

# TTAP Enterprises 2005 Business Plan

P.O. Box 2159 Vernon, TX 76385 940 552-9941

November 15, 2005

This document is confidential and was developed under the direction of the Tomorrow's Top Agricultural Producer Program Team.

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# **Executive Summary**

TTAP Enterprises is owned and operated by Thomas, Jr. and Julie Rancher. The operation is located in north central Texas and is primarily a wheat and cattle operation. The base for the operation is the 400 cow herd from which stocker cattle are raised. Additional outside cattle are purchased in order to generate enough stocker cattle to graze the operation's 1,000 acres of wheat. Each year approximately half of the wheat is grazed out and half is harvested for grain. An additional 200 acres are double cropped each year with sorghum to assist cash flow and aid in weed control.

In 1994, Thomas C. Rancher, Jr. purchased 6,000 acres of from his father. Mr. Rancher, Sr. continues to own an additional 5,000 acres which are leased to Thomas, Jr.

# TTAP Enterprises mission statement is:

To operate a diversified crop and cattle operation that will provide:

- 1. Financial success through the production and marketing of high-quality products. An important element to achieving this is effective cost control.
- 2. A working environment that fosters mutual respect among all parties involved with the operation.
- 3. A rural family living environment with opportunities for recreation and personal growth for all involved.

It is our desire to practice good stewardship of natural resources of this operation.

TTAP Enterprises has adequate resources to perform and sustain its operation. Most machinery and equipment is in good to fair condition. No new equipment purchases are foreseen in the near future. Human capital is adequate as long as Catchum Maverick is employed.

The operation draws upon its internal strengths. These include young, knowledgeable and aggressive owners, natural resources of the land, and dependable employees. Many weaknesses have been pointed out. Some of these include the operation's dependency upon cattle and cattle prices, Julie's bookkeeping skills, marketing, and the lack of an estate plan for the remaining acreage held by Mr. Rancher, Sr.

TTAP Enterprises currently has three long term goals. First, TTAP Enterprises will build its net worth to over \$2.0 million by January 1, 2015. Given current financial projections, this goal should be attainable. Second, TTAP Enterprises will increase the carrying capacity of the ranch from 481 animal units to 520 animal units by January 1, 2005. This goal should be attainable if the rainfall is near normal and the operation continues to address brush management. Finally, the Ranchers will have a new four bedroom house built by January 1, 2015. This coincides with their personal family plans of having children.

No production changes are being planned for the near future. The operation will continue to depend upon its cattle herd, wheat, and stocker cattle to provide income. Likewise, current financial projections indicate that TTAP Enterprises is moving towards its long-term goals. Financial weakness is anticipated as the cattle cycle continues; however, the operation should remain solvent during its planning horizon.

# TTAP Enterprises Business Description

# **Business Name and Address:**

Business Name: TTAP Enterprises Address: P.O. Box 2159

Vernon, TX 76385

Business Phone: 940 552-9941
Home Phone: 940 552-9941
Mobile Phone: 940 888-9941
Fax: 940 553-4657
Email Address: ttap@email.com
http://ttap.tamu.edu

Type of Ownership: Sole Proprietorship

#### Personnel

Tom C. Rancher, Jr. Owner 940 888-9941 Julie A. Rancher Co-owner 940 552-9941

& Spouse

Catchum Maverick Employee 940 888-9942

#### Advisors

M.A. Loan Burl O'Cracy I.M. Honest
First National Bank USDA Service Center Attorney at Law
Vernon, TX 76384 Vernon, TX 76384 Vernon, TX 76384
940 555-1234 940 555-1111 940 555-2222
aglender@bank.com county.director@usda.gov attorney@lawfirm.com

Thomas Rancher, Sr. Dr. Hank Feelgood

P.O. Box 12 Vet Clinic

Vernon, TX 76384 Vernon, TX 76384 940 555-2223 940 555-6456

feelgood@vetclinic.com

# **Business History**

TTAP Enterprises was founded in 1972 as a sole proprietorship registered in Wilbarger County, Texas, owned and operated by Thomas C. Rancher, Sr. It was originally a farm and ranch operations that produced calves from its cow herd and also farmed wheat, grain sorghum, and alfalfa for sale on a total of 11,000 acres. Thomas Sr. and his wife had two children; a daughter named Jan and son named Thomas Jr. Both children are married. Jan and her husband, Joe Rowdy, live in Lubbock, Texas where Jan teaches school and Joe has a successful veterinary business. Thomas Jr. is married to Julie who was raised on a ranch not far from the current operation.

In 1994, Thomas C. Rancher Jr. purchased 6,000 acres of the original operation from his father. Mr. Rancher Sr. chose to hold the additional 5,000 acres for estate planning and transfer purposes. These acres are leased by TTAP Enterprises. Upon the purchase in 1994, TTAP Enterprises expanded its operation to include stocker cattle into the farming and ranching operation and dropped alfalfa production.

Currently, TTAP Enterprises is a privately owned farming and ranching operation. TTAP Enterprises consists of 6,000 acres of owned land (5,000 native pasture; 1,000 acres of wheat with 200 acres double cropped grain sorghum as a cash crop) and 5,000 acres of rented land (all native pasture) in North Central Texas. The foundation of TTAP Enterprises is its cowherd. It consists of 400 breeding females selected over time for their muscling and carcass characteristics. From each year's calf crop, 60 head of replacement heifers are selected to fulfill and/or exceed their mother's characteristics.

TTAP Enterprises is in the business of producing and pre-conditioning calves from its cow herd for the stocker operation. In addition to those raised on the farm, additional calves are purchased for the stocker operation. All of the planted wheat is utilized by the stocker cattle operation for grazing until the cattle are crowded onto one-half of the acreage, which is grazed out. The other one-half of the wheat acreage is then harvested for grain and sold.

TTAP Enterprises' revenue and profit are highly correlated with market prices of cattle. Given recent increases in cattle prices, all debt obligations have been met. TTAP Enterprises has also been able to generate adequate funds for family living. The cattle inventory has been constant indicating the retention of replacement females into the cowherd. The 1,000 acres of wheat has a crop insurance APH of 28.0 bushels per acre. The current FSA program acreage and yield is 1,000 acres at 30 bushels per acre. TTAP Enterprises does participate in the government's farm programs.

# **Mission Statement**

TTAP Enterprises' mission statement is to operate a diversified crop and cattle operation that will provide:

- 1. Financial success through the production and marketing of high-quality products. An important element to achieving this goal is effective cost control.
- 2. A working environment that fosters mutual respect among all parties involved with the operation.
- 3. A rural family living environment with opportunities for recreation and personal growth for all involved.

It is our desire to practice good stewardship of natural resources of this operation.

# **Resource Inventory**

TTAP Enterprises is owned and operated by Thomas Rancher, Jr. and his wife, Julie. The operation includes 10,000 acres of native pasture and 1,000 acres of cultivated cropland in Wilbarger County, Texas. The base for the operation is a cowherd from which stocker cattle are raised. The stocker cattle enterprise is augmented through occasional purchases of outside cattle and supported through crop production. Also, the operation capitalizes on the abundant wildlife through a season long hunting lease. The following resource inventory was developed to gather a better picture of the operation.

#### **Physical/Natural Resource Inventory**

To begin a physical/natural resource inventory of the farm, a map of the farm (Figure 1) was developed and complements the physical/natural resource inventory worksheet (Table 1). The total land area of the TTAP Enterprises is 11,000 acres (6,000 purchased and 5,000 leased) located in Wilbarger County, Texas. 10,000 acres are native pasture with mixed brush species of moderate density. The carrying capacity of the pasture is approximately 25 acres per animal unit. This stocking rate has to be reduced during prolonged dry periods, but can be exceeded slightly when good spring rains produce abundant summer grasses. Cultivated cropland accounts for 1,000 acres of the operation.

The operation has one house, which provides Thomas, Jr. and Julie's residence as well as a barn and working pens. All structures are located on the map in the area marked as "Homestead". Ranch perimeter fences are in good condition; however the interior fence separating the purchased and leased acreage will need some repair in the near future. Watering facilities include a mix of 5 windmills, 11 stock tanks, and two creeks dispersed across the 11,000 acres.

An additional supplement to the physical/natural resources inventory worksheet is a summary of monthly climatology data. The coldest average month is January (avg. low – 28 degrees) with July being the warmest (avg. high 97 degrees) (Figure 3). Average

rainfall is 26 inches per year. The wettest months are May and June (>3.25 inches per month each) with December and January being the driest (<1.25 inches per month each) (Figure 3).

Finally, wildlife that can be found on the property includes: white-tailed deer, feral hogs, turkeys, dove, quail, and coyotes. The 5,000 acres of purchased native pasture is leased to a group of hunters on a season-long, all-species basis for \$35,000 annually. Half of the hunting lease payment is received in June and the remainder in September.

#### **Human Resource Inventory**

All persons working on the farm or involved as advisors are included in the human resource inventory worksheet (Table 2). Thomas Rancher, Jr. and his wife, Julie are the owners and managers of TTAP Enterprises. Thomas's background is in animal science and Julie's area of expertise is agricultural business management. Collectively, their duties include: all major work on the farm; all major production decisions; and minor decision maker concerning the financial aspects of the operation. They currently draw \$30,000 as living expenses charged against the operation for management.

TTAP Enterprises employs one full time employee, Catchum Maverick. The operators recognize the difficulty in finding and keeping reliable employees. As a result, they have instituted annual pay raises for Catchum Maverick in order to keep him satisfied and content. His current salary is \$24,000 per year.

There are a number of other people who contribute to TTAP Enterprises, without being directly employed by the operation. Thomas Rancher, Sr. is available at his own discretion to assist with some of the activities. Thomas, Sr. enjoys tending to the livestock and has years of experienced as a cowman and mechanic. He is also very pleased that his son has chosen to take over the operation and is genuinely interested in his success. Thomas, Sr. and Julie have an outstanding rapport and he is very supportive that she also takes an active role in the operation.

The outside professionals that TTAP Enterprises relies upon includes: M.A. Loan, their local lender at the 1<sup>st</sup> National Bank; I.M. Honest, the lawyer that has handled all of the family's legal and abstract work associated with the land sale; Dr. Hank Feelgood, the local veterinarian. Each of these individuals has worked on projects for the family operation for at least 20 years. The final key person who provides assistance to the operation is Burl O'Cracy, the local FSA Director. Mr. O'Cracy is new to Wilbarger County and appears to be very progressive and supportive in helping Thomas, Jr. and Julie navigate potential USDA programs that might be of benefit. This is a dramatic improvement over the relationship that the Rancher family had with the previous local FSA representative.

### **Equipment Resource Inventory**

The equipment and resource inventory worksheet (Table 3) gives a breakdown of the equipment by name, the model number, size, age, condition, whether owned, leased, or borrowed, book value, and market value. The operation has a 200 horsepower tractor that is 5 years old and in good condition. Other equipment that the operation has includes: plows, grain drills, two pickups and an assortment of ranch equipment. Collectively, the book value of equipment is \$173,000. All equipment is owned. When Thomas, Jr. and Julie purchased the 6,000 acres in 1994, the land payments necessitated that they strive to minimize additional interest expenses associated with financed equipment. At the end of the year, excess ranch proceeds are prioritized to replace or repair exhausted equipment. The most appropriate creed for the equipment compliment of the operation is, "it might not look pretty, but it's paid for."

#### **Animal/Crop Resource Inventory**

A list of all crops and animals produced on the farm are listed on the animal/crop resources inventory worksheet (Table 4). The 1,000 acres of cultivated cropland is annually planted with wheat. After a period of grazing, the stocker calves are placed on 500 acres of the wheat that is grazed-out. The remaining 500 acres of wheat is harvested. Each year, 200 acres of sorghum are double-cropped on this acreage for additional cash flow and to assist with weed control.

The operation has 5,000 acres of native pasture that is the remainder of the 6,000 acres initially purchased from Thomas, Sr. in 1994. An additional 5,000 acres of native pasture is currently leased from Thomas, Sr. This provides a total of 10,000 acres of native pasture to support the cow-calf operation and hunting enterprise.

The operation maintains 400 cows and 16 bulls. Each year 60 of the raised heifers are retained as replacements. The remaining calf crop is treated as a stocker operation and utilizes the crop production. Additional stocker calves (usually about 100 head) are purchased and integrated with the raised stocker calves.

#### **Financial Resource Inventory**

A snapshot of the financial situation of TTAP Enterprises is shown on the financial resources inventory worksheet (Table 5). TTAP Enterprises has a total of \$47,862 in cash and savings at 1<sup>st</sup> National Bank. The debt being carried by the operation primarily includes the land note held by the Federal Land Bank. Interest costs remain high due to the purchase of 6,000 acres in 1994. The land note was refinanced in 2001 to take advantage of lower interest rates. The current balance of the land note is a little more than \$1 million.

Income for the operation is highly correlated with cattle prices. The operation strives to control its cost of production. The financial condition is expected to improve over the next three years.

Both the land note payment and the annual cash lease payment (to Thomas, Sr. for the 5,000 acres of native pasture) are due in June of each year. This situation has proven to be very feasible as the timing of these payments correlates shortly after the operation realizes proceeds from the sales of the stocker calves. The additional cash flow from sorghum and the hunting lease enables the operation to meet cash-flow needs through the year and has eliminated the need for a separate operating note. If the farm needed to borrow additional money, First National Bank would loan up to \$60,000 at 8.0 percent interest for the purchase of additional stocker calves. Also, the operation has access to another \$150,000 in credit for equipment from John Deere Credit.

# Table 1. Physical/Natural Resources Inventory Worksheet

# **LAND UNITS:**

| 1. <u>5,000</u> acres in <u>\</u> | Wilbarger Co  | ounty L                       | and Descript                                    | ion: <u>Na</u> | tive Pastı | ure       |
|-----------------------------------|---|-------------------------------|---|----------------|------------|-----------|
| Purchased                         |   |                               | 994_  |                |            |           |
|                                   |   |                               |   |                |            |           |
| 2. <u>1,000</u> acres in <u></u>  |   |                               |   |                |            |           |
| Purchased                         | <b>\</b>  | Year: <u>19</u>               | <u>994_</u>                                     | Cost/Leas      | se Rate: _ | \$400/ac  |
|                                   |   |                               |   |                |            |           |
| 3. <u>5,000</u> acres in          |   |                               |   |                |            |           |
| Leased                            | Term: <u>Annual</u>   | Paymen                        | <u>t in June</u>                                | Cost/Leas      | se Rate: _ | \$4.25/ac |
|                                   |   |                               |   |                |            |           |
| 4 acres in                        | Cou   | unty L                        | and Descripti                                   | ion:           |            |           |
| Purchased                         | Leased  | Year:                         |   | Cost/Leas      | se Rate: _ |           |
|                                   |   |                               |   |                |            |           |
| STRUCTURES / FA                   | CILITIES:   |                               |   |                |            |           |
| Hauga/Dagidanaa                   | located on Units  | <i>4</i> 1                    | Dwilt in  | 1072           |            |           |
| House/Residence                   | located on Onit   | # <u>_1</u>                   | Built ir  | 1 <u>19/3</u>  |            |           |
| Barn/Storage Shed                 | located on Unit   | # 1                           | Built ir  | 1057           |            |           |
| _barn/storage sned_               | located on Onit   | π <u>1</u>                    | Dunt n  | 1_1/5/         |            |           |
| Working Pens                      | located on Unit   | # 1                           | Built ir  | 1985           |            |           |
|                                   | _ located on onit   | · · · · <u>- <del>-</del></u> | Built   | 1_1700_        |            |           |
| FENCES:                           |   |                               |   |                |            |           |
|                                   |   |                               |   |                |            |           |
| Unit #1.                          | Condition:  | Good                          |   |                |            |           |
| Unit #2.                          |   | Good                          |   |                |            |           |
| Unit #3.                          | Condition: 1  | Fair                          |   |                |            |           |
| Unit #4.                          |   |                               |   |                |            |           |
|                                   |   |                               |   |                |            |           |
| WATERING FACI                     | LITIES:   | Average                       | Rainfall:                                       | <u>26</u>      | _inches/y  | /ear      |
|                                   |   |                               |   |                |            |           |
| Unit #1. Win                      | $\begin{array}{ccc} dmills & \underline{3} & \underline{3} \\ dmills & \underline{0} & \underline{3} \end{array}$ | Tanks/Pc                      | onds <u>7</u>                                   | Creeks/St      | treams     | <u>1</u>  |
| Unit #2. Win                      | dmills <u>0</u>   | Tanks/Po                      | onds <u>1</u>                                   | Creeks/St      | treams     |           |
| Unit #3. Win                      | dmills $\underline{\underline{0}}$  | Tanks/Po                      | onds <u>7</u><br>onds <u>1</u><br>onds <u>3</u> | Creeks/St      | treams     | <u>1</u>  |
| Unit #4. Win                      | dmills  | Tanks/Pc                      | onds  | Creeks/St      | treams     |           |
|                                   |   |                               |   |                |            |           |
| WILDLIFE SPECII                   | ES: White-ta  | ailed Dee                     | er, Ferral Hog                                  | gs, Turkey     | , Dove, (  | Quail     |
|                                   |   |                               |   |                |            |           |
| Lease                             | Rate: Season-   | long leas                     | se, all-species                                 | , \$35,000     | per year   |           |

Figure 1. TTAP Enterprises

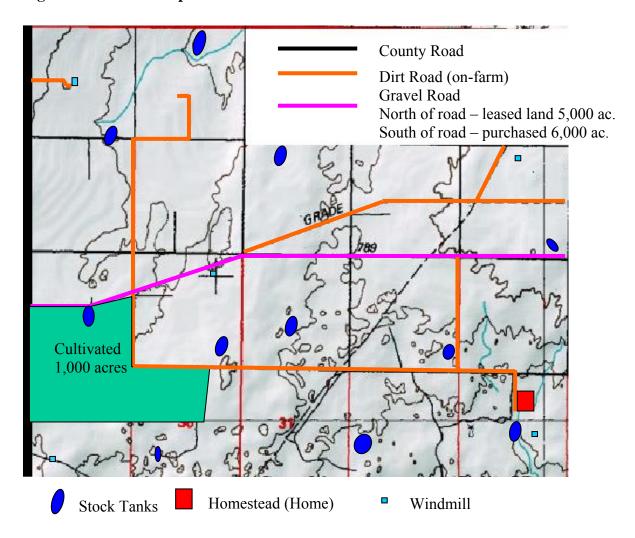
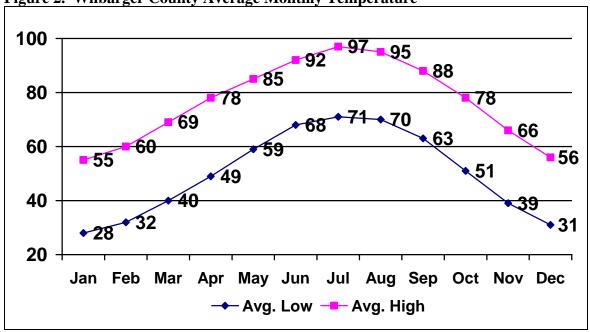
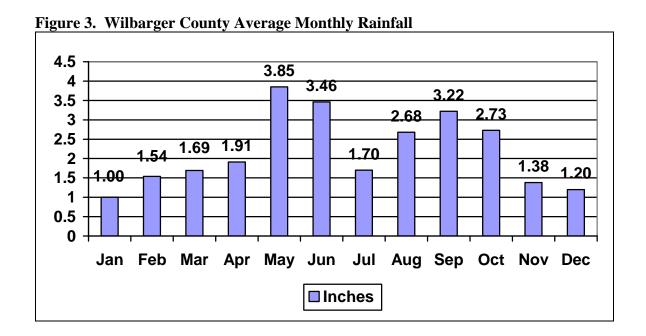


Figure 2. Wilbarger County Average Monthly Temperature 97 95 5 Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun → Avg. Low - Avg. High





**Table 2. Human Resources Inventory Worksheet** 

| Name                           | Assigned Duties    | Salaries/Wages | Skills/Talents      | Work Schedules | <b>Emergency Contact</b> |
|--------------------------------|--------------------|----------------|---------------------|----------------|--------------------------|
| Thomas Rancher, Jr.<br>Age: 35 | Owner/Manager      | \$15 K / yr.   | B.S. Animal Science | 24/7           | Thomas Rancher, Sr.      |
| Julie Rancher<br>Age: 33       | Owner/Manager      | \$15 K / yr.   | B.S. Ag. Business   | 24/7           | Thomas Rancher, Sr.      |
| Catchum Maverick<br>Age: 30    | Hired Hand         | \$24 K / yr.   |                     | 24/6           |                          |
| M.A. Loan                      | Local Lender       |                |                     | 9-3 M-F        |                          |
| I.M. Honest                    | Attorney           |                |                     | 9-4 M-F        |                          |
| Burl O'Cracy                   | Local FSA Director |                |                     | 8-4 M-F        |                          |
| Hank Feelgood, DVM             | Veterinarian       |                |                     | On-call        | Joe Rowdy, D.V.M.        |

**Table 3. Equipment Resources Inventory Worksheet** 

| Equipment          | 1105041005 |          | Purchase |      | Co | nditi | ion | Ow | ners | hin |             | Market  |
|--------------------|------------|----------|----------|------|----|-------|-----|----|------|-----|-------------|---------|
| Name               | Model #    | Size     | Year     | Age  | G  | F     | P   | 0  | L    | В   | Book Value  | Value   |
| 1 (6222)           | 111000111  | Size     | 1001     | 1180 | •  | _     | _   |    |      |     | 20011 (diae | V dizer |
| John Deere Tractor | 200        | 200 h.p. | 2000     | 5    | X  |       |     | X  |      |     | 79 K        | 75 K    |
| Chisel Plow        |            | 20 ft.   | 2000     | 5    | X  |       |     | X  |      |     | 7.5 K       | 3 K     |
| Offset Plow        |            | 20 ft.   | 2000     | 5    | X  |       |     | X  |      |     | 7.5 K       | 4 K     |
| Grain Drills       |            | 20 ft.   | 2000     | 5    |    | X     |     | X  |      |     | 34 K        | 20 K    |
| Ranch Truck #1     |            |          | 2000     | 5    |    | X     |     | X  |      |     | 10 K        | 8 K     |
| Ranch Truck #2     |            |          | 2004     | 1    | X  |       |     | X  |      |     | 22 K        | 22 K    |
| Livestock Equip.   |            |          |          |      | X  |       |     | X  |      |     | 8 K         | 8 K     |
| Ranch Equip.       |            |          |          |      |    |       | X   | X  |      |     | 5 K         | 1 K     |
|                    |            |          |          |      |    |       |     |    |      |     |             |         |
|                    |            |          |          |      |    |       |     |    |      |     |             |         |
| Total              |            |          |          |      |    |       |     |    |      |     | 173 K       | 141 K   |

Table 4. Animal/Crop Resources Inventory Worksheet

| Table 4. Animal/Cr   |                               |   |  | Mankat  | Value           |
|--|-------------------------------|---|--|---|-----------------|
| Crop   |                               | Yield History   | Govt.  | Market Value  |                 |
| Enterprise   | Acres                         | per Acre  | <b>Payments</b>                                    |   |                 |
|  | <b>-</b> 00                   | APH   | 201  |   |                 |
| Wheat – Grazing  | 500                           | 28 bu./ac.  | 30 bu./ac.   |   |                 |
|  |                               | APH   |  |   |                 |
| Wheat – Harvest  | 500                           | 28 bu./ac.  | 30 bu./ac.   |   |                 |
|  |                               | APH   |  |   |                 |
| Sorghum/Double   | 200                           | 21 c.w.t./ac.   |  |   |                 |
| Crop   |                               |   |  |   |                 |
| •  |                               |   |  |   |                 |
|  |                               |   |  |   |                 |
|  |                               |   |  |   |                 |
| Owned Pasture  | 5,000                         |   |  |   |                 |
| o wheat astare   | 2,000                         |   |  |   |                 |
|  |                               |   |  |   |                 |
|  |                               |   |  |   |                 |
| Leased Pasture   | 5,000                         |   |  |   |                 |
| Leased Lasture   | 3,000                         |   |  |   |                 |
|  |                               |   |  |   |                 |
|  |                               |   |  |   |                 |
| Livoctock  |                               |   | Cost nor   | Entorprico  | Market          |
| Livestock  | Hood                          | Description   | Cost per   | Enterprise  | Market          |
| Livestock<br>Enterprise  | Head                          | <b>Description</b>  | Cost per<br>Head                                   | Enterprise<br>Cost Basis                                  | Market<br>Value |
| Enterprise   |                               | 7 yr replacement  | Head   | Cost Basis  |                 |
|  | Head<br>400                   | 7 yr replacement rate   | -  | _   |                 |
| Enterprise  Cows   | 400                           | 7 yr replacement rate yearlings for   | <b>Head</b><br>\$ 670                              | Cost Basis<br>\$268 K                                     |                 |
| Enterprise   |                               | 7 yr replacement rate yearlings for replacement   | Head   | Cost Basis  |                 |
| Cows  Retained Heifers   | 400<br>60                     | 7 yr replacement rate yearlings for replacement replace four per                                | \$ 670<br>\$ 500                                   | \$268 K<br>\$ 30 K  |                 |
| Enterprise  Cows   | 400                           | 7 yr replacement rate yearlings for replacement replace four per year                           | <b>Head</b><br>\$ 670                              | Cost Basis<br>\$268 K                                     |                 |
| Cows  Retained Heifers  Bulls                                      | 400<br>60<br>16               | 7 yr replacement rate yearlings for replacement replace four per year transferred from          | \$ 670<br>\$ 500<br>\$2,125                        | \$268 K<br>\$ 30 K<br>\$ 34 K                             |                 |
| Cows  Retained Heifers   | 400<br>60                     | 7 yr replacement rate yearlings for replacement replace four per year                           | \$ 670<br>\$ 500                                   | \$268 K<br>\$ 30 K  |                 |
| Cows  Retained Heifers  Bulls  Raised Stockers                     | 400<br>60<br>16<br>272        | 7 yr replacement rate yearlings for replacement replace four per year transferred from cow-calf | #ead \$ 670 \$ 500 \$2,125 \$ 504                  | \$268 K<br>\$ 30 K<br>\$ 34 K<br>\$137 K                  |                 |
| Cows  Retained Heifers  Bulls                                      | 400<br>60<br>16               | 7 yr replacement rate yearlings for replacement replace four per year transferred from          | \$ 670<br>\$ 500<br>\$2,125                        | \$268 K<br>\$ 30 K<br>\$ 34 K                             |                 |
| Cows  Retained Heifers  Bulls  Raised Stockers  Purchased Stockers | 400<br>60<br>16<br>272<br>100 | 7 yr replacement rate yearlings for replacement replace four per year transferred from cow-calf | \$ 670<br>\$ 500<br>\$2,125<br>\$ 504<br>\$ 563    | \$268 K<br>\$ 30 K<br>\$ 34 K<br>\$ 137 K<br>\$ 56 K      |                 |
| Cows  Retained Heifers  Bulls  Raised Stockers                     | 400<br>60<br>16<br>272        | 7 yr replacement rate yearlings for replacement replace four per year transferred from cow-calf | #ead \$ 670 \$ 500 \$2,125 \$ 504                  | \$268 K<br>\$ 30 K<br>\$ 34 K<br>\$137 K                  |                 |
| Cows  Retained Heifers  Bulls  Raised Stockers  Purchased Stockers | 400<br>60<br>16<br>272<br>100 | 7 yr replacement rate yearlings for replacement replace four per year transferred from cow-calf | \$ 670<br>\$ 500<br>\$2,125<br>\$ 504<br>\$ 563    | \$268 K<br>\$ 30 K<br>\$ 34 K<br>\$ 137 K<br>\$ 56 K      |                 |
| Cows  Retained Heifers  Bulls  Raised Stockers  Purchased Stockers | 400<br>60<br>16<br>272<br>100 | 7 yr replacement rate yearlings for replacement replace four per year transferred from cow-calf | \$ 670<br>\$ 500<br>\$2,125<br>\$ 504<br>\$ 563    | \$268 K<br>\$ 30 K<br>\$ 34 K<br>\$ 137 K<br>\$ 56 K      |                 |
| Cows  Retained Heifers  Bulls  Raised Stockers  Purchased Stockers | 400<br>60<br>16<br>272<br>100 | 7 yr replacement rate yearlings for replacement replace four per year transferred from cow-calf | #ead \$ 670 \$ 500 \$ 2,125 \$ 504 \$ 563 \$ 1,500 | \$268 K<br>\$30 K<br>\$34 K<br>\$137 K<br>\$56 K<br>\$9 K |                 |
| Cows  Retained Heifers  Bulls  Raised Stockers  Purchased Stockers | 400<br>60<br>16<br>272<br>100 | 7 yr replacement rate yearlings for replacement replace four per year transferred from cow-calf | #ead \$ 670 \$ 500 \$ 2,125 \$ 504 \$ 563 \$ 1,500 | \$268 K<br>\$ 30 K<br>\$ 34 K<br>\$ 137 K<br>\$ 56 K      |                 |

| Table 5. Fin                              |                             | es Inventory Wo            |                  | I               | Balance        |  |
|---|-----------------------------|----------------------------|------------------|-----------------|----------------|--|
|   | – 1 <sup>st</sup> Nat. Bank | 555-12346                  | 58               | \$47,8          | 362            |  |
|   |                             |                            | TOTAL            | \$47,8          | 862            |  |
| Debt<br>Lender                            | Balance                     | Years<br>Remaining         | Int. Rate        | <b>Due Date</b> | Original Loan  |  |
| Federal <a href="Land Bank">Land Bank</a> | \$1,082,480                 | <u>29</u>                  | 6.04_%           | June 1          | 2001-\$1.325 M |  |
|   |                             |                            | %                |                 |                |  |
|   |                             |                            | %                |                 |                |  |
|   |                             |                            | %                |                 |                |  |
|   |                             |                            | %                |                 |                |  |
|   |                             |                            | %                |                 |                |  |
| TOTAL                                     | <u>\$1,082,480</u>          |                            |                  |                 |                |  |
| Potential Credit<br>Lender                |                             | Amount / Use of Funds      |                  | Interest Rate   |                |  |
| _1 <sup>st</sup> Nat. Bank_               |                             | \$60 K – Stocker Purchases |                  | _               | _8.0_%         |  |
| _John Deere Credit                        |                             | \$150 K – New              | <u>Equipment</u> | 5.0_%           |                |  |

**TOTAL** \$210 K

# S.W.O.T. Analysis

As with any business, TTAP Enterprises has many internal strengths to draw upon. Table 6 presents many of these specific strengths. From this list, it can be seen that the owners of the operation (Thomas Jr. and his wife Julie) both possess agricultural educations. Specifically, Thomas Jr. has a Bachelors of Science in Animal Science and Julie a Bachelors of Science in Agricultural Business. Furthermore, both owners are willing to learn and implement new concepts into the business. Given the history and location of the operation, the potential exists for diversification into other commodities if warranted. Thomas Jr. has a very close relationship with his sister, and his father still lives in the area and offers advice concerning the operation of the farm/ranch. Equipment used by TTAP Enterprises is owned free and clear of debt. There is abundant wildlife on the operation and hunting is developing very nicely in the area. Thomas Sr. has also expressed a willingness to develop an estate plan. Underground water is accessible across all parts of the pasture. Finally, the hired labor (Catchum Maverick) is reliable and provides adequate assistance in the day-to-day operation of the farm/ranch.

Table 7 presents the internal weaknesses of TTAP Enterprises. From this outline, one can see that the business is not highly diversified (foundation is cattle). Because of this dependency, income generated by the operation is highly dependent on cattle sales and prices. Furthermore, Julie (wife and co-owner) is the only person involved with the accounting and financial aspects of the business. The owners, both past and present, have never used nor do they understand how to utilize futures and/or options to manage price risk. Currently there is no estate plan in place to dictate how the remainder of Thomas Sr.'s estate (including 5,000 acres of the operation) will be handled upon his death. Thomas Sr. is also having a difficult time turning the day-to-day decisions over to Thomas Jr. While there are windmills present on the property, they are located in the far locations of the property. While most of the equipment is in good working condition, its age can be classified as moderate. There are no on-farm storage facilities for grain. The pastures are all native and unimproved. Finally, Thomas Jr. and Julie are considering the possibility of having their first baby. Currently, family living draw from the operation equals \$30,000 per year and may not be enough if a baby is introduced.

There are several external opportunities (Table 8) that can be identified for the farm/ranch. Specifically, there is a growing popularity of hunting in the area from non-residents. Furthermore due to the location of the farm/ranch to the Metroplex, there exists the opportunity to expand the operation to include an agri-tourism component or to begin producing organic beef. Furthermore, both owners can develop price risk management strategies that have not been utilized in the past. There does exist the possibility that Thomas Jr.'s sister, Jan, will not want to sell the 2,500 acres of the farm it is assumed she will inherit. The native, unimproved pastures could also be improved. Finally, the market value of the land has increased by approximately 100.3 percent in value since the land was purchased.

Examining the external threats faced by the operation (Table 9) suggest that the commodities produced on the operation face the most risks. Specifically the foundation of the operation, the cattle, faces the direct or indirect threats of BSE, foreign country bans of U.S. beef, commodity market prices and draught. Wheat that is grown on the farm can suffer from commodity market prices, government payment reductions or elimination, Karnal Bunt, and draught. Other threats

faced by the operation include: Thomas Jr.'s sister, Jan, wanting to sell her believed 2,500 acre inheritance of the farm; high interest costs; and agri-terrorism.

# **Operational Plans**

The operational plans for the farm are drawn from the list of the strengths, weaknesses, opportunities, and threats that were identified and are presented in Table 10. On the left-hand column of Table 10, specific weaknesses  $(W_i)$ , opportunities  $(O_i)$ , and threats  $(T_i)$  are listed first followed by the specific strengths  $(S_i)$ , weaknesses, or opportunities that may impact the action plan. A description of how to interpret the information provided in Table 10 is described below.

Examining this table shows that the first weakness listed ( $W_1$ ) is that the business is not highly diversified (the foundation is cattle, 500 acres of wheat, and grain sorghum). The components of the SWOT analysis that may help improve this weakness are:  $S_1$  (Thomas Jr. has a production background and education),  $O_4$  (Organic beef or other specialty market due to proximity to MetroPlex), and  $O_5$  (Agri-tourism). This combination of strengths and opportunities lead to the action plan to improve the weakness (the right hand column of Table 10). This action plan is that: alternative crops and/or livestock enterprises could be incorporated into the operation if diversification is needed. Specifically traditional crops/livestock raised in the area could be pursued, or specialty crops/livestock enterprises could be incorporated to cater to the large MetroPlex population.

In the case of the external opportunity of beginning an organic beef or other specialty crop/livestock enterprise  $(O_4)$ , it should be noticed that a weaknesses was identified along with two strengths as impacting the action plan. Specifically, the two strengths to getting into this type of market include: the willingness of Thomas Jr. and Julie to learn and implement new concepts  $(S_5)$  and the availability of adequate and reliable labor  $(S_{12})$ . However the weakness associated with this endeavor would be that Thomas Sr. is not willing to let go of day-to-day decision making activities on the farm/ranch  $(W_6)$ . Therefore, Thomas Sr. may not understand or approve of this decision. This weakness could hamper the ability of the operation to take advantage of the opportunity. Similar interpretations can be derived from the remainder of the plans presented in Table 10.

Finally, it should be noted that three of the weaknesses identified for TTAP Enterprises ( $W_6$ ,  $W_9$ , and  $W_{11}$ ) do not have any strengths or opportunities that will make improvements. In this case, these weaknesses are considered problem areas, and the development of the internal strengths or further investigation of external opportunities should be considered. Likewise, four external threats ( $T_1$ ,  $T_2$ ,  $T_7$ , and  $T_9$ ) had no strength or opportunity identified to combat these risks. Weakness  $W_1$  was found, however, to be associated with each of these threats. This suggests these threats could pose major problems for the operation. Therefore, these threats should be further analyzed to determine what, if any, precautions or action plans should be developed.

# **Table 6. TTAP Enterprises Strengths.**

| Question<br>Number | List of Strengths  |
|--------------------|--|
| $S_1$              | Thomas Jr. has production background and education.  |
| $S_2$              | Julie (wife) has agribusiness background.  |
| $S_3$              | Can diversify more if needed.  |
| $S_4$              | Very close relationship with sister.   |
| $S_5$              | Willingness of Thomas Jr. and Julie to learn and implement new concepts (marketing, business, etc)   |
| $S_6$              | Father is still around to give advice.   |
| $S_7$              | Routine equipment maintenance is a priority.   |
| $\mathbf{S}_8$     | Equipment is owned free and clear of debt.   |
| $S_9$              | Wildlife and hunting.  |
| $S_{10}$           | Thomas Sr. is willing to develop an estate plan.   |
| S <sub>11</sub>    | Underground water accessible across all parts of the pasture.  |
| $S_{12}$           | Adequate reliable labor that is familiar with the type, condition and use of existing line of equipment.   |
| S <sub>13</sub>    | Thomas Sr. and Jr. both have utilized BMPs and other practical strategies to minimize runoff and other pollution, and to maintain a high level of quality of the product they are selling. |

# **Table 7. TTAP Enterprises Weaknesses.**

| Question<br>Number | List of Weaknesses   |
|--------------------|--|
| $W_1$              | Business is not highly diversified (foundation is cattle).                                   |
| $W_2$              | Income is highly dependent on cattle sales & prices.   |
| $W_3$              | Julie (wife) is the only one involved with the accounting and financial aspects of business. |
| $W_4$              | Do not understand the use of futures/options.  |
| $W_5$              | No estate plan for receiving land from Thomas Sr.  |
| $W_6$              | Father will not let go of the reins and allow Thomas Jr. to run the farm himself.            |
| $W_7$              | Windmills only in far locations of pasture.  |
| $W_8$              | Most of the equipment has some age.  |
| W <sub>9</sub>     | No on-farm grain storage facilities.   |
| $\mathbf{W}_{10}$  | 10,000 acres of native unimproved pasture.   |
| $\mathbf{W}_{11}$  | \$30,000 may not be enough for family living if a child enters the picture.                  |
| $\mathbf{W}_{12}$  | Thomas Jr. needs a plan to provide for his young family in the event of a catastrophe.       |
| $W_{13}$           |  |

**Table 8. TTAP Enterprises Opportunities.** 

| Question<br>Number | List of Opportunities   |
|--------------------|---|
| O <sub>1</sub>     | Growing popularity of hunting in the area from non-residents.                               |
| $O_2$              | Price risk management strategies.   |
| $O_3$              | Jan (sister) may not want to sell the 2,500 acres she will inherit.                         |
| O <sub>4</sub>     | Organic beef or other specialty market due to proximity to MetroPlex.                       |
| $O_5$              | Agri-tourism (crop maze, nature walks, etc).  |
| O <sub>6</sub>     | Can sell part or all of 5,000 acres of pasture (purchased for \$185/ac now worth \$375/ac). |
| $O_7$              | Improve pasture.  |
| O <sub>8</sub>     |   |
| $O_9$              |   |
| $O_{10}$           |   |
| O <sub>11</sub>    |   |
| O <sub>12</sub>    |   |
| O <sub>13</sub>    |   |

**Table 9. TTAP Enterprises Threats.** 

| Question<br>Number | List of Threats  |
|--------------------|--|
| $T_1$              | BSE  |
| $T_2$              | Potential foreign country bans of U.S. beef.   |
| Т3                 | Commodity market prices.   |
| T <sub>4</sub>     | Jan (sister) may want to sell the 2,500 acres she will inherit.                        |
| T <sub>5</sub>     | Interest costs are high due to loan for 6,000 purchased acres.                         |
| $T_6$              | Government farm program payments reduction or elimination.                             |
| T <sub>7</sub>     | Karnal Bunt  |
| T <sub>8</sub>     | Draught (from a crop and livestock perspective).                                       |
| Т9                 | Agri-terrorism.  |
| $T_{10}$           | Operation lies within the watershed used by the Metroplex.                             |
| T <sub>11</sub>    | Hunting and agri-tourism will bring the non-farming/ranching public onto the property. |
| T <sub>12</sub>    |  |
| $T_{13}$           |  |

**Table 10. TTAP Enterprises Action Plans.** 

| Weakness,                               | prises reason rains  |
|---|--|
| ,                                       |  |
| Opportunity, or                         | 4.4. 70  |
| Threat and associated                   | Action Plans   |
| component of the                        |  |
| SWOT Analysis                           |  |
| W1,S3,O4,O5                             | The area offers many different alternatives (crops and livestock) that can be  |
|   | pursued if market conditions suggest diversification is needed. May be able to   |
|   | get into organic beef production. May be able to take advantage of the large   |
|   | population nearby.   |
| W2,S9,S3,O4,O5                          | The wildlife experience (hunting) as well as other agri-tourism endeavors can  |
| (1,2,5),53,01,03                        | be pursued. Specialty beef markets might be available. The area offers many  |
|   | different alternatives (livestock) that can be pursued if market conditions  |
|   |  |
| 11/2 05                                 | suggest diversification is needed.   |
| W3,S5                                   | Thomas Jr. can learn and become more involved in this side of the business.  |
| W4,S5                                   | Both Thomas Jr. and Julie can learn about price risk management (TCE   |
|   | programs).   |
| W5,S10                                  | Get with our lawyer and develop an inter-generational transfer plan.   |
| W6                                      | PROBLEM AREA (find a way to make Thomas Sr. turn over some of the  |
|   | reins).  |
| W7,S11                                  | Water wells can be drilled on other parts of the property if needed (keep in   |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | mind, we might <b>need</b> the water without much warning). Place livestock wells  |
|   | (windmills/stock tanks/ponds) so as to not create attractive nuisance liability.   |
| W8,S7, S12                              | Remain focused on routine maintenance, replace older equipment when  |
| W 8,87, S12                             |  |
| N/O                                     | possible.  |
| W9                                      | PROBLEM AREA (cannot take advantage of on-farm storage if it is the best   |
|   | alternative).  |
| W10,O8                                  | Improve pasture when feasible.   |
| W11                                     | PROBLEM AREA (need to discuss situation with Julie and decide how).  |
| W12                                     | Could create a problem for Julie and the growing family. Need to consult   |
|   | with attorney and insurance agent.   |
| O1,S9,S12                               | Look into offering day hunts or split the land up into multiple hunting leases.  |
|   | Might need more labor.   |
| O2,S5                                   | Gain more education in regards to price risk management.   |
| O3,S4                                   | Talk to sister and find out her goals for her future potion of the land.   |
| O4,S5,S12,W6                            | We can diversify our operation by getting into the organic beef business.  |
| , | Thomas Jr. and Julie are eager to learn. Dad may not understand this   |
|   | alternative and could cause some problems.   |
| O5,W1,S5,S9,S12,W6                      | We could diversify our operation by getting into some type of agri-tourism.  |
| 05, W1,55,57,512, W0                    | Thomas Jr. and Julie are eager to learn. We have abundant wildlife. Might  |
|   | cause a problem with our hunters. Might have to hire more labor. Dad may   |
|   |  |
| O.C. W.1                                | not understand this alternative and could cause some problems.   |
| O6,W1                                   | More wells would ensure adequate water supply for our business foundation.   |
| O7,T5                                   | Selling a portion of the land would ease the debt load, but what would we do?  |
| T1,W1                                   | MAJOR PROBLEM AREA FOR OUR BUSINESS FOUNDATION.  |
| T2,W1                                   | MAJOR PROBLEM AREA FOR OUR BUSINESS FOUNDATION.  |
| T4,S4                                   | Talk to sister and find out her goals for her future portion of the land.  |
| T5,O7                                   | If the problem gets too great, we can sell the land and relieve all debt.  |
| T6                                      | The foundation of our business does not receive much government assistance.  |
| T7,W1                                   | MAJOR PROBLEM AREA. THE FOUNDATION OF OUR BUSINESS   |
| , ., -                                  | The second secon |

|             | RELIES PARTIALLY ON WHEAT GRAZING.  |
|-------------|---|
| T8,O6       | We can drill more wells. However, we may <b>need</b> the water with little    |
|             | warning.  |
| T9,W1       | CAN BE A MAJOR PROBLEM AREA, DEPENDING ON IF AND HOW IT                       |
|             | HITS THE BEEF INDUSTRY OR OUR OPERATION.                                      |
| T10, S13    | The use of BMPs to limit the non-point source pollution and other runoff that |
|             | may ultimately affect the water supply of the Metroplex.                      |
| T11, O1, O5 | Could create some liability issues. Need to consult with Insurance Agent and  |
|             | Attorney.   |
|             |   |

# Legal and Liability Assessment For TTAP Enterprises

As part of the development of a full business plan for TTAP enterprises, Thomas Jr. and Julie Rancher have completed a **SWOT** analysis and an inventory of available resources on their operation. They have also developed an action plan for the operation which seeks to exploit the identified strengths and opportunities while at the same time improving their weaknesses and developing definitive plans for managing the threats facing them. This discussion will address the legal and liability weaknesses and threats identified in the **SWOT** analysis.

Table 11 provides the list of legal and liability weaknesses of TTAP Enterprises while Table 12 similarly provides a list of the legal and liability threats of the operation. The type of risk or threat is also identified in each table.

#### **Successional Risk**

The first issue to deal with is that Julie is the only person involved with the accounting and financial aspects of the operation (W<sub>3</sub>). This can be viewed as an operational weakness as well as a successional weakness. The intimate knowledge of the daily financial conditions of the operation would likely benefit Thomas Jr.'s management ability. Thomas Jr.'s ability to handle the accounting and financial responsibilities provides some long term stability to the operation if Julie is unavailable due to childbirth/child rearing or other circumstances.

The current lack of an estate plan for Thomas Sr. is a weakness to the operation as well  $(W_5)$ . This is especially critical if Thomas Sr. were to pass sooner rather than later. The issue of providing for Thomas Sr.'s spouse after his death also needs to be considered. Obviously the planned transition of ownership of Thomas Sr.'s property would be more desirable. The last successional risk is the lack of a plan to provide for Julie and her new/growing family in the event of a personal catastrophe to Thomas Jr.  $(W_{12})$ . None of these issues are particularly pleasant to discuss, but a firm plan is necessary to ensure the long term success of TTAP Enterprises.

# **Public and Employee Safety**

Agriculture in the rolling plains of Texas implies the availability of water, either through precipitation or groundwater. The **SWOT** Analysis identified windmills as being the major source of livestock water in the far reaches of pasture (W<sub>7</sub>). The current placement of two windmills and possibly one dirt tank can be viewed as a potential weakness in that windmills, stock tanks and ponds could be viewed as an attractive nuisance. It is not intended that windmills become a place for children to climb or for ponds and tanks to become popular swimming holes. This issue may be compounded by bringing in the non-farming/ranching public for hunting or other outdoor recreational activities. Placement of future livestock watering infrastructure needs to account for visibility and access to unintended trespassers.

The line equipment is thought to be only moderately aged (W<sub>8</sub>). While the age of machinery is usually thought of as a financial issue, it also poses an employee and public safety issue. Older or relatively worn machinery and equipment requires more repair and servicing to maintain its safety and efficiency. Obviously the compromised integrity of a piece of machinery or equipment is a safety issue to the operator, but if the equipment is traveling on public highways, the general public is also being exposed.

The proximity of a county road on the west side of the operation creates some public safety concerns  $(T_{13})$ ; trespassers coming onto the Rancher's property and TTAP Enterprises' cattle getting loose on the county road.

# **Product Liability**

Two product liability threats have been identified for TTAP Enterprises, the threat of karnal bunt  $(T_1)$  and BSE  $(T_7)$  or other foreign animal disease. The possibility of BSE or another foreign animal disease being discovered anywhere in the U.S. is a threat to market prices. But the possibility of that event happening on TTAP Enterprises is also a very real threat. This threat may become more critical if TTAP Enterprises enters a niche market where consumer perceptions of health issues may be more focused than in the general public.

#### **Environmental**

The threat of increased regulations aimed at reducing non-point source pollution from agricultural runoff limiting activities or greatly increasing production costs is a real concern to both Thomas Jr. and Sr.  $(T_{10})$ . The threat of ground or surface water pollution being traced back to TTAP enterprises needs to be minimized.

#### **Financial or Contractual Risks**

TTAP Enterprises face several financial risks as a result of the uncertainties in weather and the markets. These types of financial risk are addressed by the financial analysis, cash flow projection and the application of various risk management strategies; futures market, crop insurance, LRP policies, forward contracts, etc. Financial liability in this context is referring to the additional potential liabilities created when invited non-farming/ranching individuals or groups are on the ranch  $(T_{11})$ , or to other contractual arrangements that TTAP Enterprises may enter into. Thomas Sr. is also concerned about the financial losses that TTAP Enterprises may incur if the owner of the mineral rights grants a lease to a drilling or exploration company  $(T_{12})$ .

#### **Action Plans**

Table 13 begins to lay out the plans for systematically addressing each of the identified weaknesses and threats. Each weakness or threat is addressed individually, and a specific person or combination of people will be assigned to each issue. Delegation of the these responsibilities will make the overall task more manageable for Thomas Jr. and Julie, as well as gives the other team members a sense of ownership of the plan they are to help develop. The initial action plan for individual threats or weaknesses may be somewhat vague or generalized until the appropriate

resources or expertise is applied to the problem. Upon completion of the full business plan, several threats and weaknesses will remain on the **SWOT** analysis, but the action plans for managing these risks will be much more specific and detailed.

The first weakness from Table 11 involves Thomas Jr. becoming proficient with the accounting and financial reporting of the operation (W<sub>3</sub>). Thomas Jr. has committed to spending a half day per week with Julie working on the production and financial records. A managerial accounting system will be tailored to TTAP Enterprises with the help of a Texas Cooperative Extension economist. This system will use QuickBooks Pro<sup>®</sup> and integrate financial and production records.

Thomas Sr. has agreed to begin work on an estate plan for himself and his wife  $(W_5)$ . However, Thomas Jr. also requires a plan for the continued use of land currently owned by Thomas Sr. This plan will also address any provisions of Thomas Sr.'s plan that are phased in over a number of years. Thomas Jr. will work closely with I.M. Honest, the TTAP Enterprises attorney in developing this plan.

Water availability was identified as a weakness of TTAP Enterprises' crop and livestock operations. Thomas Sr. will develop a plan for addressing additional water needs for each component of their operations. This will include the placement of wells, stock tanks, diversion dams and ponds (W<sub>7</sub>). Thomas Sr. will consult with the attorney about trespassing, liability and attractive nuisance issues as they pertain to windmills or stock tanks, and if necessary will also consult with their insurance representative. Thomas Sr. will make a full report to Thomas Jr. on the status of this project.

Mr. Maverick will develop a formal preventive maintenance program for each major piece of equipment used by TTAP Enterprises. This is intended to reduce maintenance related accidents  $(W_8)$ , but may prove to also lower repair costs and down time. Frequent and regular reports of the maintenance status of all equipment will be exchanged between Mr. Maverick and all other employees and owners of TTAP Enterprises. Mr. Maverick will also report on the progress of the maintenance plan to Thomas Jr.

As Thomas Jr. and Julie contemplate parenthood, Thomas Jr. also needs to develop a plan to care for his family in the event of his disability or death  $(W_{12})$ . Much like the estate plan that Thomas Sr. is developing, Thomas Jr.'s plan will address the disposition of real and personal property to Julie and the anticipated minor children. This plan will require periodic review and revision to account for the maturing of children and the acquisition of additional real estate through new purchases or from the inheritance from Thomas Sr. Again, the expertise of Mr. Honest and possibly their insurance representative will be an important part of the development of this plan.

Two product liability threats have been identified for TTAP Enterprises, the threat of BSE  $(T_1)$  or other foreign animal disease and karnal bunt  $(T_7)$ . The possibility of BSE or another foreign animal disease being discovered anywhere in the U.S. is a threat to market prices. But the possibility of that event happening on TTAP enterprises is also a very real threat. This threat may become more critical if TTAP Enterprises enters a niche market where consumer perceptions of health issues may be more focused than in the general public. Thomas Sr. will

develop a set of guidelines or operating procedures for each enterprise or commodity being produced by the operation. These guidelines will include best management practices (BMP) as currently being recommended by the appropriate specialists from Texas Cooperative Extension, Texas Department of Agriculture, Texas Animal Health Commission, and other industry specialists/consultants. These guidelines will cover all aspects of cropping and livestock operations to include risk management and marketing. These BMPs will also likely address some of the environmental threats also identified in the SWOT analysis  $(T_{10})$ . Thomas Sr. will make a full report to Thomas Jr. on the status of this project.

Thomas Jr. will establish a policy manual for the proper use, storage and handling of agricultural chemicals, animal waste and other materials that have the potential to pollute surface and groundwater ( $T_{10}$ ). Many of these "proper use" practices will be included in the operating procedures for each enterprise being developed by Thomas Sr. The maintenance and pre-execution checklists for spraying/application equipment being developed by Mr. Maverick will also address the liability threats related to environmental issues. Thomas Jr. will ensure that himself, Thomas Sr. and Maverick all keep their pesticide applicators licenses current and participate in the required associated training.

The issues revolving around increased hunting and agri-tourism issues are of particular concern to Thomas Sr. While he recognizes the need to diversify and generate additional revenues that will strengthen their cash flow position, he is very concerned about the increased level of potential liability these activities carry with them (T<sub>11</sub>). Thomas Jr. together with Mr. Honest and their insurance representative will develop a strategy for proactively managing these perceived liabilities. This plan will include the use of liability waivers, liability insurance, written policies for invitees and other precautions as recommended by Mr. Honest. In this instance, Thomas Jr. will report make a full report to Thomas Sr. on the progress of this project.

Recent energy prices have sparked exploration and drilling interests in areas not typically associated with oil and gas production. Both Thomas Jr. and Sr. are concerned about the effects exploration or production will have on their operation in light of the fact they do not own the mineral rights associated with their property  $(T_{12})$ .

Thomas Sr. will work with Mr. Honest to develop a contingency plan in the event of future exploration or drilling activities. This will include: 1) methodology for documenting and valuing surface damages, and 2) a defensible pricing scheme for surface water that may be needed for drilling activities. Though these measures appear rather punitive in nature, these steps may be the only way TTAP Enterprises can get compensation for the disruption of their daily activities, damage to roads and fences, and the loss of useable pasture.

The proximity of the county road on the west side of the ranch has the potential for several unintended interactions with the public  $(T_{13})$ . Poaching, though infrequent, has always been an issue along the county road. As doe numbers are reduced and the bucks that are harvested increase in value, any poaching equates to a monetary loss to TTAP Enterprises. Thomas Jr. will request stepped up monitoring along the county road by local game wardens. In conjunction with reviewing the increased liability associated with hunting and agri-tourism, Thomas Jr. will

review trespassing laws and legal posting requirements with Mr. Honest. Legal postings will be placed around the perimeter of the entire operation.

Loose livestock being struck by passing auto traffic, while again rare, cannot be tolerated. Thomas Jr. will initiate a semi-annual inspection of fences along the county road and will perform repairs as necessary to maintain the integrity of the fences. A written account of the inspections and required repairs will also be kept. Thomas Jr. will review liability coverage with his insurance representative as it specifically pertains to escaped livestock.

#### **Summary**

The business planning process is a continual process. Once the initial plan is drafted and implemented, progress will be monitored. Changes in the operation's financial condition, new opportunities or threats, new or changing markets may all dictate a change in the overall business plan, and will certainly change or require an updated SWOT analysis.

Table 11. TTAP Enterprises Legal and Liability Weaknesses.

| Table 11. 1 1111 Enterprises Degai and Elability Weakingses.   |                               |  |  |  |  |  |
|--|-------------------------------|--|--|--|--|--|
| Identified Weakness  | Type of Risk/Threat           | Description of Weaknesses  |  |  |  |  |
| $W_3$  | Successional                  | Julie (wife) is the only one involved with the accounting and financial aspects of business. |  |  |  |  |
| $W_5$  | Successional                  | No estate plan for receiving land from Thomas Sr.  |  |  |  |  |
| $W_7$  | Public Safety                 | Windmills only means of supplying water in far locations of pasture.                         |  |  |  |  |
| $W_8$  | Public and Employee<br>Safety | Most of the Equipment has some age.  |  |  |  |  |
| W <sub>12</sub> Successional Thomas Jr. does not have a plan to provide for young family in the event of his disability or d |                               |  |  |  |  |  |

**Table 12. TTAP Enterprises Legal and Liability Threats.** 

|                   | Table 12. TTAT Enterprises Degarant Enablity Timeats. |  |  |  |  |  |
|-------------------|---|--|--|--|--|--|
| Identified Threat | Type of Risk/Threat                                   | Description of Threats   |  |  |  |  |
| T <sub>1</sub>    | Product and Financial/Contractual                     | BSE, or other foreign animal disease.  |  |  |  |  |
| $T_7$             | Product and Financial/Contractual                     | Karnal Bunt  |  |  |  |  |
| T <sub>10</sub>   | Environmental   | Increasing regulations due to non-point source pollution.  |  |  |  |  |
| T <sub>11</sub>   | Financial/Contractual                                 | Hunting and agri-tourism will bring the non-farming/ranching public onto the property.                                   |  |  |  |  |
| T <sub>12</sub>   | Financial/Contractual                                 | Ranchers do not own the mineral rights on the land they own.   |  |  |  |  |
| T <sub>13</sub>   | Public and Employee<br>Safety                         | County road creates the opportunity for poaching, and safety issues due to unsupervised trespassers and loose livestock. |  |  |  |  |

Table 13. TTAP Enterprises Action Plans for Legal and Liability Threats.

| Table 13. TTAP Enterprises Action Plans for Legal and Liability Threats. |   |  |  |  |  |  |
|--|---|--|--|--|--|--|
| Weakness or<br>Threat Identified<br>by SWOT<br>Analysis                  | Assigned<br>Resource<br>Person(s)                 | Action Plans   |  |  |  |  |
| $W_3$  | Thomas Jr.,<br>TCE<br>Economist                   | Thomas Jr. will commit ½ day per week to working with Julie on TTAP Enterprises production and financial records. Julie and Thomas Jr. will enroll in QBP workshop and make use of TCE economist to monitor progress and functionality of financial records.   |  |  |  |  |
| W <sub>5</sub>   | Thomas Jr.,<br>I.M. Honest<br>(Attorney)          | Thomas Jr. and I.M. Honest will develop a realistic plan to handle the additional workload and financial burden associated with a sudden loss of Thomas Sr. This plan will be reflect the direction of Thomas Sr.'s estate plan.   |  |  |  |  |
| $W_7$  | Thomas Sr.,<br>Insurance<br>agent, I.M.<br>Honest | TTAP Enterprises will review trespassing laws and review liability insurance with attorney and insurance agent. Practical plan for the placement of new livestock wells (windmills), stock tanks or ponds as to not create attractive nuisance situation.  |  |  |  |  |
| $\mathbf{W}_{8}$   | Maverick,<br>Thomas Jr.                           | Mr. Maverick will develop a formal preventive maintenance program and pre-execution checklist for all major pieces of equipment. Frequent and regular reports of maintenance status of all equipment will be exchanged between Jr., Sr., and Mr. Maverick  |  |  |  |  |
| W <sub>12</sub>  | Thomas Jr., I.M. Honest, Insurance Agent          | Thomas Jr. and I.M. Honest will develop a plan to care for his young family in the event of his disability or death. Annual reviews of plan and adequacy of insurance coverage will be performed.  |  |  |  |  |
| $T_1$  | Thomas Sr.,<br>TCE                                | Thomas Sr. will, with the input of various TCE specialists develop a Standard Operating Plan (SOP) for the livestock operations of TTAP Enterprises. This will include current BMPs as recommended by Texas Cooperative Extension, Texas Animal Health Commission and other industry working groups. These plans will cover all aspects of the livestock operation to include risk management and marketing. |  |  |  |  |

Table 13. TTAP Enterprises Action Plans for Legal and Liability Threats-Continued

| Table 13. I TALE | nici prises Action                                | i Flans for Legal and Liability Threats-Continued  |
|------------------|---|--|
| T <sub>7</sub>   | Thomas Sr.,<br>TCE                                | Thomas Sr. will, with the input of various TCE specialists develop a Standard Operating Plan (SOP) for the cropping operations of TTAP Enterprises. This will include current BMPs as recommended by Texas Cooperative Extension, Texas Department of Agriculture and other industry working groups. These plans will cover all aspects of the cropping operations to include risk management and marketing. |
| T <sub>10</sub>  | Thomas Jr.  | Thomas Jr. will establish a policy manual for the proper use, storage and handling of agricultural chemical, animal waste and other materials that have the potential to pollute surface and groundwater. Thomas Jr. will ensure that himself, Thomas Sr. and Maverick all keep their pesticide applicators licenses current and participate in the required associated training.                            |
| T <sub>11</sub>  | Thomas Jr.,<br>Insurance<br>Agent, I.M.<br>Honest | Thomas Jr. and I.M. Honest will develop a strategy for dealing with the additional potential liabilities created with increased hunting and agri-tourism activities. This will include the use of liability waivers, liability insurance, written policies for the invitees and other precautions as recommended by I.M. Honest.   |
| T <sub>12</sub>  | Thomas Sr.<br>I.M. Honest                         | Thomas Sr. and I.M. Honest will formulate a strategy for documenting and valuing surface damage and for the potential sale of surface water in the event that any production does begin.   |
| T <sub>13</sub>  | Thomas Jr.,<br>Insurance<br>Agent, I.M.<br>Honest | Thomas Jr. will request stepped up monitoring by Game Warden along the county road. Thomas Jr. will also consult with his insurance agent and I.M. Honest regarding trespassing laws. Legal postings will be placed on the perimeter of the entire operation. Fences along county road will be inspected semi-annually, and repaired as necessary.   |

# **Short Term and Long Term Goals for TTAP Enterprises**

Thomas Jr. and Julie have defined seven short term goals and three long term goals. The seven short term goals include four financial goals, one production goal, one resource goal and one combination goal. These are outlined in the short term goal worksheet in table 14. Each of the short term goals is targeted to a long term goal or to one of the weaknesses and/or threats defined earlier. Each goal has who is responsible for meeting the goal and when the goal will be evaluated.

The long term goals (Table 15) help to define whether the Ranchers are moving the operation in the direction they want. In each of the three goals case, the overall mission statement of the operation is supported once the goal has been met. The Ranchers are using a ten year planning horizon for these long term goals.

**Table 14. TTAP Enterprises Short Term Goals** 

| Goal  | Production,<br>Financial,<br>or<br>Resource | Whose<br>Responsible | Long Term<br>Goal<br>Support | Evaluation<br>Date (or<br>period) | Exceeded,<br>Met or<br>Remains |
|---|---|----------------------|------------------------------|-----------------------------------|--------------------------------|
| 1) TTAP's 2006 Wheat for Grain will be sold for at least \$3.45 per bushel.   | Financial                                   | Thomas               | 1 and 3                      | 7/1/06                            |                                |
| 2) TTAP Enterprises will achieve a return on its assets of 5.25 percent during 2006.                                  | Financial                                   | Everyone             | 1 and 3                      | 1/2/07                            |                                |
| 3) TTAP Enterprises will reduce its debt to assets ratio to below 43.0 percent during 2006.                           | Financial                                   | Thomas               | 1 and 3                      | 1/2/07                            |                                |
| 4) TTAP Enterprises operating expense ratio will not exceed 65 percent during 2006.                                   | Financial                                   | Thomas/<br>Catchum   | 1                            | 1/2/07                            |                                |
| 5) TTAP Enterprise will wean an 85 percent calf crop during 2006.   | Production                                  | Catchum              | 1                            | 11/15/06                          |                                |
| 6) TTAP Enterprises will reduce brush problem in southeast 100 acres from 80 percent coverage to 45 percent coverage. | Production / Resource                       | Catchum              | 2                            | 11/1/2006                         |                                |
| 7) TTAP Enterprise will harvest 25 head of whitetail does during the 2006 winter months.                              | Resource                                    | Catchum              | 2                            | 2/1/07                            |                                |

**Table 15. TTAP Enterprises Long Term Goals** 

| Goal   | Production,<br>Financial,<br>or<br>Resource | Whose<br>Responsible | Supports<br>Mission<br>Statement | Evaluation<br>Date (or<br>period) | Exceeded,<br>Met or<br>Remains |
|--|---|----------------------|----------------------------------|-----------------------------------|--------------------------------|
| 1) TTAP Enterprises will build its Net Worth to over \$2.0 million by January 1, 2015.   | Financial                                   | Everyone             | Yes                              | 1/2/15                            |                                |
| 2) TTAP Enterprises will increase the carrying capacity of the ranch from 481 animal units to 520 animal units by January 1, 2005. | Production                                  | Catchum/<br>Thomas   | Yes                              | 1/2/15                            |                                |
| 3) Thomas and Julie Rancher will have a new four bedroom house built by January 1, 2015.   | Resource                                    | Ranchers             | Yes                              | 1/2/15                            |                                |
|  |   |                      |                                  |                                   |                                |
|  |   |                      |                                  |                                   |                                |

#### **TTAP Enterprises Production Plan**

The primary activities of TTAP Enterprises include a commercial cattle herd, stocker operation, wheat production for grazing and grain, and sorghum production. TTAP Enterprises owns 6,000 acres of which 1,000 acres are planted to wheat (200 acres are double cropped grain sorghum) and 5,000 acres are native pasture. Approximately 500 acres of wheat are harvested each year for grain and the remaining 500 acres are grazed out with stocker calves. The operation leases an additional 5,000 acres of native pasture at a cash rental rate of \$4.25 per acre.

Table 16 illustrates a summary of TTAP Enterprise's crop activities. Cropping activities are limited to wheat (both grazed and harvested) and grain sorghum production. Because of dryland cropping conditions, TTAP Enterprises expects an average wheat production of 30 bushels per acre and 21 hundred weights of sorghum production. The crop land has a Farm Service Agency base of 500 acres at 30 bushels per acre for direct and countercyclical government payments. Total variable cost for harvested wheat averages \$41.20 per acre while grazed wheat variable cost is expected to be about \$25.50 per acre. Variable cost for sorghum production averages \$41.20 per planted acre. TTAP Enterprises insures only the 500 acres of wheat that is expected to be harvested with a Crop Revenue Coverage (CRC) policy. A ten year historical production for wheat ranges from 12 to 39 bushels per acre.

Table 17 summarizes TTAP Enterprise's cow-calf operation. TTAP Enterprises prides itself in the production of quality beef. Currently there are 400 head of cows and 60 head of heifers that are retained for replacement each year. The operation has experienced an above average calving percentage of 88% for the past few years. TTAP Enterprises expects a death loss of 2.5% on cows and another 6% on calves before weaning. Weaning weights average 450 pounds for heifers and 475 for steers. TTAP Enterprises currently has 16 bulls and replaces about four bulls every year.

A summary of TTAP Enterprise's stocker operations is shown in Table 18. TTAP Enterprises preconditions and transfers an average of 272 head of calves to a stocker operation. To enhance the stocker cattle enterprise, TTAP Enterprises purchases 100 stockers when grazing availability permits to maximize utilization of the wheat pasture. TTAP Enterprises expects about a \$0.10 to \$0.12 rollback on purchased stocker calves. Stockers have historically gained 1.5 to 2.0 pounds per day depending on weather and crop conditions. TTAP Enterprises does little or no forward pricing of their calves. By retaining ownership in their calves, TTAP Enterprises hopes to capitalize on the value that is added to their calves through the sale of heavier animals ready for the feedlot.

Table 19 shows TTAP Enterprise's production calendar. Each major activity that takes place during the year is placed in the month that it occurs. In addition to detailing the activity, the personnel responsible for the action, the associated enterprise, and other technical data is reported on the production calendar. April, May, and June are busy months for TTAP Enterprises because sorghum is planted, wheat is harvested, and

stockers are shipped. Activities during the fall months are also time constrained as wheat is planted, cows are palpated, and stocker cattle are purchased and vaccinated. TTAP Enterprise's production calendar engages each member of the team to plan and coordinate their efforts.

TTAP Enterprises places a great deal of importance on bookkeeping. Because of diligent efforts put forth by Julie Rancher, TTAP Enterprises is able to develop a table of cash flow timing. Table 20 illustrates the percentage of revenues and expenses by month for TTAP Enterprises. The majority of revenue is received in May and by June over 82% of revenue is realized. Although the stream of expenses for the year is more uniform than incomes, most expenses are realized in the month of June when land and lease payments are due.

Table 16. Crop Production Summary, Owned Land - TTAP Enterprises.

| Producer:     | TTAP E | <u>nterprises</u> | <br>Unit: | <u>1</u> |  |
|---------------|--------|-------------------|-----------|----------|--|
| Unit Descript | tion:  | Home Place        |           |          |  |

| Unit Info                             | Crop: Wheat |                  | Crop: Wheat |                  | Crop: Sorghum |                  | Crop: Pasture |                  |
|---------------------------------------|-------------|------------------|-------------|------------------|---------------|------------------|---------------|------------------|
| Planted Acres                         | 500         | )                | 500         |                  | 200           |                  | 5000          |                  |
| Budgeted Yield (units/acre)           | 30 b        | u                | 30 bu       |                  | 21 cwt        |                  | 2000 lb       |                  |
| Actual Yield (units/acre)             | 30 b        | u                | 30 b        | u                | 21 cv         | vt               | 2000          | lb               |
| Crop Price                            | 3.25        | ;                | N/A         | L                | 3.25          | ;                | N/.           | Ā                |
| LDP                                   |             |                  |             |                  |               |                  |               |                  |
| Base Acres                            | 500         | )                | 500         | )                | 0             |                  | 0             |                  |
| CCP Yield                             | 30          |                  | 30          |                  | 0             |                  | 0             |                  |
| Direct Payment Yield                  | 30          |                  | 30          |                  | 0             |                  | 0             |                  |
| Landowner's Share of Production       | 100         | 1                | 100         | 1                | 100           | 1                | 10            | 0                |
| Cost Items                            | Cost        | LL<br>Share<br>% | Cost        | LL<br>Share<br>% | Cost          | LL<br>Share<br>% | Cost          | LL<br>Share<br>% |
| Seed Cost (\$/acre)                   | 8.00        |                  | 8.00        |                  | 8.00          |                  |               |                  |
| Fertilizer Cost (\$/acre)             | 12.50       |                  | 12.50       |                  | 12.50         |                  |               |                  |
| Herbicide Cost (\$/acre)              | 5.00        |                  | 5.00        |                  | 5.00          |                  |               |                  |
| Insecticide Cost (\$/acre)            |             |                  |             |                  |               |                  |               |                  |
| Fungicide Cost (\$/acre)              |             |                  |             |                  |               |                  |               |                  |
| Custom Application Cost (\$/acre)     |             |                  |             |                  |               |                  |               |                  |
| Scouting & Other Cost (\$/acre)       |             |                  |             |                  |               |                  |               |                  |
| Irrigation Fuel Cost (\$/acre)        |             |                  |             |                  |               |                  |               |                  |
| Tillage & Harvest Fuel Cost (\$/acre) |             |                  |             |                  |               |                  |               |                  |
| Variable Harvesting Cost (\$/unit)    |             |                  |             |                  |               |                  |               |                  |
| Variable Harvesting Cost (\$/acre)    | 2.70        |                  |             |                  | 2.70          |                  |               |                  |
| Boll Weevil Cost (\$/acre)            |             |                  |             |                  |               |                  |               |                  |
| Labor Costs (\$/acre)                 | 13.00       |                  |             |                  | 13.00         |                  |               |                  |
| Cash Lease Rate (\$/acre)             |             |                  |             |                  |               |                  |               |                  |
| <b>Crop Insurance Information</b>     |             |                  |             |                  |               |                  |               |                  |
| Type of Coverage                      | CRC         |                  |             |                  |               |                  |               |                  |
| Yield Coverage                        | 0.65        | 5                |             |                  |               |                  |               |                  |
| Price Coverage                        | 1           |                  |             |                  |               |                  |               |                  |
| Premium                               | 4.70        | )                |             |                  |               |                  |               |                  |
| Hail Exclusion (Y/N)                  | N           |                  |             |                  |               |                  |               |                  |
| Hail Insurance (Y/N)                  | N           |                  |             |                  |               |                  |               |                  |
| Other Crop Information                |             |                  |             |                  |               |                  |               |                  |
| Irrigation Method                     | Dry         |                  | Dry         |                  | Dry           |                  |               |                  |
| Gene Type                             | Non         | e                | Non         | e                | Non           | e                |               |                  |
| Planting Pattern                      | Solie       | d                | Solie       | d                | Solie         | d                |               |                  |
| Purpose                               | Comme       | rcial            | Graz        | e                | Comme         | rcial            |               |                  |
| Practice                              | Comm        | non              | Comm        |                  | Comm          | non              |               |                  |
| Environmental                         | Convent     | ional            | Convent     | ional            | Convent       | ional            |               |                  |

Notes:
Type of Coverage: CAT, APH/MPCI, CRC, IP
Irrigation Method: dry, pivot, furrow, Lepa, side roll, drip, flood, semi-irrigated
Gene Type: None, Bt, Roundup Ready, Bt + Roundup Ready
Planting Pattern: solid, skip row, ultra narrow row
Purpose: commercial, commercial/graze, graze, feed, seed, food
Practice: common, minimum till, no till
Environmental: conventional, organic

### Table 16 (cont.). Crop Production Summary, Owned Land - TTAP Enterprises.

| Producer: TTA      | AP Enterprises | Unit: <u>1</u> |
|--------------------|----------------|----------------|
| Unit Description:_ | Home Place     |                |

#### **Historical & APH Yields**

| Historical & APH Yields | Crop: Whea          | at        | Crop: Wh            | eat       | Crop: Sorgl         | num       | Crop: Past          | ture      |
|-------------------------|---------------------|-----------|---------------------|-----------|---------------------|-----------|---------------------|-----------|
| Year                    | Historical<br>Yield | APH Yield |
| 1996                    | 28                  | 28        | 28                  | 28        | 27.3                | N/A       |                     |           |
| 1997                    | 12                  | 28        | 12                  | 28        | 33.3                | N/A       |                     |           |
| 1998                    | 24                  | 28        | 24                  | 28        | 43.33               | N/A       |                     |           |
| 1999                    | 32                  | N/A       | 32                  | N/A       | 10.09               | N/A       |                     |           |
| 2000                    | 36                  | N/A       | 36                  | N/A       | 42.0                | N/A       |                     |           |
| 2001                    | 29                  | N/A       | 29                  | N/A       | 25.33               | N/A       |                     |           |
| 2002                    | 31                  | N/A       | 31                  | N/A       | 40.33               | N/A       |                     |           |
| 2003                    | 25                  | N/A       | 25                  | N/A       | 33.75               | N/A       |                     |           |
| 2004                    | 39                  | N/A       | 39                  | N/A       | 20.34               | N/A       |                     |           |
| 2005                    | 32                  | N/A       | 32                  | N/A       | 49.06               | N/A       |                     |           |
| T-Yield                 | 28                  |           | 28                  |           | 33                  |           |                     |           |

#### **Hail Insurance Data**

| Insurance Data          | Crop: Wheat | Crop: Wheat | Crop: Sorghum | Crop: Pasture |
|-------------------------|-------------|-------------|---------------|---------------|
| Coverage                | None        | None        | None          |               |
| Premium                 |             |             |               |               |
| Frequency               |             |             |               |               |
| Severity                |             |             |               |               |
| Loss Standard Deviation |             |             |               |               |
| Exclusion               |             |             |               |               |

Table 16. Crop Production Summary, Leased Land - TTAP Enterprises.

| Producer: <u>T</u> | TAP Enterprises   | Unit: | <u>2</u> |  |
|--------------------|-------------------|-------|----------|--|
| Unit Description   | : Leased Property |       |          |  |

| Unit Info                             | Crop: Pas | Crop: Pasture    |      | Crop:            |      | Crop:            |      | Crop:            |  |
|---------------------------------------|-----------|------------------|------|------------------|------|------------------|------|------------------|--|
| Planted Acres                         | 5,00      | 0                |      |                  |      |                  |      |                  |  |
| Budgeted Yield (units/acre)           | 2,000     | lb               |      |                  |      |                  |      |                  |  |
| Actual Yield (units/acre)             | 2,000     |                  |      |                  |      |                  |      |                  |  |
| Crop Price                            | N/A       | 1                |      |                  |      |                  |      |                  |  |
| LDP                                   |           |                  |      |                  |      |                  |      |                  |  |
| Base Acres                            | 0         |                  |      |                  |      |                  |      |                  |  |
| CCP Yield                             | 0         |                  |      |                  |      |                  |      |                  |  |
| Direct Payment Yield                  | 0         |                  |      |                  |      |                  |      |                  |  |
| Landowner's Share of Production       | 100       | )                |      |                  |      |                  |      |                  |  |
| Cost Items                            | Cost      | LL<br>Share<br>% | Cost | LL<br>Share<br>% | Cost | LL<br>Share<br>% | Cost | LL<br>Share<br>% |  |
| Seed Cost (\$/acre)                   |           |                  |      |                  |      |                  |      |                  |  |
| Fertilizer Cost (\$/acre)             |           |                  |      |                  |      |                  |      |                  |  |
| Herbicide Cost (\$/acre)              |           |                  |      |                  |      |                  |      |                  |  |
| Insecticide Cost (\$/acre)            |           |                  |      |                  |      |                  |      |                  |  |
| Fungicide Cost (\$/acre)              |           |                  |      |                  |      |                  |      |                  |  |
| Custom Application Cost (\$/acre)     |           |                  |      |                  |      |                  |      |                  |  |
| Scouting & Other Cost (\$/acre)       |           |                  |      |                  |      |                  |      |                  |  |
| Irrigation Fuel Cost (\$/acre)        |           |                  |      |                  |      |                  |      |                  |  |
| Tillage & Harvest Fuel Cost (\$/acre) |           |                  |      |                  |      |                  |      |                  |  |
| Variable Harvesting Cost (\$/unit)    |           |                  |      |                  |      |                  |      |                  |  |
| Variable Harvesting Cost (\$/acre)    |           |                  |      |                  |      |                  |      |                  |  |
| Boll Weevil Cost (\$/acre)            |           |                  |      |                  |      |                  |      |                  |  |
| Labor Costs (\$/acre)                 |           |                  |      |                  |      |                  |      |                  |  |
| Cash Lease Rate (\$/acre)             | \$4.2     | 5                |      |                  |      |                  |      |                  |  |
| <b>Crop Insurance Information</b>     |           |                  |      |                  |      |                  |      |                  |  |
| Type of Coverage                      |           |                  |      |                  |      |                  |      |                  |  |
| Yield Coverage                        |           |                  |      |                  |      |                  |      |                  |  |
| Price Coverage                        |           |                  |      |                  |      |                  |      | -                |  |
| Premium                               |           |                  |      |                  |      |                  |      |                  |  |
| Hail Exclusion (Y/N)                  |           |                  |      |                  |      |                  |      |                  |  |
| Hail Insurance (Y/N)                  |           |                  |      |                  |      |                  |      |                  |  |
| Other Crop Information                |           |                  |      |                  |      |                  |      |                  |  |
| Irrigation Method                     |           |                  |      |                  |      |                  |      |                  |  |
| Gene Type                             |           |                  |      |                  |      |                  |      |                  |  |
| Planting Pattern                      |           |                  |      |                  |      |                  |      |                  |  |
| Purpose                               |           |                  |      |                  |      |                  |      |                  |  |
| Practice                              |           |                  |      |                  |      |                  |      |                  |  |
| Environmental                         |           |                  |      |                  |      |                  |      |                  |  |

Notes:
Type of Coverage: CAT, APH/MPCI, CRC, IP
Irrigation Method: dry, pivot, furrow, Lepa, side roll, drip, flood, semi-irrigated
Gene Type: None, Bt, Roundup Ready, Bt + Roundup Ready
Planting Pattern: solid, skip row, ultra narrow row
Purpose: commercial, commercial/graze, graze, feed, seed, food
Practice: common, minimum till, no till
Environmental: conventional, organic

| Table 16 (cont.). Crop Production Summary, Leased Land - TTAP Enterprises. |        |  |  |  |  |  |  |
|--|--------|--|--|--|--|--|--|
| Producer: <u>TTAP Enterprises</u>  | Unit:2 |  |  |  |  |  |  |
| Unit Description: <u>Leased Property</u>                                   |        |  |  |  |  |  |  |
| Historical & APH Yields  |        |  |  |  |  |  |  |

| Historical & APH Yields | Crop: Pastu         | ire       | Crop:               |           | Crop:               |           | Crop:               |           |
|-------------------------|---------------------|-----------|---------------------|-----------|---------------------|-----------|---------------------|-----------|
| Year                    | Historical<br>Yield | APH Yield |
| 1996                    |                     | N/A       |                     |           |                     |           |                     |           |
| 1997                    |                     |           |                     |           |                     |           |                     |           |
| 1998                    |                     |           |                     |           |                     |           |                     |           |
| 1999                    |                     |           |                     |           |                     |           |                     |           |
| 2000                    |                     |           |                     |           |                     |           |                     |           |
| 2001                    |                     |           |                     |           |                     |           |                     |           |
| 2002                    |                     |           |                     |           |                     |           |                     |           |
| 2003                    |                     |           |                     |           |                     |           |                     |           |
| 2004                    |                     |           |                     |           |                     |           |                     |           |
| 2005                    |                     |           |                     |           |                     |           |                     |           |
| T-Yield                 |                     |           |                     |           |                     |           |                     |           |

#### **Hail Insurance Data**

| Insurance Data          | Crop: Pasture | Crop: | Crop: | Crop: |
|-------------------------|---------------|-------|-------|-------|
| Coverage                | None          |       |       |       |
| Premium                 |               |       |       |       |
| Frequency               |               |       |       |       |
| Severity                |               |       |       |       |
| Loss Standard Deviation |               |       |       |       |
| Exclusion               |               |       |       |       |

**Table 17. Summary of Cow Calf Enterprise – TTAP Enterprises.** 

| Producer: <u>TTAP Enter</u> | <u>prises</u> | Unit:1_ |  |
|-----------------------------|---------------|---------|--|
| Unit Description:           | Home Place    |         |  |

| Summary of Cattle D        | ata      | <b>Expected Calf Production</b>  |         |  |
|----------------------------|----------|----------------------------------|---------|--|
| Mature Cows Jan 1          | 400      | Calving Percentage               | 88      |  |
| Cows Culled                | 59       | Heifer Calves Born               | 176     |  |
| Cows that Died             | 1        | Heifer Calves that Died          | 10      |  |
| Needed Replacements        | 60       | Replacement Heifers (Jan 1)      | 60      |  |
| Replacements Raised        | 60       | Replacements culled              | 60      |  |
| Replacement Heifers Bought | 0        | Bred Replacements                | 0       |  |
| Mature Bulls Jan 1         | 16       | Bred Replacements Sold           | 0       |  |
| Bulls Culled               | 4        | Bred Replacements that Died      | 0       |  |
| Bulls that Died            | 0        | Bull Calves Born                 | 176     |  |
| Needed Bull Replacements   | 4        | Bull Calves that Died            | 10      |  |
| Replacement Bulls Raised   | 0        | Bull Calves Sold                 | 0       |  |
| Herd Bulls Bought          | 4        | Bull Calves held for Replacement | 0       |  |
|                            |          | Replacement Bulls (Jan 1)        | 0       |  |
| Expected Sale Weights Fo   | r Cattle | Replacement Bulls Sold           | 0       |  |
| Cull Cows                  | 1,000    | Replacement Bulls that Died      | 0       |  |
| Cull Replacement Heifers   | 750      |                                  |         |  |
| Cull Bulls                 | 1,500    | <b>Expected Replacement Cost</b> | \$/head |  |
| Cull Replacement Bulls     | 1,000    | Replacement Heifers              | N/A     |  |
| Weaned Heifers             | 450      | Bull Yearlings                   | N/A     |  |
| Weaned Steers              | 475      | Mature Cows                      | N/A     |  |
|                            |          | Mature Bulls                     | 2,000   |  |

| <b>Expected Sales Price</b> |      | <b>Costs of Production</b> | \$/head |
|-----------------------------|------|----------------------------|---------|
| Culled Cows                 | 0.65 | Vet, Medicine & Supplies   | \$ 7.80 |
| Culled Replacement Heifers  | N/A  | Marketing                  | \$15.00 |
| Culled Bulls                | N/A  | Check-off                  | \$ 1.00 |
| Culled Replacement Bulls    | N/A  | Salt and Mineral           | \$ 8.25 |
| Weaned Heifers              | 1.02 | Grazing                    | \$44.64 |
| Weaned Steers               | 1.12 | Hauling                    |         |
| Bred Replacement Heifers    | N/A  | Other                      |         |
| Fed Cattle                  | N/A  |                            |         |

| Cattle Transferred to Stocker and Feedlot Enterprises |     | Stocker | Feedlot |
|---|-----|---------|---------|
| Weaned Heifers  | 106 | X       |         |
| Weaned Steers   | 166 | X       |         |

| Annual Supplemental Feed Requirements for Cattle |                  |                       |  |
|--|------------------|-----------------------|--|
| Name of Feedstuff                                | Pounds/Head/Year | Price/Unit            |  |
| Range Cubes                                      | 315              | \$201/ton             |  |
| Hay  | 360              | \$45 / 1,500 lb. roll |  |
|  |                  |                       |  |
|  |                  |                       |  |

### Table 17 (cont.). Summary of Cow Calf Enterprise – TTAP Enterprises.

| Producer:    | TTAP Ente | <u>rprises</u> | Unit: | <u>1</u> |
|--------------|-----------|----------------|-------|----------|
| Unit Descrip | otion:    | Home Place     |       |          |

#### **Historical Cattle Production**

| Year | Calf Sale Weight | Calf Crop % |
|------|------------------|-------------|
| 1996 | N/A              | N/A         |
| 1997 | N/A              | N/A         |
| 1998 | N/A              | N/A         |
| 1999 | N/A              | N/A         |
| 2000 | 425              | 87          |
| 2001 | 440              | 89          |
| 2002 | 450              | 83          |
| 2003 | 460              | 82          |
| 2004 | 470              | 89          |
| 2005 | 462.5            | 88          |

#### **Historical Prices Received for Cattle**

| Year | Steer Price | <b>Heifer Price</b> | Cow Price | <b>Bull Price</b> |
|------|-------------|---------------------|-----------|-------------------|
| 1996 | N/A         | N/A                 | N/A       | N/A               |
| 1997 | N/A         | N/A                 | N/A       | N/A               |
| 1998 | N/A         | N/A                 | N/A       | N/A               |
| 1999 | N/A         | N/A                 | N/A       | N/A               |
| 2000 | \$0.87      | \$0.79              | \$0.46    | \$0.56            |
| 2001 | \$0.88      | \$0.81              | \$0.47    | \$0.58            |
| 2002 | \$0.93      | \$0.86              | \$0.49    | \$0.60            |
| 2003 | \$0.98      | \$0.92              | \$0.52    | \$0.61            |
| 2004 | \$1.02      | \$0.95              | \$0.58    | \$0.69            |
| 2005 | \$1.12      | \$1.02              | \$0.65    | \$0.75            |

**Table 18. Summary of Stocker Enterprise, Retained – TTAP Enterprises.** 

| Producer : <u>TTAP</u> | Enterprises       | Unit #: | <u>1</u> |
|------------------------|-------------------|---------|----------|
| Unit Description:      | Retained Stockers |         |          |

| Stocker Herd Information                        |                 |                   |  |  |
|---|-----------------|-------------------|--|--|
|   | Current Year    | <b>Years 2-10</b> |  |  |
| Stockers on hand Jan 1.                         | 272             | 272               |  |  |
| Average weight per head of stockers Jan 1.      | 550             | 550               |  |  |
| Crop Stockers are tied too.                     | Graze Wheat     | Graze Wheat       |  |  |
| Stocker Lease Terms (Select ONE)                |                 |                   |  |  |
| \$/lb of gain                                   | N/A             | N/A               |  |  |
| \$/cwt on weight                                |                 |                   |  |  |
| \$/acre   |                 |                   |  |  |
| \$/head   |                 |                   |  |  |
| Group 1. (purchased and sold in different year) |                 |                   |  |  |
| Stocker Purchase date                           | N/A             | N/A               |  |  |
| Sale Date                                       | May 3           | May 3             |  |  |
| On weight after shrink for Fall Stockers        | 463             | 463               |  |  |
| Death loss                                      | 0               | 0                 |  |  |
| Number Purchased                                | 0               | 0                 |  |  |
| Purchase Price                                  | N/A             | N/A               |  |  |
| Sale Price                                      | 1.04 H : 1.09 S |                   |  |  |
| Daily gain                                      | 1.93            |                   |  |  |
| Decision date to final sale                     | N/A             | N/A               |  |  |
| #transferred in                                 | 272             | 272               |  |  |
| #transferred out                                | 0               | 0                 |  |  |
| Acres Grazed                                    | 500             | 500               |  |  |
| Answer Next two only if using graze out rule    |                 |                   |  |  |
| Normal Pull-off date                            | N/A             | N/A               |  |  |
| Net Revenue difference to Pull-off cattle       | N/A             | N/A               |  |  |

| Stocker Cattle Costs of Production | n (\$/head) |
|------------------------------------|-------------|
| Vet, Medicine & Supplies           | 22.37       |
| Marketing/Commission               | 0           |
| Utilities                          | 0           |
| Salt and Mineral                   | 0           |
| Custom Services                    | 0           |
| Hauling, Fuel, Lube Cost           | 0           |
| Labor                              | 0           |

### Table 18 (cont.). Summary of Stocker Enterprise, Retained – TTAP Enterprises.

| Producer :TTAP    | Enterprises       | Unit #: | <u>1</u> |
|-------------------|-------------------|---------|----------|
| Unit Description: | Retained Stockers |         |          |

| Annual Feed Requirements for Stockers |               |            |  |
|---------------------------------------|---------------|------------|--|
| Feed                                  | Feed/Head/Day | Price/Unit |  |
| None                                  |               |            |  |
|                                       |               |            |  |
|                                       |               |            |  |
|                                       |               |            |  |
|                                       |               |            |  |

| Historical Gain - Stocker Calf Production |           |            |                |
|---|-----------|------------|----------------|
| Year                                      | In-weight | Out-weight | Number of Days |
| 2004                                      | 495       | 795        | 181            |
| 2003                                      | 501       | 801        | 178            |
| 2002                                      | 505       | 803        | 180            |
| 2001                                      | 510       | 814        | 185            |
| 2000                                      | 486       | 788        | 177            |
| 1999                                      | 484       | 791        | 175            |
| 1998                                      | 493       | 796        | 182            |
| 1997                                      | 497       | 799        | 186            |
| 1996                                      | 482       | 810        | 193            |
| 1995                                      | 499       | 808        | 188            |

| Optional Pricing Histories |                                   |                               |   |  |  |  |  |  |  |
|----------------------------|-----------------------------------|-------------------------------|---|--|--|--|--|--|--|
| Year                       | Stocker Purchase Price<br>(\$/lb) | Stocker Sale Price<br>(\$/lb) | Contract Rates (\$/lb of gain or \$/head/month) |  |  |  |  |  |  |
| 2004                       | N/A                               | 1.03                          |   |  |  |  |  |  |  |
| 2003                       |                                   | 0.99                          |   |  |  |  |  |  |  |
| 2002                       |                                   | 0.97                          |   |  |  |  |  |  |  |
| 2001                       |                                   | 0.95                          |   |  |  |  |  |  |  |
| 2000                       |                                   | 0.93                          |   |  |  |  |  |  |  |
| 1999                       |                                   | 0.91                          |   |  |  |  |  |  |  |
| 1998                       |                                   | 0.89                          |   |  |  |  |  |  |  |
| 1997                       |                                   | 0.87                          |   |  |  |  |  |  |  |
| 1996                       |                                   | 0.85                          |   |  |  |  |  |  |  |
| 1995                       |                                   | 0.83                          |   |  |  |  |  |  |  |

**Table 18. Summary of Stocker Enterprise, Purchased – TTAP Enterprises**.

| Producer : <u>TTAP Er</u> | nterprises         | Unit #: | <u>2</u> |  |
|---------------------------|--------------------|---------|----------|--|
| Unit Description:         | Purchased Stockers |         |          |  |

| Stocker Herd Information                        |              |             |  |  |  |  |
|---|--------------|-------------|--|--|--|--|
|   | Current Year | Years 2-10  |  |  |  |  |
| Stockers on hand Jan 1.                         | 100          | 100         |  |  |  |  |
| Average weight per head of stockers Jan 1.      | 575          | 575         |  |  |  |  |
| Crop Stockers are tied too.                     | Graze Wheat  | Graze Wheat |  |  |  |  |
| Stocker Lease Terms (Select ONE)                |              |             |  |  |  |  |
| \$/lb of gain                                   | N/A          | N/A         |  |  |  |  |
| \$/cwt on weight                                |              |             |  |  |  |  |
| \$/acre   |              |             |  |  |  |  |
| \$/head   |              |             |  |  |  |  |
| Group 1. (purchased and sold in different year) |              |             |  |  |  |  |
| Stocker Purchase date                           | Dec 5        | Dec 5       |  |  |  |  |
| Sale Date                                       | May 3        | May 3       |  |  |  |  |
| On weight after shrink for Fall Stockers        | 450          | 450         |  |  |  |  |
| Death loss                                      | 0            | 0           |  |  |  |  |
| Number Purchased                                | 100          | 100         |  |  |  |  |
| Purchase Price                                  | 1.25         |             |  |  |  |  |
| Sale Price                                      | 1.12         |             |  |  |  |  |
| Daily gain                                      | 1.67         |             |  |  |  |  |
| Decision date to final sale                     | N/A          | N/A         |  |  |  |  |
| #transferred in                                 | 0            | 0           |  |  |  |  |
| #transferred out                                | 0            | 0           |  |  |  |  |
| Acres Grazed                                    | 500          | 500         |  |  |  |  |
| Answer Next two only if using graze out rule    |              |             |  |  |  |  |
| Normal Pull-off date                            | N/A          | N/A         |  |  |  |  |
| Net Revenue difference to Pull-off cattle       | N/A          | N/A         |  |  |  |  |

| Stocker Cattle Costs of Production (\$/head) |       |
|--|-------|
| Vet, Medicine & Supplies                     | 34.50 |
| Marketing/Commission                         | 0     |
| Utilities                                    | 0     |
| Salt and Mineral                             | 0     |
| Custom Services                              | 0     |
| Hauling, Fuel, Lube Cost                     | 0     |
| Labor  | 0     |

### Table 18 (cont.). Summary of Stocker Enterprise, Purchased – TTAP Enterprises.

| Producer : <u>TTAF</u> | <u>Enterprises</u> | Unit #: | <u>2</u> |
|------------------------|--------------------|---------|----------|
| Unit Description:      | Purchased Stockers |         |          |

| Annual Feed Requirements for Stockers |  |  |  |  |  |  |  |  |  |
|---------------------------------------|--|--|--|--|--|--|--|--|--|
| Feed Feed/Head/Day Price/Unit         |  |  |  |  |  |  |  |  |  |
| None                                  |  |  |  |  |  |  |  |  |  |
|                                       |  |  |  |  |  |  |  |  |  |
|                                       |  |  |  |  |  |  |  |  |  |
|                                       |  |  |  |  |  |  |  |  |  |
|                                       |  |  |  |  |  |  |  |  |  |

| Historical Gain - Stocker Calf Production |           |            |                |  |  |  |  |  |
|---|-----------|------------|----------------|--|--|--|--|--|
| Year                                      | In-weight | Out-weight | Number of Days |  |  |  |  |  |
| 2004                                      | 445       | 753        | 184            |  |  |  |  |  |
| 2003                                      | 462       | 748        | 172            |  |  |  |  |  |
| 2002                                      | 438       | 762        | 186            |  |  |  |  |  |
| 2001                                      | 449       | 755        | 180            |  |  |  |  |  |
| 2000                                      | 471       | 739        | 171            |  |  |  |  |  |
| 1999                                      | 475       | 744        | 178            |  |  |  |  |  |
| 1998                                      | 443       | 751        | 184            |  |  |  |  |  |
| 1997                                      | 447       | 748        | 186            |  |  |  |  |  |
| 1996                                      | 432       | 768        | 196            |  |  |  |  |  |
| 1995                                      | 450       | 750        | 189            |  |  |  |  |  |

| Optional Pricing Histories |                                   |                               |   |  |  |  |  |  |
|----------------------------|-----------------------------------|-------------------------------|---|--|--|--|--|--|
| Year                       | Stocker Purchase Price<br>(\$/lb) | Stocker Sale Price<br>(\$/lb) | Contract Rates (\$/lb of gain or \$/head/month) |  |  |  |  |  |
| 2004                       | 1.18                              | 1.09                          | N/A   |  |  |  |  |  |
| 2003                       | 1.12                              | 1.01                          |   |  |  |  |  |  |
| 2002                       | 1.02                              | 0.91                          |   |  |  |  |  |  |
| 2001                       | 1.00                              | 0.89                          |   |  |  |  |  |  |
| 2000                       | 0.98                              | 0.87                          |   |  |  |  |  |  |
| 1999                       | 0.96                              | 0.85                          |   |  |  |  |  |  |
| 1998                       | 0.94                              | 0.83                          |   |  |  |  |  |  |
| 1997                       | 0.92                              | 0.81                          |   |  |  |  |  |  |
| 1996                       | 0.89                              | 0.78                          |   |  |  |  |  |  |
| 1995                       | 0.86                              | 0.75                          |   |  |  |  |  |  |

 Table 19. Production Calendar for January through June for TTAP Enterprises.

|                            | Jan  | Feb   | Mar                                   | Apr  |         | May   | Jun  |
|----------------------------|--|---|---------------------------------------|--|---------|---|--|
| Activity/<br>Personnel     | Vaccinate<br>Stockers/T. Rancher,<br>Jr., J. Rancher, & C.<br>Maverick | Spray wheat/T.<br>Rancher, Jr. & C.<br>Maverick | Report Acreage to FSA/T. Rancher, Jr. | 1) Spray Wheat/T. Rancher, Jr. & C. Maverick 2) Equipment Repair (harvest)/C. Maverick | 3       | Rancher, Jr. &<br>C. Maverick<br>Custom wheat<br>harvest/ T.<br>Rancher, Jr. &<br>C. Maverick | 1) Sell cull bulls/T. Rancher, Jr. 2) Buy Replacement Bulls/ T. Rancher, Jr. 3) Harvest & Sell Wheat/T. Rancher, Jr. & C. Maverick 4) Make land and lease payments/ T. Rancher, Jr. and J. Rancher |
| Enterprise/<br>Input /Rate | Stockers/Triange9/<br>5cc per head                                     | Wheat/KernelMax/3<br>oz per gallon              | All Acreage                           | 1) Wheat/<br>KernelMax/3c<br>per gallon<br>2) Wheat                                    | z 1 2 3 | Wheat   | 1) Cow-calf 2) Cow-calf 3) Wheat 4) All  |

 $Table\ 19\ (cont.).\ \ Production\ Calendar\ for\ July\ through\ December\ for\ TTAP\ Enterprises.$ 

|                            | Jul   | Aug                                 |       | Sept   |       | Oct   | Nov  |       | Dec  |
|----------------------------|---|-------------------------------------|-------|--|-------|---|--|-------|--|
| Activity/<br>Personnel     | Herbicide application<br>for brush control/C.<br>Maverick | Renew insurance policies/J. Rancher | 2)    | Custom harvest<br>Sorghum/T.<br>Rancher, Jr. &<br>C. Maverick<br>Plant Wheat/T.<br>Rancher, Jr. &<br>C. Maverick | 1) 2) | Palpate cows/T. Rancher, Jr., & C. Maverick Vaccinate Raised Stockers/T. Rancher, Jr., J. Rancher & C. Maverick | Sell Cull Cows/T.<br>Rancher, Jr. & C.<br>Maverick | 1) 2) | Purchase<br>stockers/T.<br>Rancher, Jr.<br>Vaccinate<br>purchased<br>stockers/T.<br>Rancher, Jr., J.<br>Rancher & C.<br>Maverick |
| Enterprise/<br>Input /Rate | Cow-calf  | All                                 | 1) 2) | Sorghum<br>Wheat/Grow<br>Great Wheat<br>Seed/60 lbs per<br>acre  | 1) 2) | Cow-calf<br>Raised Stockers/<br>Triangle9/5 cc<br>per head  | Cow-calf   | 1) 2) | Purchased<br>Stockers<br>Purchased<br>Stockers/<br>Triangle9/5 cc<br>per head  |

Table 20. Cash Flow Timing – TTAP Enterprises.

|                  | J | F | M | A | M  | J  | J | A  | S | 0  | N | D | Total |
|------------------|---|---|---|---|----|----|---|----|---|----|---|---|-------|
| % of<br>Revenue  | 0 | 0 | 0 | 0 | 67 | 15 | 0 | 0  | 7 | 3  | 8 | 0 | 100%  |
| % of<br>Expenses | 3 | 5 | 2 | 5 | 5  | 39 | 4 | 13 | 3 | 16 | 2 | 3 | 100%  |

#### **TTAP Enterprises Financial Position, Performance, and Projections**

TTAP Enterprises uses QuickBooks Pro to keep their managerial accounting information. From this system, Tom and Julie can quickly generate their balance sheets and their income statement to determine their financial position. The balance sheets are constructed on the cost basis value. The centers approach is incorporated into the QuickBooks Pro system so they can determine enterprise level profitability. The financial ratios are generated using Microsoft Excel spreadsheets.

Using the financial statements from QuickBooks Pro and combining this with their production data in Microsoft Excel, Tom and Julie can generate their commodity (enterprise) reports to determine their level of efficiency. The financial ratios and commodity reports give a good picture of their operations past performance.

Finally, the Ranchers utilize Farm Assistance offered by the Extension Risk Management Group of the Texas Cooperative Extension. This strategic analysis tool provides the operators with a futuristic picture their operation and helps to determine whether their goals will be met in the future.

The following statements and reports tell the Ranchers' their financial position, performance and projections.

#### **TTAP Enterprises Financial Position**

The beginning balance sheet, as of December 31, 2004, shows total assets valued at \$2,567,983. Current assets make up \$343,112, while fixed assets make up \$2,224,871. The current assets include their checking account, investment in growing commodities such as their wheat planting, their raised stocker cattle and their purchased stocker cattle. Their fixed assets include their breeding stock (including their breeding females, replacement heifers and bulls), their machinery and equipment, buildings and improvements, and land.

Their liabilities total \$1,152,774 and include their purchased stocker cattle note (current note) and their real estate note. Equity as of 12/31/04 was \$1,415,208.99.

TTAP Enterprise's profit and loss statement shows a managerial net income of \$66,522.06. This includes the cost of family living and depreciation. Revenue was generated from their government payments, crop sales, raised and purchased stocker cattle, the sale of cull breeding animals, and their wildlife enterprise. Total revenue was \$439,141.93. Including their purchased stocker cattle cost of goods, total gross profit was \$382,891.93. Total expenses were \$340,364.24, however a portion of these expenses were used in the development of assets and were transferred to the balance sheet. Major expenses included interest on the real estate note (19% of total expenses), depreciation (14%), family living withdrawals (9%), hired labor (7%), and land rent (6%).

The ending balance sheet, as of 12/31/05, reflects high cattle prices and progress being made. Total assets increased to \$2,624,325.47, total liabilities declined to \$1,142,594.42, while equity increased to \$1,481,731.05. Fixed assets declined due to depreciation. All liability obligations were paid on time.

## TTAP ENTERPRISES Balance Sheet

#### **Cash Basis**

As of December 31, 2004

|  | Dec 31, 04                           |
|--|--------------------------------------|
| ASSETS   |                                      |
| Current Assets   |                                      |
| Checking/Savings<br>1st National Bank- Checking  | 47,862.00                            |
| Total Checking/Savings   | 47,862.00                            |
| Other Current Assets Invest in Growing Commodities Pur Stkrs (non-cattle costs) Raised Stockers Accum Costs Wheat Planting Accum Costs | 2,000.00<br>132,000.00<br>105,000.00 |
| <b>Total Invest in Growing Commodities</b>   | 239,000.00                           |
| Inventory (unfinished Ivstk.) '04 Purch Stkrs (Cattle Cost)  | 56,250.00                            |
| Total Inventory (unfinished lvstk.)  | 56,250.00                            |
| Total Other Current Assets   | 295,250.00                           |
| Total Current Assets   | 343,112.00                           |
| Fixed Assets<br>Land   | 1,700,000.00                         |
| Breeding Stock (purchased) Bulls   | 1,700,000.00                         |
| Purchased Bulls Cost<br>Accum. Depr. Purchased Bulls   | 34,000.00<br>-10,650.00              |
| Total Bulls  | 23,350.00                            |
| Horses   |                                      |
| Accum. Depr. Purchased Horses<br>Purchased Horses Cost   | -1,450.00<br>9,000.00                |
| Total Horses   | 7,550.00                             |
| Total Breeding Stock (purchased)   | 30,900.00                            |
| Breeding Stock (raised) Breeding Cows  |                                      |
| Raised Breeding Cows Cost<br>Accum. Depr. Raised Cows  | 280,000.00<br>-62,000.00             |
| Total Breeding Cows  | 218,000.00                           |
| Replacement Heifers  | 29,000.00                            |
| Total Breeding Stock (raised)  | 247,000.00                           |
| Buildings & Improvements<br>Buildings & Improvements Cost<br>Accum. Depr. Build. & Improv.   | 15,000.00<br>-3,000.00               |
| Total Buildings & Improvements   | 12,000.00                            |
| Machinery & Equipment Machinery & Equipment Cost Accum. Depr. Machinery & Equip.   | 292,500.00<br>-57,529.00             |
| Total Machinery & Equipment  | 234,971.00                           |
| Total Fixed Assets   | 2,224,871.00                         |
| TOTAL ASSETS   | 2,567,983.00                         |

## TTAP ENTERPRISES Balance Sheet

#### **Cash Basis**

As of December 31, 2004

|  | Dec 31, 04   |
|--|--------------|
| LIABILITIES & EQUITY Liabilities Current Liabilities Other Current Liabilities Curr. portion of non-cur. notes | 14,043.59    |
| Current notes payable  | 56,250.00    |
| Total Other Current Liabilities  | 70,293.59    |
| Total Current Liabilities  | 70,293.59    |
| Long Term Liabilities<br>Notes Payable (land)  | 1,082,480.42 |
| Total Long Term Liabilities  | 1,082,480.42 |
| Total Liabilities  | 1,152,774.01 |
| Equity Opening Bal Equity  | 1,415,208.99 |
| Total Equity   | 1,415,208.99 |
| TOTAL LIABILITIES & EQUITY   | 2,567,983.00 |

## TTAP ENTERPRISES Profit & Loss

#### **Cash Basis**

#### January through December 2005

|  | Jan - Dec 05                                     |
|--|--|
| Ordinary Income/Expense Income   |  |
| Agricultural program payments<br>Crop Revenues   | 13,260.00<br>62,400.00                           |
| Gain(Loss)-Lvstk. Disposed<br>Breeding Stock (purchased)<br>Gain(Loss)-Cull Bulls Sold                       |  |
| Basis in Cull Bulls Sold Sale of Cull Bulls  | -3,150.00<br>4,500.00                            |
| Total Gain(Loss)-Cull Bulls Sold   | 1,350.00   |
| Total Breeding Stock (purchased)   | 1,350.00   |
| Breeding Stock (raised) Death loss of Cows Gain(Loss) on Cull Cows Sold Basis in cull cows Sale of Cull Cows | -408.33<br>-21,358.34<br>38,350.00               |
| Total Gain(Loss) on Cull Cows Sold   | 16,991.66  |
| Total Breeding Stock (raised)  | 16,583.33  |
| Total Gain(Loss)-Lvstk. Disposed   | 17,933.33  |
| Livestock (raised market) Stockers   | 232,548.60                                       |
| Total Livestock (raised market)  | 232,548.60                                       |
| Livestock Purchased for Resale<br>Purch Stockers   | 78,000.00  |
| Total Livestock Purchased for Resale   | 78,000.00  |
| Wildlife Revenues  | 35,000.00  |
| Total Income   | 439,141.93                                       |
| Cost of Goods Sold Lvstk. purchased for resale COS Cattle Costs (Purch Price)                                | 56,250.00  |
| Total Lvstk. purchased for resale COS  | 56,250.00  |
| Total COGS   | 56,250.00  |
| Gross Profit   | 382,891.93                                       |
| Expense Chemicals Herbicide Chemicals - Other  | 6,000.00<br>7,600.00                             |
| Total Chemicals  | 13,600.00  |
| Custom hire (Machinery)<br>Harvesting<br>Custom hire (Machinery) - Other                                     | 1,890.00<br>9,100.00                             |
| Total Custom hire (Machinery)  | 10,990.00  |
| Depreciation Breed Stock (pur. or cap.) Buildings & Improvements Machinery & Equipment                       | 23,219.04<br>500.00<br>24,385.71                 |
| Total Depreciation   | 48,104.75  |
| Feed Purchased<br>Fertilizer & lime<br>Gasoline, fuel & oil<br>Insurance                                     | 20,164.12<br>15,000.00<br>12,320.00<br>17,550.00 |

### TTAP ENTERPRISES Profit & Loss

#### **Cash Basis**

#### January through December 2005

|  | Jan - Dec 05   |
|--|--|
| Interest (current loans) Interest (non-current loans) Labor (Contract) Labor (hired) Payroll expenses  | 2,401.36<br>65,409.01<br>676.00<br>24,000.00                           |
| Total Labor (hired)  | 24,000.00  |
| Labor (owner operator) Payroll Expenses Professional Fees Rent or lease (land) Repairs Seed Supplies Livestock   | 30,000.00<br>2,028.00<br>4,500.00<br>21,250.00<br>7,930.00<br>9,600.00 |
| Supplies - Other   | 1,250.00   |
| Total Supplies   | 3,750.00   |
| Taxes (not income taxes) Real estate   | 7,935.00   |
| Total Taxes (not income taxes)   | 7,935.00   |
| Utilities<br>Veterinary & medicine   | 6,000.00<br>17,156.00  |
| Total Expense  | 340,364.24   |
| Net Ordinary Income  | 42,527.69  |
| Other Income/Expense Other Income Stocker Gain (Internal Only)   | 18,779.00  |
| Total Other Income   | 18,779.00  |
| Other Expense Support Center Cost Allocation Finance General and Administrative Labor and Management Machinery, Equipment & Vehicles                         | 0.00<br>0.00<br>0.00<br>0.00   |
| Total Support Center Cost Allocation   | 0.00   |
| Transfer Cattle Cost Cow-Calf Preconditioned Calves '04 Replacement Heifers '05 Replacement Heifers  | 0.00<br>0.00<br>-68,303.76<br>-25,583.97                               |
| Total Transfer Cattle Cost   | -93,887.73   |
| Transfer Crop Cost<br>Wheat Planting<br>Wheat- Grazing   | 0.00<br>18,779.00  |
| Total Transfer Crop Cost   | 18,779.00  |
| Transfer Inventory Cost Replacement Heifers Raised Stockers Purchased Stockers Cattle Cost (purch price) Non-cattle (Accum Costs) Purchased Stockers - Other | 29,000.00<br>19,428.59<br>56,250.00<br>2,000.00<br>-964.89             |
| Total Purchased Stockers   | 57,285.11  |
| Wheat Planting & Prod  | 20,429.66  |
| Total Transfer Inventory Cost  | 126,143.36   |

## TTAP ENTERPRISES Profit & Loss

#### **Cash Basis**

#### January through December 2005

| _  | Jan - Dec 05 |
|--|--------------|
| COS Xfer Purch/Capitalized Cost Purchased Stockers | -56,250.00   |
| Total COS Xfer Purch/Capitalized Cost              | -56,250.00   |
| Total Other Expense                                | -5,215.37    |
| Net Other Income                                   | 23,994.37    |
| Net Income   | 66,522.06    |

## TTAP ENTERPRISES Balance Sheet

#### **Cash Basis**

As of December 31, 2005

|  | Dec 31, 05                        |
|--|-----------------------------------|
| ASSETS Current Assets  |                                   |
| Checking/Savings<br>1st National Bank- Checking  | 145,231.52                        |
| Total Checking/Savings   | 145,231.52                        |
| Other Current Assets Invest in Growing Commodities Pur Stkrs (non-cattle costs) Raised Stockers Accum Costs Wheat Planting Accum Costs | 964.89<br>112,571.41<br>84,570.34 |
| Total Invest in Growing Commodities  | 198,106.64                        |
| Inventory (unfinished lvstk.) '05 Purch Stkrs (Cattle Cost)  | 56,250.00                         |
| Total Inventory (unfinished lvstk.)  | 56,250.00                         |
| Total Other Current Assets   | 254,356.64                        |
| Total Current Assets   | 399,588.16                        |
| Fixed Assets<br>Land<br>Breeding Stock (purchased)<br>Bulls  | 1,700,000.00                      |
| Purchased Bulls Cost<br>Accum. Depr. Purchased Bulls   | 34,000.00<br>-8,400.00            |
| Total Bulls  | 25,600.00                         |
| Horses<br>Accum. Depr. Purchased Horses<br>Purchased Horses Cost   | -2,050.00<br>9,000.00             |
| Total Horses   | 6,950.00                          |
| Total Breeding Stock (purchased)   | 32,550.00                         |
| Breeding Stock (raised) Breeding Cows  |                                   |
| Raised Breeding Cows Cost<br>Accum. Depr. Raised Cows  | 306,303.76<br>-61,785.71          |
| Total Breeding Cows  | 244,518.05                        |
| Replacement Heifers  | 25,583.97                         |
| Total Breeding Stock (raised)  | 270,102.02                        |
| Buildings & Improvements<br>Buildings & Improvements Cost<br>Accum. Depr. Build. & Improv.   | 15,000.00<br>-3,500.00            |
| Total Buildings & Improvements   | 11,500.00                         |
| Machinery & Equipment Machinery & Equipment Cost Accum. Depr. Machinery & Equip.   | 292,500.00<br>-81,914.71          |
| Total Machinery & Equipment  | 210,585.29                        |
| Total Fixed Assets   | 2,224,737.31                      |
| TOTAL ASSETS   | 2,624,325.47                      |

## TTAP ENTERPRISES Balance Sheet

#### **Cash Basis**

As of December 31, 2005

|  | Dec 31, 05   |
|--|--------------|
| LIABILITIES & EQUITY Liabilities Current Liabilities |              |
| Other Current Liabilities                            |              |
| Curr. portion of non-cur. notes                      | 14,909.35    |
| Current notes payable                                | 56,250.00    |
| Payroll Liabilities                                  | 3,864.00     |
| Total Other Current Liabilities                      | 75,023.35    |
| Total Current Liabilities                            | 75,023.35    |
| Long Term Liabilities                                |              |
| Notes Payable (land)                                 | 1,067,571.07 |
| Total Long Term Liabilities                          | 1,067,571.07 |
| Total Liabilities                                    | 1,142,594.42 |
| Equity   |              |
| Opening Bal Equity                                   | 1,415,208.99 |
| Net Income   | 66,522.06    |
| Total Equity   | 1,481,731.05 |
| TOTAL LIABILITIES & EQUITY                           | 2,624,325.47 |

#### **TTAP Enterprise's Financial Performance**

The 2005 financial performance of TTAP Enterprises is shown using various methods. The first is the sixteen financial ratios recommended by the Farm Financial Standards Council. All of the ratios are determined based upon the cost basis value of the operations assets. As such, the ratios should be considered conservative.

#### Financial Ratios

#### Liquidity

1. Beginning Current Ratio: 4.88 Ending Current Ratio: 5.33

Based upon the beginning and ending current ratios, TTAP Enterprises have approximately five times the needed current assets to pay for current liabilities. This is a strong position.

2. Beginning Working Capital: \$272,818 Ending Working Capital: \$324,565

Based upon the beginning and ending working capital, TTAP Enterprises has adequate capital available to serve its current liabilities. This is a strong position.

#### Solvency

3. Beginning Debt to Asset Ratio: 44.9 Ending Debt to Asset Ratio: 43.5

Based upon the beginning and ending debt to asset ratios, TTAP Enterprises owns more of the operation than does its creditors. The trend from beginning to ending reflects an improvement of the ratio. The land debt makes up the largest portion of the liabilities. This is an area that the owners consider to be weak. This should be considered a possible stressful position.

4. Beginning Equity to Asset Ratio: 55.1 Ending Equity to Asset Ratio: 56.5

The beginning and ending equity to asset ratio reflects that over 55 percent of the operations assets are owned or financed by owner capital. While this ratio improves from beginning to ending, the owners would like to see improvement in this area. This should be considered a possible stressful position.

5. Beginning Debt to Equity Ratio: 81.5 Ending Debt to Equity Ratio: 77.1

The beginning and ending debt to equity ratio reflects that approximately 80 percent of the operations debt is financed by outside creditors. While this ratio improves from beginning to ending, the owners would like to see improvement in this area. This should be considered a possible stressful position.

#### **Profitability**

6. Return on Assets (ROA): 5.17

The ROA shows that TTAP Enterprises was profitable in 2005. The 5.17 percent should be viewed as a positive performance for the operation. This should be considered a good performance.

#### 7. Return on Equity (ROE): 4.59

The ROE shows that TTAP Enterprises was profitable in 2005. The 4.59 percent should be viewed as a positive performance for the operation. This should be considered a good performance.

#### 8. Operating Margin Ratio: 29.34

The operating margin ratio shows that TTAP Enterprises generates a return of 29.34 percent for every gross dollar received. This should be considered a neutral to strong position.

#### 9. Net Income from Operations – Pre Interest and Income Tax: \$134,332

The net income from operations shows TTAP Enterprises to be a profitable operation. This should be considered a strong position.

#### Repayment Capacity

#### 10. Term Debt and Capital Lease Coverage Ratio: 2.27

This ratio represents the ability of the operation to pay long-term debt commitments. With a value of 2.27, TTAP Enterprises has over 2 times the necessary capital to service its long term debt. This should be considered a strong position.

#### 11. Capital Replacement and Term Debt Repayment Margin: \$102,985

This value represents the capital available above normal operating expenses that is available to pay long term debt and replace capital assets. This should be considered a strong position.

#### Financial Efficiency

#### 12. Asset Turnover Ratio: 0.18

This ratio shows that each dollar invested in TTAP Enterprises assets generates \$0.18 of gross revenue. This value appears low, however, given the operation is primarily a cow-calf operation, this value is acceptable.

#### **Operating Ratios**

#### 13. Operating Expense Ratio: 60.16

This ratio shows that for dollar of revenue generated by the operation, \$0.60 of expenses is spent. This figure is acceptable.

#### 14. Depreciation Expense Ratio: 10.51

This ratio shows that for dollar of revenue generated by the operation, \$0.11 of depreciation is recorded. This figure is acceptable.

#### 15. Interest Expense Ratio: 14.81

This ratio shows that for dollar of revenue generated by the operation, \$0.15 of interest is paid. This value is high and should be considered somewhat stressful.

#### 16. Net Income from Operation Ratio: 14.53

This ratio shows that for dollar of revenue generated by the operation, \$0.15 of income is made. This is value should be considered neutral.

Overall, TTAP Enterprises is profitable. However, the large amount of real estate debt is a risk to the operation. Progress needs to continue to be made on paying this debt down.

#### Income Statement by Enterprise

TTAP Enterprises benefited from the high cattle prices during 2005. The income statement by enterprise shows which commodities are providing income and which are not. Each enterprise has been allocated a portion of all the expenses. Direct expenses are directly paid by that particular enterprise, while indirect expenses (cost and support centers) are allocated based upon a predetermined allocation scheme.

The largest amount of income in 2005 came from the raised stocker cattle that were grazed on the wheat pasture. This enterprise generated net income of \$42,002.53. The second greatest source of net income came from the wildlife enterprise. This enterprise netted \$25,804.76. Total government payments during 2005 were \$13,260.00.

Losses occurred in the 2004 purchased stocker cattle, the 2005 wheat sold as grain, and the sorghum enterprise. The operation needs to further investigate these enterprises and determine how these can be profitable.

#### TUC and Enterprise Commodity Reports

The total unit cost report details seven profit centers and six cost centers from Tom and Julie's accounting system. Five of the profit centers sold products in 2005 and were completed. These include the wildlife enterprise, the sorghum enterprise, the 2004 purchased stocker cattle, the 2004 raised stocker cattle, and the 2005 wheat for grain. The remaining two profit centers, 2005 purchased stocker cattle and 2005 raised stocker cattle, did not sell their products in 2005 and were not complete. The total costs attributed to these two profit centers were transferred to the ending balance sheet and will be completed in 2006. The operation also has one unallocated center for agricultural program payments. During the 2005 year, TTAP Enterprises received \$13,260 in agricultural payments.

The five completed profit centers unit cost include: wildlife - \$0.92 per acre, sorghum - \$3.89 per cwt, 2004 purchased stocker cattle - \$111.20 per cwt, 2004 raised stocker cattle - \$87.75 per cwt, and 2005 wheat for grain - \$4.93 per bushel. The wildlife enterprise is a low cost enterprise and contributes greatly to the overall profitability of the operation. Comparing the raised stocker cattle versus the purchased stocker cattle, it is apparent that TTAP Enterprises can raise calves cheaper than what they could be purchased for in 2004 and 2005. The most concerning profit center is the wheat for grain. The unit cost of this enterprise, while serving as the base for the stocker cattle enterprises (raised and purchased), must be reduced in order to make producing

wheat for grain efficient. This can be done by either increasing the yield or reducing the overall costs of producing the wheat.

Of the six cost centers included in the 2005 total unit cost report, four were complete during 2005. These include the breeding females (CC-Cows), preconditioning of the raised stocker cattle, 2004 replacement heifers, and the 2004 wheat planting. Each of these cost centers were transferred to a profit center or to the balance sheet as a capital asset. During 2005, the total cost to maintain one breeding female, as shown by the cost center for cows, was \$344.54. According to the preconditioning cost center, the value of a raised preconditioned calf to the operation was \$410.32 per head. From the 2004 replacement heifer cost center, the total cost to the operation to raise its own replacement females was \$1,138.40 per head. Furthermore, the cost of an acre of wheat forage for the stocker cattle was \$112.98 per acre. The remaining two cost centers, 2005 replacement heifers and 2005 wheat planting, were transferred to the 2005 ending balance sheet as investments in growing commodities.

#### Sorghum Commodity Report

Sorghum provides the operation will a double crop opportunity and also provides an opportunity for some weed control during the summer months. The wheat program benefits from this weed program. The 200 acres that were planted provided 4,200 cwt or a yield of 21 cwt. per acre. The operation is efficiently producing sorghum. The total unit cost of production for the sorghum was \$3.89 per cwt, while the price received for the production was \$3.25 per cwt. Overall, the sorghum crop lost \$2,691.51.

#### 2004 Purchased Stocker Cattle

During the fall of 2004, 100 head of 450 pound stocker steers were purchased to graze the 1,000 acres of wheat. These calves were combined with the 332 raised calves. All 1,000 acres of wheat were grazed from November 1, 2004 until March 1, 2005. At this point, the total 432 calves were crowded onto 500 acres of wheat for graze out purposes. The cattle were sold and shipped on May 1, 2005. The purchased cattle were bought for an average price of \$1.25 per cwt. The cattle gained 1.5 pounds per day during the early grazing period and 2.0 pounds per day during the graze out period. The final weight of the 100 purchased cattle was 750 pounds. The cattle were sold for \$104.00 per cwt. When all costs were attributed to these cattle (including the cost of producing the wheat forage), the end result was a total loss of \$5,402.37 or \$54.02 per head. The total unit cost of production for the 100 head of cattle was \$111.20 per cwt.

#### 2004 Raised Stocker Cattle

The breeding cow herd provides the raised stocker cattle that are grazed on the operations wheat pasture. The calves are transferred from the cow-calf cost center to the preconditioning cost center at an accumulated cost of \$351.57 per head (332 head including 60 to be picked as replacement heifers). Approximately \$58.75 of expenses per head is added to the calves during the preconditioning phase. The calves begin grazing wheat with an accumulated cost of \$410.32 per head. This amounts to \$82.89 per cwt and compares to the \$1.11 purchase price of the

additional 100 stockers that are purchased. Given the cost of the wheat pasture to graze the cattle, the total unit cost of the raised stocker cattle coming off wheat was \$87.75 per cwt. The sell price received for these cattle was \$107.10 per cwt. The raised stocker cattle resulted in a net profit of \$42,002.53 and were the greatest contributor of income for TTAP Enterprises.

#### 2005 Wheat for Grain

The 2005 wheat for grain enterprise was a drain to the overall profitability of the operation. Total unit cost of production was \$4.93 per bushel. This compares to the price received of \$3.25 per bushel. The average production was 30 bushels of wheat per acre harvested. It is apparent that wheat for grain during the 2005 harvest year did not work. The operation must look at increasing yields, reducing its cost of production or improving the market price received if this enterprise is to remain.

|  | Wildlife<br>(PC) | '04 Pur Stkrs<br>(PC) | '04 Rsd St<br>(PC) | '05 Pur Stkrs<br>(PC) | '05 Rsd St<br>(PC) | '05 Wht- G<br>(PC) | Sorghum<br>(PC) | Total PC   |
|--|------------------|-----------------------|--------------------|-----------------------|--------------------|--------------------|-----------------|------------|
| Ordinary Income/Expense  |                  |                       |                    |                       |                    |                    |                 |            |
| Income Agricultural program payments   | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Crop Revenues Gain(Loss)-Lvstk. Disposed Breeding Stock (purchased) Gain(Loss)-Cull Bulls Sold | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 48,750.00          | 13,650.00       | 62,400.00  |
| Basis in Cull Bulls Sold<br>Sale of Cull Bulls   | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Total Gain(Loss)-Cull Bulls Sold   | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Total Breeding Stock (purchased)   | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Breeding Stock (raised) Death loss of Cows Gain(Loss) on Cull Cows Sold                        | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Basis in cull cows<br>Sale of Cull Cows  | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Total Gain(Loss) on Cull Cows Sold   | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Total Breeding Stock (raised)  | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Total Gain(Loss)-Lvstk. Disposed   | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00       |
| Livestock (raised market) Stockers   | 0.00             | 0.00                  | 232,548.60         | 0.00                  | 0.00               | 0.00               | 0.00            | 232,548.60 |
| Total Livestock (raised market)  | 0.00             | 0.00                  | 232,548.60         | 0.00                  | 0.00               | 0.00               | 0.00            | 232,548.60 |
| Livestock Purchased for Resale<br>Purch Stockers   | 0.00             | 78,000.00             | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 78,000.00  |
| <b>Total Livestock Purchased for Resale</b>  | 0.00             | 78,000.00             | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 78,000.00  |
| Wildlife Revenues  | 35,000.00        | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 35,000.00  |
| Total Income   | 35,000.00        | 78,000.00             | 232,548.60         | 0.00                  | 0.00               | 48,750.00          | 13,650.00       | 407,948.60 |
| Cost of Goods Sold  Lvstk. purchased for resale COS  | 0.00             | E6 250 00             | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | F6 2F0 00  |
| Cattle Costs (Purch Price)   | 0.00             | 56,250.00             | 0.00               | 0.00                  | 0.00               |                    | 0.00            | 56,250.00  |
| Total Lvstk. purchased for resale COS  | 0.00             | 56,250.00             | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 56,250.00  |
| Total COGS   | 0.00             | 56,250.00             | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 56,250.00  |
| Gross Profit   | 35,000.00        | 21,750.00             | 232,548.60         | 0.00                  | 0.00               | 48,750.00          | 13,650.00       | 351,698.60 |

|                                 | Wildlife<br>(PC) | '04 Pur Stkrs<br>(PC) | '04 Rsd St<br>(PC) | '05 Pur Stkrs<br>(PC) | '05 Rsd St<br>(PC) | '05 Wht- G<br>(PC) | Sorghum<br>(PC) | Total PC  |
|---------------------------------|------------------|-----------------------|--------------------|-----------------------|--------------------|--------------------|-----------------|-----------|
| Expense                         |                  |                       |                    |                       |                    |                    |                 |           |
| Chemicals                       |                  |                       |                    |                       |                    |                    |                 |           |
| Herbicide                       | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Chemicals - Other               | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 1,600.00        | 1,600.00  |
| Total Chemicals                 | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 1,600.00        | 1,600.00  |
| Custom hire (Machinery)         |                  |                       |                    |                       |                    |                    |                 |           |
| Harvesting                      | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 1,890.00        | 1,890.00  |
| Custom hire (Machinery) - Other | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 9,100.00           | 0.00            | 9,100.00  |
| Total Custom hire (Machinery)   | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 9,100.00           | 1,890.00        | 10,990.00 |
| Depreciation                    |                  |                       |                    |                       |                    |                    |                 |           |
| Breed Stock (pur. or cap.)      | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Buildings & Improvements        | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Machinery & Equipment           | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Total Depreciation              | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Feed Purchased                  | 0.00             | 400.00                | 1,191.00           | 0.00                  | 0.00               | 0.00               | 0.00            | 1,591.00  |
| Fertilizer & lime               | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Gasoline, fuel & oil            | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Insurance                       | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 1,750.00           | 600.00          | 2,350.00  |
| Interest (current loans)        | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Interest (non-current loans)    | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Labor (Contract)                | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Labor (hired) Payroll expenses  | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| · ·                             |                  |                       |                    |                       |                    |                    |                 |           |
| Total Labor (hired)             | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Labor (owner operator)          | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Payroll Expenses                | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Professional Fees               | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Rent or lease (land)            | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Repairs                         | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Seed                            | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 1,600.00        | 1,600.00  |
| Supplies<br>Livestock           | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| Supplies - Other                | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |
| • •                             |                  |                       |                    |                       |                    |                    |                 |           |
| Total Supplies                  | 0.00             | 0.00                  | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | 0.00      |

#### **Cash Basis**

|  | Wildlife<br>(PC)                           | '04 Pur Stkrs<br>(PC)                         | '04 Rsd St<br>(PC)                         | '05 Pur Stkrs<br>(PC)                   | '05 Rsd St<br>(PC)                          | '05 Wht- G<br>(PC)                   | Sorghum<br>(PC)                              | Total PC  |
|--|--|---|--|---|---|--------------------------------------|--|---|
| Taxes (not income taxes)   |  |   |  |   |   |                                      |  |   |
| Real estate  | 0.00                                       | 0.00  | 0.00                                       | 0.00                                    | 0.00  | 3,279.00                             | 656.00                                       | 3,935.00  |
| Total Taxes (not income taxes)   | 0.00                                       | 0.00  | 0.00                                       | 0.00                                    | 0.00  | 3,279.00                             | 656.00                                       | 3,935.00  |
| Utilities  | 0.00                                       | 0.00  | 0.00                                       | 0.00                                    | 0.00  | 0.00                                 | 0.00   | 0.00  |
| Veterinary & medicine  | 0.00                                       | 0.00  | 2,720.00                                   | 0.00                                    | 0.00  | 0.00                                 | 0.00   | 2,720.00  |
| Total Expense  | 0.00                                       | 400.00  | 3,911.00                                   | 0.00                                    | 0.00  | 14,129.00                            | 6,346.00                                     | 24,786.00   |
| Net Ordinary Income  | 35,000.00                                  | 21,350.00                                     | 228,637.60                                 | 0.00                                    | 0.00  | 34,621.00                            | 7,304.00                                     | 326,912.60  |
| Other Income/Expense Other Income  |  |   |  |   |   |                                      |  |   |
| Stocker Gain (Internal Only)   | 0.00                                       | 0.00  | 0.00                                       | 0.00                                    | 0.00  | 18,779.00                            | 0.00   | 18,779.00   |
| Total Other Income   | 0.00                                       | 0.00  | 0.00                                       | 0.00                                    | 0.00  | 18,779.00                            | 0.00   | 18,779.00   |
| Other Expense Support Center Cost Allocation Finance General and Administrative Labor and Management Machinery, Equipment & Vehicles                         | 4,973.56<br>1,000.00<br>964.89<br>2,256.79 | 2,401.36<br>67.82<br>4,859.56<br>0.00         | 0.00<br>663.06<br>6,579.56<br>0.00         | 0.00<br>0.00<br>964.89<br>0.00          | 0.00<br>0.00<br>964.89<br>0.00              | 0.00<br>2,395.40<br>964.89<br>0.00   | 3,441.16<br>1,075.89<br>964.89<br>4,513.57   | 10,816.08<br>5,202.17<br>16,263.57<br>6,770.36        |
| <b>Total Support Center Cost Allocation</b>  | 9,195.24                                   | 7,328.74                                      | 7,242.62                                   | 964.89                                  | 964.89                                      | 3,360.29                             | 9,995.51                                     | 39,052.18   |
| Transfer Cattle Cost Cow-Calf Preconditioned Calves '04 Replacement Heifers '05 Replacement Heifers  | 0.00<br>0.00<br>0.00<br>0.00               | 0.00<br>0.00<br>0.00<br>0.00                  | 0.00<br>0.00<br>0.00<br>0.00               | 0.00<br>0.00<br>0.00<br>0.00            | 0.00<br>111,606.52<br>0.00<br>0.00          | 0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00                 | 0.00<br>111,606.52<br>0.00<br>0.00                    |
| Total Transfer Cattle Cost   | 0.00                                       | 0.00  | 0.00                                       | 0.00                                    | 111,606.52                                  | 0.00                                 | 0.00   | 111,606.52  |
| Transfer Crop Cost<br>Wheat Planting<br>Wheat- Grazing   | 0.00                                       | 13,076.63<br>4,347.00                         | 35,568.45<br>11,824.00                     | 0.00                                    | 0.00  | 56,491.06<br>0.00                    | 0.00   | 105,136.14<br>16,171.00                               |
| Total Transfer Crop Cost   | 0.00                                       | 17,423.63                                     | 47,392.45                                  | 0.00                                    | 0.00  | 56,491.06                            | 0.00   | 121,307.14  |
| Transfer Inventory Cost Replacement Heifers Raised Stockers Purchased Stockers Cattle Cost (purch price) Non-cattle (Accum Costs) Purchased Stockers - Other | 0.00<br>0.00<br>0.00<br>0.00<br>0.00       | 0.00<br>0.00<br>56,250.00<br>2,000.00<br>0.00 | 0.00<br>132,000.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>-964.89 | 0.00<br>-112,571.41<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>19,428.59<br>56,250.00<br>2,000.00<br>-964.89 |
| Total Purchased Stockers   | 0.00                                       | 58,250.00                                     | 0.00                                       | -964.89                                 | 0.00  | 0.00                                 | 0.00   | 57,285.11   |
| Wheat Planting & Prod  | 0.00                                       | 0.00  | 0.00                                       | 0.00                                    | 0.00  | 0.00                                 | 0.00   | 0.00  |
| Total Transfer Inventory Cost  | 0.00<br>Fina                               | 58,250.00<br>ncial Position,                  | 132,000.00<br>Performance, a               | -964.89<br>and Projections              | -112,571.41                                 | 0.00                                 | 0.00   | 76,713.70   |

Financial Position, Performance, and Projections

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|   | Wildlife<br>(PC) | '04 Pur Stkrs<br>(PC) | '04 Rsd St<br>(PC) | '05 Pur Stkrs<br>(PC) | '05 Rsd St<br>(PC) | '05 Wht- G<br>(PC) | Sorghum<br>(PC) | Total PC    |
|---|------------------|-----------------------|--------------------|-----------------------|--------------------|--------------------|-----------------|-------------|
| COS Xfer Purch/Capitalized Cost<br>Purchased Stockers | 0.00             | -56,250.00            | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | -56,250.00  |
| Total COS Xfer Purch/Capitalized Cost                 | 0.00             | -56,250.00            | 0.00               | 0.00                  | 0.00               | 0.00               | 0.00            | -56,250.00  |
| Total Other Expense                                   | 9,195.24         | 26,752.37             | 186,635.07         | 0.00                  | 0.00               | 59,851.35          | 9,995.51        | 292,429.54  |
| Net Other Income                                      | -9,195.24        | -26,752.37            | -186,635.07        | 0.00                  | 0.00               | -41,072.35         | -9,995.51       | -273,650.54 |
| Net Income  | 25,804.76        | -5,402.37             | 42,002.53          | 0.00                  | 0.00               | -6,451.35          | -2,691.51       | 53,262.06   |

|  | Cow-Calf<br>(CC) | Preconditi<br>(CC) | '04 Rep Hfrs<br>(CC) | '04 Wht Pl<br>(CC) | '05 Rep Hfrs<br>(CC) | '05 Wht Pl<br>(CC) | Total CC   | Labor & M<br>(SC) |
|--|------------------|--------------------|----------------------|--------------------|----------------------|--------------------|------------|-------------------|
| Ordinary Income/Expense  |                  |                    |                      |                    |                      |                    |            |                   |
| Income Agricultural program payments   | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Crop Revenues  | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Gain(Loss)-Lvstk. Disposed<br>Breeding Stock (purchased)<br>Gain(Loss)-Cull Bulls Sold |                  |                    |                      |                    |                      |                    |            |                   |
| Basis in Cull Bulls Sold   | -3,150.00        | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | -3,150.00  | 0.00              |
| Sale of Cull Bulls   | 4,500.00         | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 4,500.00   | 0.00              |
| Total Gain(Loss)-Cull Bulls Sold   | 1,350.00         | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 1,350.00   | 0.00              |
| Total Breeding Stock (purchased)   | 1,350.00         | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 1,350.00   | 0.00              |
| Breeding Stock (raised)<br>Death loss of Cows<br>Gain(Loss) on Cull Cows Sold          | -408.33          | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | -408.33    | 0.00              |
| Basis in cull cows   | -21,358.34       | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | -21,358.34 | 0.00              |
| Sale of Cull Cows  | 38,350.00        | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 38,350.00  | 0.00              |
| Total Gain(Loss) on Cull Cows Sold   | 16,991.66        | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 16,991.66  | 0.00              |
| Total Breeding Stock (raised)  | 16,583.33        | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 16,583.33  | 0.00              |
| Total Gain(Loss)-Lvstk. Disposed   | 17,933.33        | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 17,933.33  | 0.00              |
| Livestock (raised market) Stockers   | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Total Livestock (raised market)  | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Livestock Purchased for Resale<br>Purch Stockers                                       | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Total Livestock Purchased for Resale   | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Wildlife Revenues  | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Total Income   | 17,933.33        | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 17,933.33  | 0.00              |
| Cost of Goods Sold<br>Lvstk. purchased for resale COS                                  |                  |                    |                      |                    |                      |                    |            |                   |
| Cattle Costs (Purch Price)   | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Total Lvstk. purchased for resale COS  | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Total COGS   | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00       | 0.00              |
| Gross Profit   | 17,933.33        | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 17,933.33  | 0.00              |

|  | Cow-Calf<br>(CC)  | Preconditi (CC)  | '04 Rep Hfrs<br>(CC)                                   | '04 Wht Pl<br>(CC)                                   | '05 Rep Hfrs<br>(CC)                                 | '05 Wht Pl<br>(CC)  | Total CC   | Labor & M<br>(SC)                                     |
|--|---|--|--|--|--|---|--|---|
| Expense<br>Chemicals<br>Herbicide<br>Chemicals - Other   | 6,000.00<br>0.00  | 0.00<br>0.00   | 0.00<br>0.00   | 0.00<br>6,000.00                                     | 0.00<br>0.00   | 0.00<br>0.00  | 6,000.00<br>6,000.00   | 0.00<br>0.00  |
| Total Chemicals  | 6,000.00  | 0.00   | 0.00   | 6,000.00   | 0.00   | 0.00  | 12,000.00  | 0.00  |
| Custom hire (Machinery)<br>Harvesting<br>Custom hire (Machinery) - Other   | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00  | 0.00   | 0.00  |
| Total Custom hire (Machinery)  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00  | 0.00   | 0.00  |
| Depreciation Breed Stock (pur. or cap.) Buildings & Improvements Machinery & Equipment   | 23,219.04<br>0.00<br>0.00                                   | 0.00<br>0.00<br>0.00                                     | 0.00<br>0.00<br>0.00                                   | 0.00<br>0.00<br>0.00                                 | 0.00<br>0.00<br>0.00                                 | 0.00<br>0.00<br>0.00                                      | 23,219.04<br>0.00<br>0.00  | 0.00<br>0.00<br>0.00                                  |
| Total Depreciation   | 23,219.04   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00  | 23,219.04  | 0.00  |
| Feed Purchased Fertilizer & lime Gasoline, fuel & oil Insurance Interest (current loans) Interest (non-current loans) Labor (Contract) Labor (hired) | 10,980.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>676.00 | 6,693.12<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 900.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>15,000.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00 | 18,573.12<br>15,000.00<br>0.00<br>0.00<br>0.00<br>0.00<br>676.00 | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00          |
| Payroll expenses   | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00  | 0.00   | 24,000.00   |
| Total Labor (hired)  | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00  | 0.00   | 24,000.00   |
| Labor (owner operator) Payroll Expenses Professional Fees Rent or lease (land) Repairs Seed Supplies Livestock                                       | 0.00<br>0.00<br>0.00<br>21,250.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00             | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00           | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>0.00         | 0.00<br>0.00<br>0.00<br>0.00<br>0.00<br>8,000.00          | 0.00<br>0.00<br>0.00<br>21,250.00<br>0.00<br>8,000.00            | 30,000.00<br>2,028.00<br>0.00<br>0.00<br>0.00<br>0.00 |
| Supplies - Other   | 0.00  | 0.00   | 0.00   | 0.00   | 0.00   | 1,250.00  | 1,250.00   | 0.00  |
| Total Supplies   | 2,500.00  | 0.00   | 0.00   | 0.00   | 0.00   | 1,250.00  | 3,750.00   | 0.00  |

#### **Cash Basis**

|  | Cow-Calf<br>(CC)                                | Preconditi (CC)                           | '04 Rep Hfrs<br>(CC)                    | '04 Wht Pl<br>(CC)                 | '05 Rep Hfrs<br>(CC)                    | '05 Wht Pl<br>(CC)                             | Total CC   | Labor & M<br>(SC)                  |
|--|---|---|---|------------------------------------|---|--|--|------------------------------------|
| Taxes (not income taxes)   |   |   |   |                                    |   |  |  |                                    |
| Real estate  | 4,000.00  | 0.00                                      | 0.00                                    | 0.00                               | 0.00                                    | 0.00   | 4,000.00   | 0.00                               |
| Total Taxes (not income taxes)   | 4,000.00  | 0.00                                      | 0.00                                    | 0.00                               | 0.00                                    | 0.00   | 4,000.00   | 0.00                               |
| Utilities<br>Veterinary & medicine   | 0.00<br>5,600.00                                | 0.00<br>7,636.00                          | 0.00<br>1,200.00                        | 0.00                               | 0.00                                    | 0.00   | 0.00<br>14,436.00                                | 0.00                               |
| Total Expense  | 74,225.04                                       | 14,329.12                                 | 2,100.00                                | 6,000.00                           | 0.00                                    | 24,250.00                                      | 120,904.16                                       | 56,028.00                          |
| Net Ordinary Income  | -56,291.71                                      | -14,329.12                                | -2,100.00                               | -6,000.00                          | 0.00                                    | -24,250.00                                     | -102,970.83                                      | -56,028.00                         |
| Other Income/Expense Other Income Stocker Gain (Internal Only)   | 0.00  | 0.00                                      | 0.00                                    | 0.00                               | 0.00                                    | 0.00   | 0.00   | 0.00                               |
| Stocker Gain (Internal Only)   |   |   |   |                                    |   |  |  |                                    |
| Total Other Income   | 0.00  | 0.00                                      | 0.00                                    | 0.00                               | 0.00                                    | 0.00   | 0.00   | 0.00                               |
| Other Expense Support Center Cost Allocation Finance General and Administrative Labor and Management Machinery, Equipment & Vehicles | 39,788.46<br>12,583.96<br>26,894.67<br>2,256.79 | 0.00<br>2,429.33<br>2,745.78<br>0.00      | 0.00<br>356.03<br>5,299.53<br>0.00      | 0.00<br>1,017.23<br>964.89<br>0.00 | 0.00<br>0.00<br>964.89<br>0.00          | 17,205.83<br>4,111.28<br>2,894.67<br>36,108.56 | 56,994.29<br>20,497.83<br>39,764.43<br>38,365.35 | 0.00<br>0.00<br>-56,028.00<br>0.00 |
| <b>Total Support Center Cost Allocation</b>  | 81,523.88                                       | 5,175.11                                  | 5,655.56                                | 1,982.12                           | 964.89                                  | 60,320.34                                      | 155,621.90                                       | -56,028.00                         |
| Transfer Cattle Cost Cow-Calf Preconditioned Calves '04 Replacement Heifers '05 Replacement Heifers                                  | -137,815.59<br>0.00<br>0.00<br>0.00             | 116,721.37<br>-136,225.60<br>0.00<br>0.00 | 21,094.22<br>0.00<br>-68,303.76<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00       | 0.00<br>24,619.08<br>0.00<br>-25,583.97 | 0.00<br>0.00<br>0.00<br>0.00                   | 0.00<br>-111,606.52<br>-68,303.76<br>-25,583.97  | 0.00<br>0.00<br>0.00<br>0.00       |
| Total Transfer Cattle Cost   | -137,815.59                                     | -19,504.23                                | -47,209.54                              | 0.00                               | -964.89                                 | 0.00   | -205,494.25                                      | 0.00                               |
| Transfer Crop Cost<br>Wheat Planting<br>Wheat- Grazing   | 0.00<br>0.00                                    | 0.00<br>0.00                              | 7,845.98<br>2,608.00                    | -112,982.12<br>0.00                | 0.00<br>0.00                            | 0.00<br>0.00                                   | -105,136.14<br>2,608.00                          | 0.00<br>0.00                       |
| Total Transfer Crop Cost   | 0.00  | 0.00                                      | 10,453.98                               | -112,982.12                        | 0.00                                    | 0.00   | -102,528.14                                      | 0.00                               |
| Transfer Inventory Cost<br>Replacement Heifers<br>Raised Stockers<br>Purchased Stockers  | 0.00<br>0.00                                    | 0.00<br>0.00                              | 29,000.00<br>0.00                       | 0.00<br>0.00                       | 0.00<br>0.00                            | 0.00<br>0.00                                   | 29,000.00<br>0.00                                | 0.00<br>0.00                       |
| Cattle Cost (purch price) Non-cattle (Accum Costs) Purchased Stockers - Other  | 0.00<br>0.00<br>0.00                            | 0.00<br>0.00<br>0.00                      | 0.00<br>0.00<br>0.00                    | 0.00<br>0.00<br>0.00               | 0.00<br>0.00<br>0.00                    | 0.00<br>0.00<br>0.00                           | 0.00<br>0.00<br>0.00                             | 0.00<br>0.00<br>0.00               |
| Total Purchased Stockers   | 0.00  | 0.00                                      | 0.00                                    | 0.00                               | 0.00                                    | 0.00   | 0.00   | 0.00                               |
| Wheat Planting & Prod  | 0.00  | 0.00                                      | 0.00                                    | 105,000.00                         | 0.00                                    | -84,570.34                                     | 20,429.66  | 0.00                               |
| Total Transfer Inventory Cost  | 0.00<br>F                                       | 0.00<br>inancial Positio                  | 29,000.00<br>on Performance             | 105,000.00                         | 0.00                                    | -84,570.34                                     | 49,429.66  | 0.00                               |

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|   | Cow-Calf<br>(CC) | Preconditi<br>(CC) | '04 Rep Hfrs<br>(CC) | '04 Wht Pl<br>(CC) | '05 Rep Hfrs<br>(CC) | '05 Wht Pl<br>(CC) | Total CC    | Labor & M<br>(SC) |
|---|------------------|--------------------|----------------------|--------------------|----------------------|--------------------|-------------|-------------------|
| COS Xfer Purch/Capitalized Cost<br>Purchased Stockers | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00        | 0.00              |
| Total COS Xfer Purch/Capitalized Cost                 | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00        | 0.00              |
| Total Other Expense                                   | -56,291.71       | -14,329.12         | -2,100.00            | -6,000.00          | 0.00                 | -24,250.00         | -102,970.83 | -56,028.00        |
| Net Other Income                                      | 56,291.71        | 14,329.12          | 2,100.00             | 6,000.00           | 0.00                 | 24,250.00          | 102,970.83  | 56,028.00         |
| Net Income  | 0.00             | 0.00               | 0.00                 | 0.00               | 0.00                 | 0.00               | 0.00        | 0.00              |

|   | Finance<br>(SC) | G & A<br>(SC) | M&E<br>(SC)  | Total SC     | Unclassified | TOTAL                  |
|---|-----------------|---------------|--------------|--------------|--------------|------------------------|
| Ordinary Income/Expense                             |                 |               |              |              |              |                        |
| Income  |                 |               |              |              |              |                        |
| Agricultural program payments                       | 0.00<br>0.00    | 0.00<br>0.00  | 0.00<br>0.00 | 0.00<br>0.00 | 13,260.00    | 13,260.00<br>62,400.00 |
| Crop Revenues<br>Gain(Loss)-Lvstk. Disposed         | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 62,400.00              |
| Breeding Stock (purchased)                          |                 |               |              |              |              |                        |
| Gain(Loss)-Cull Bulls Sold                          |                 |               |              |              |              |                        |
| Basis in Cull Bulls Sold                            | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | -3,150.00              |
| Sale of Cull Bulls                                  | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 4,500.00               |
| Total Gain(Loss)-Cull Bulls Sold                    | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 1,350.00               |
| Total Breeding Stock (purchased)                    | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 1,350.00               |
| Breeding Stock (raised)                             |                 |               |              |              |              |                        |
| Death loss of Cows<br>Gain(Loss) on Cull Cows Sold  | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | -408.33                |
| Basis in cull cows                                  | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | -21,358.34             |
| Sale of Cull Cows                                   | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 38,350.00              |
| Total Gain(Loss) on Cull Cows Sold                  | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 16,991.66              |
| Total Breeding Stock (raised)                       | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 16,583.33              |
| Total Gain(Loss)-Lvstk. Disposed                    | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 17,933.33              |
| Livestock (raised market)                           |                 |               |              |              |              |                        |
| Stockers  | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 232,548.60             |
| Total Livestock (raised market)                     | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 232,548.60             |
| Livestock Purchased for Resale                      |                 |               |              |              |              |                        |
| Purch Stockers                                      | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 78,000.00              |
| Total Livestock Purchased for Resale                | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 78,000.00              |
| Wildlife Revenues                                   | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 35,000.00              |
| Total Income  | 0.00            | 0.00          | 0.00         | 0.00         | 13,260.00    | 439,141.93             |
| Cost of Goods Sold  Lvstk. purchased for resale COS |                 |               |              |              |              |                        |
| Cattle Costs (Purch Price)                          | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 56,250.00              |
| Total Lvstk. purchased for resale COS               | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 56,250.00              |
| Total COGS  | 0.00            | 0.00          | 0.00         | 0.00         | 0.00         | 56,250.00              |
| Gross Profit  | 0.00            | 0.00          | 0.00         | 0.00         | 13,260.00    | 382,891.93             |

|                                 | Finance<br>(SC) | G & A<br>(SC) | M&E<br>(SC) | Total SC  | Unclassified | TOTAL                |
|---------------------------------|-----------------|---------------|-------------|-----------|--------------|----------------------|
| Expense                         |                 |               |             |           |              |                      |
| Chemicals                       |                 |               |             |           |              |                      |
| Herbicide                       | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 6,000.00             |
| Chemicals - Other               | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 7,600.00             |
| Total Chemicals                 | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 13,600.00            |
| Custom hire (Machinery)         |                 |               |             |           |              |                      |
| Harvesting                      | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 1,890.00             |
| Custom hire (Machinery) - Other | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 9,100.00             |
| Total Custom hire (Machinery)   | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 10,990.00            |
| Depreciation                    |                 |               |             |           |              |                      |
| Breed Stock (pur. or cap.)      | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 23,219.04            |
| Buildings & Improvements        | 0.00            | 0.00          | 500.00      | 500.00    | 0.00         | 500.00               |
| Machinery & Equipment           | 0.00            | 0.00          | 24,385.71   | 24,385.71 | 0.00         | 24,385.71            |
| Total Depreciation              | 0.00            | 0.00          | 24,885.71   | 24,885.71 | 0.00         | 48,104.75            |
| Feed Purchased                  | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 20,164.12            |
| Fertilizer & lime               | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 15,000.00            |
| Gasoline, fuel & oil            | 0.00            | 0.00          | 12,320.00   | 12,320.00 | 0.00         | 12,320.00            |
| Insurance                       | 0.00            | 15,200.00     | 0.00        | 15,200.00 | 0.00         | 17,550.00            |
| Interest (current loans)        | 2,401.36        | 0.00          | 0.00        | 2,401.36  | 0.00         | 2,401.36             |
| Interest (non-current loans)    | 65,409.01       | 0.00          | 0.00        | 65,409.01 | 0.00         | 65,409.01            |
| Labor (Contract)                | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 676.00               |
| Labor (hired)                   | 0.00            | 0.00          | 0.00        | 24 000 00 | 0.00         | 24 000 00            |
| Payroll expenses                | 0.00            | 0.00          | 0.00        | 24,000.00 | 0.00         | 24,000.00            |
| Total Labor (hired)             | 0.00            | 0.00          | 0.00        | 24,000.00 | 0.00         | 24,000.00            |
| Labor (owner operator)          | 0.00            | 0.00          | 0.00        | 30,000.00 | 0.00         | 30,000.00            |
| Payroll Expenses                | 0.00            | 0.00          | 0.00        | 2,028.00  | 0.00         | 2,028.00             |
| Professional Fees               | 0.00            | 4,500.00      | 0.00        | 4,500.00  | 0.00         | 4,500.00             |
| Rent or lease (land)            | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 21,250.00            |
| Repairs                         | 0.00            | 0.00          | 7,930.00    | 7,930.00  | 0.00         | 7,930.00             |
| Seed                            | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 9,600.00             |
| Supplies                        | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 2 500 00             |
| Livestock                       | 0.00            | 0.00<br>0.00  | 0.00        | 0.00      | 0.00         | 2,500.00<br>1,250.00 |
| Supplies - Other                |                 |               |             |           |              |                      |
| Total Supplies                  | 0.00            | 0.00          | 0.00        | 0.00      | 0.00         | 3,750.00             |

### **Cash Basis**

|   | Finance<br>(SC)              | G & A<br>(SC)                | M&E<br>(SC)                  | Total SC                     | Unclassified                 | TOTAL                                    |
|---|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|--|
| Taxes (not income taxes)  |                              |                              |                              |                              |                              |  |
| Real estate   | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 7,935.00                                 |
| Total Taxes (not income taxes)  | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 7,935.00                                 |
| Utilities<br>Veterinary & medicine  | 0.00<br>0.00                 | 6,000.00<br>0.00             | 0.00<br>0.00                 | 6,000.00<br>0.00             | 0.00<br>0.00                 | 6,000.00<br>17,156.00                    |
| Total Expense   | 67,810.37                    | 25,700.00                    | 45,135.71                    | 194,674.08                   | 0.00                         | 340,364.24                               |
| Net Ordinary Income   | -67,810.37                   | -25,700.00                   | -45,135.71                   | -194,674.08                  | 13,260.00                    | 42,527.69                                |
| Other Income/Expense  |                              |                              |                              |                              |                              |  |
| Other Income<br>Stocker Gain (Internal Only)  | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 18,779.00                                |
| Total Other Income  | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 18,779.00                                |
| Other Expense Support Center Cost Allocation  | 07.040.07                    | 0.00                         | 0.00                         | 07.040.07                    | 0.00                         | 0.00                                     |
| Finance<br>General and Administrative   | -67,810.37<br>0.00           | 0.00<br>-25,700.00           | 0.00<br>0.00                 | -67,810.37<br>-25,700.00     | 0.00<br>0.00                 | 0.00<br>0.00                             |
| Labor and Management  | 0.00                         | 0.00                         | 0.00                         | -56,028.00                   | 0.00                         | 0.00                                     |
| Machinery, Equipment & Vehicles   | 0.00                         | 0.00                         | -45,135.71                   | -45,135.71                   | 0.00                         | 0.00                                     |
| <b>Total Support Center Cost Allocation</b>   | -67,810.37                   | -25,700.00                   | -45,135.71                   | -194,674.08                  | 0.00                         | 0.00                                     |
| Transfer Cattle Cost Cow-Calf Preconditioned Calves '04 Replacement Heifers '05 Replacement Heifers | 0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>0.00<br>0.00 | 0.00<br>0.00<br>-68,303.76<br>-25,583.97 |
| Total Transfer Cattle Cost  | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | -93,887.73                               |
| Transfer Crop Cost Wheat Planting Wheat- Grazing  | 0.00<br>0.00                 | 0.00<br>0.00                 | 0.00<br>0.00                 | 0.00                         | 0.00<br>0.00                 | 0.00<br>18,779.00                        |
| Total Transfer Crop Cost  | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 18,779.00                                |
| Transfer Inventory Cost Replacement Heifers Raised Stockers Purchased Stockers                      | 0.00                         | 0.00                         | 0.00<br>0.00                 | 0.00<br>0.00                 | 0.00<br>0.00                 | 29,000.00<br>19,428.59                   |
| Cattle Cost (purch price)   | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 56,250.00                                |
| Non-cattle (Accum Costs) Purchased Stockers - Other   | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 2,000.00                                 |
| Purchased Stockers - Other  Total Purchased Stockers  | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | -964.89<br>57,285.11                     |
|   |                              |                              |                              |                              |                              |  |
| Wheat Planting & Prod   | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 0.00                         | 20,429.66                                |
| Total Transfer Inventory Cost   | 0.00<br>Fir                  | 0.00<br>nancial Position     | 0.00<br>n Performance        | 0.00<br>and Projection       | 0.00                         | 126,143.36                               |

Financial Position, Performance, and Projections Page 76

|   | Finance<br>(SC) | G & A<br>(SC) | M&E<br>(SC) | Total SC    | Unclassified | TOTAL      |
|---|-----------------|---------------|-------------|-------------|--------------|------------|
| COS Xfer Purch/Capitalized Cost<br>Purchased Stockers | 0.00            | 0.00          | 0.00        | 0.00        | 0.00         | -56,250.00 |
| Total COS Xfer Purch/Capitalized Cost                 | 0.00            | 0.00          | 0.00        | 0.00        | 0.00         | -56,250.00 |
| Total Other Expense                                   | -67,810.37      | -25,700.00    | -45,135.71  | -194,674.08 | 0.00         | -5,215.37  |
| Net Other Income                                      | 67,810.37       | 25,700.00     | 45,135.71   | 194,674.08  | 0.00         | 23,994.37  |
| Net Income  | 0.00            | 0.00          | 0.00        | 0.00        | 13,260.00    | 66,522.06  |

### Linked Total Unit Cost Management Accounting Report for QuickBooks Pro<sup>TM</sup>

|    | Farm/Ranch:                          | TTAP Enterpr      | ises              | Fiscal Year:       |                         | 2005          | Printed: | 8/10/2005 9:03 |             |         |            |                |
|----|--------------------------------------|-------------------|-------------------|--------------------|-------------------------|---------------|----------|----------------|-------------|---------|------------|----------------|
|    |                                      | Total             | Total             | Total              | Total                   | Total         |          |                | TUC         | Other   | Measures a | and TUC<br>TUC |
|    |                                      | Direct<br>Expense | Support<br>Center | Transfer<br>Center | Transfer<br>Last Period | Total<br>Cost | Numbe    | er and Units   | (\$ / Unit) | Number  | and Units  | (\$ / Unit)    |
| 1  | Profit and Cost Centers PC: Wildlife | \$0.00            | \$9,195.23        | \$0.00             | \$0.00                  | \$9,195.23    | 10,000   | Ac             | \$0.92      | -       | Unit       |                |
| 2  | PC: Sorghum                          | \$6,346.00        | \$9,995.51        | \$0.00             | \$0.00                  | \$16,341.51   | 4,200    | Cwt            | \$3.89      | 200     | Ac         | \$81.71        |
| 3  | PC: '04 Purch Stockers               | \$400.00          | \$7,328.73        | \$17,423.63        | \$58,250.00             | \$83,402.36   | 750      | Cwt            | \$111.20    | 100     | Hd         | \$834.02       |
| 4  | PC: '04 Rsd Stockers                 | \$3,911.00        | \$7,242.62        | \$47,392.26        | \$132,000.00            | \$190,545.88  | 2,171    | Cwt            | \$87.75     | 272     | Hd         | \$700.54       |
| 5  | PC: '05 Wheat- Grain                 | \$14,129.00       | \$3,360.29        | \$56,491.06        | \$0.00                  | \$73,980.35   | 15,000   | Bu             | \$4.93      | 500     | Ac         | \$147.96       |
| 6  | PC: '05 Purch Stockers               | \$0.00            | \$964.89          | \$0.00             | \$0.00                  | \$964.89      | 750      | Cwt            | \$1.29      | 100     | Hd         | \$9.65         |
| 7  | PC: '05 Rsd Stockers                 | \$0.00            | \$964.89          | \$111,606.52       | \$0.00                  | \$112,571.40  | 2,171    | Cwt            | \$51.85     | 272     | Hd         | \$413.87       |
| 8  | CC: Cows                             | \$56,291.71       | \$81,523.87       | \$0.00             | \$0.00                  | \$137,815.58  | 400      | Cow            | \$344.54    | -       | -          |                |
| 9  | CC: Preconditioning                  | \$14,329.12       | \$5,175.11        | \$116,721.37       | \$0.00                  | \$136,225.59  | 332      | Hd             | \$410.32    | 164,340 | Cwt        | \$0.83         |
| 10 | CC: '04 Repl Heifers                 | \$2,100.00        | \$5,655.59        | \$31,548.40        | \$29,000.00             | \$68,303.98   | 60       | Hd             | \$1,138.40  | -       | -          |                |
| 11 | CC: '04 Wheat Planting               | \$6,000.00        | \$1,982.12        | \$0.00             | \$105,000.00            | \$112,982.12  | 1,000    | Ac             | \$112.98    | -       | -          |                |
| 12 | CC: '05 Repl Heifers                 | \$0.00            | \$964.89          | \$24,619.08        | \$0.00                  | \$25,583.97   | 60       | Hd             | \$426.40    | -       | -          |                |
| 13 | CC: '05 Wheat Planting               | \$24,250.00       | \$60,320.35       | \$0.00             | \$0.00                  | \$84,570.35   | 1,000    | Ac             | \$84.57     | -       | -          |                |
| 14 |                                      | \$0.00            | \$0.00            | \$0.00             | \$0.00                  | \$0.00        | 0        | -              |             | -       | -          |                |
| 15 |                                      | \$0.00            | \$0.00            | \$0.00             | \$0.00                  | \$0.00        | 0        | -              |             | -       | -          |                |
| 16 |                                      | \$0.00            | \$0.00            | \$0.00             | \$0.00                  | \$0.00        | 0        | -              |             | -       | -          |                |
| 17 |                                      | \$0.00            | \$0.00            | \$0.00             | \$0.00                  | \$0.00        | 0        | -              |             | -       | -          |                |
| 18 |                                      | \$0.00            | \$0.00            | \$0.00             | \$0.00                  | \$0.00        | 0        | -              |             | -       | -          |                |
| 19 | General & Administrative             | \$0.00            | \$0.00            | \$0.00             | \$0.00                  | \$0.00        | 0        | -              |             | -       | -          |                |
| 20 | Finance                              | \$0.00            | \$0.00            | \$0.00             | \$0.00                  | \$0.00        | 0        | -              |             | -       | -          |                |

### **Crop Commodity Report - Sales**

Farm/Ranch:TTAP EnterprisesCommodity Report:Sorghum

 Fiscal Year
 2005

 Production:
 4,200

 Sales:
 4,200

Total Acres: 200.00 Yield: 21.00

|    |   | Total                | \$/Acre<br>of Sales | \$/Cwt<br>of Sales | % of Total<br>Cost |
|----|---|----------------------|---------------------|--------------------|--------------------|
| Α. | Revenue                                       |                      |                     |                    |                    |
|    | Sales   | \$13,650.00          | \$68.25             | \$3.25             |                    |
| В. | Revenue - Cost Adjustment                     | \$0.00               | \$0.00              | \$0.00             |                    |
| C. | Direct Production Cost                        |                      |                     |                    |                    |
|    | Cash Cost Summary                             | \$6,346.00           | \$31.73             | \$1.51             | 39%                |
|    | Depreciation Sub-total Direct                 | \$0.00<br>\$6,346.00 | \$0.00<br>\$31.73   | \$0.00<br>\$1.51   | 0%                 |
| _  | Indianat Burdontine Cost                      | . ,                  | ·                   | ·                  |                    |
| D. | Indirect Production Cost Labor & Management   | \$964.89             | \$4.82              | \$0.23             | 6%                 |
|    | Machinery & Equipment                         | \$4,513.57           | \$22.57             | \$0.23<br>\$1.07   | 28%                |
|    | Other #2                                      | \$0.00               | \$0.00              | \$0.00             | 0%                 |
|    | Other #3                                      | \$0.00               | \$0.00              | \$0.00             | 0%                 |
|    | Total Depreciation                            | \$0.00               | \$0.00              | \$0.00             | 0%                 |
|    | Sub-total Indirect                            | \$5,478.46           | \$27.39             | \$1.30             |                    |
| E. | Total Production Cost (C + D)                 | \$11,824.46          | \$59.12             | \$2.82             |                    |
| F. | Net Production Cost (E - B)                   | \$11,824.46          | \$59.12             | \$2.82             |                    |
| G. | Production Margin (A - F)                     | \$1,825.54           | \$9.13              | \$0.43             |                    |
| Н. | General and Administrative Cost               |                      |                     |                    |                    |
|    | Cash Cost Summary                             | \$1,075.89           | \$5.38              | \$0.26             | 7%                 |
|    | Depreciation                                  | \$0.00               | \$0.00              | \$0.00             | 0%                 |
| I. | Operating Margin (A - F - H)                  | \$749.65             | \$3.75              | \$0.18             |                    |
| J. | Financing Cost                                | \$3,441.16           | \$17.21             | \$0.82             | 21%                |
| K. | Net Cost (F + H + J)                          | \$16,341.51          | \$81.71             | \$3.89             |                    |
| L. | Net Margin (A - K)                            | (\$2,691.51)         | (\$13.46)           | (\$0.64)           |                    |
| М. | Cost Summary                                  |                      |                     |                    |                    |
|    | Net Production Cost (F)                       | \$11,824.46          | \$59.12             | \$2.82             |                    |
|    | Operating Cost (F + H)                        | \$12,900.35          | \$64.50             | \$3.07             |                    |
|    | Total Unit Cost (F + H + J)                   | \$16,341.51          | \$81.71             | \$3.89             |                    |
| N. | Total Unit Cost Before Adjustment (E + H + I) | \$16,341.51          | \$81.71             | \$3.89             |                    |
| Ο. | Cash Cost Summary (N - Non Cash Costs)        | \$16,341.51          | \$81.71             | \$3.89             |                    |

### **Stocker Profit Center Commodity Report**

Farm/Ranch: '04 Purchased Stockers Beginning Fiscal Year: 2005

**Production Center: Stockers** 

|   |  | Total                                   | \$/Head<br>Sold                 | \$/Cwt<br>of gain              |
|---|--|---|---------------------------------|--------------------------------|
| Α | Revenue  |   |                                 |                                |
|   | Sales  | \$78,000.00                             | \$780.00                        |                                |
|   |  | *************************************** | 4.00.00                         |                                |
| В | Revenue - Cost Adjustment                                | \$0.00                                  | \$0.00                          | \$0.00                         |
| С | Direct Production Cost                                   |   |                                 |                                |
|   | Cattle Cost  | \$56,250.00                             | \$562.50                        |                                |
|   | Transf. Non Cattle Cost from Pred./Back. Non-Cattle Cost | \$2,000.00                              | \$20.00                         |                                |
|   | Feed Purchased   | \$400.00                                | \$4.00                          | \$1.33                         |
|   | Lease for Grazing  | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Animal Health  | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Other Direct Cost  | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Depreciation   | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Cull and Death Loss Adjustment                           | \$0.00                                  | \$0.00                          |                                |
|   | Death Loss   | \$0.00                                  | \$0.00                          |                                |
|   | Total Direct Cost  | \$58,650.00                             | \$586.50                        |                                |
| D | Indirect Production Cost                                 |   |                                 |                                |
|   | Grazing  | \$17,423.63                             | \$174.24                        | \$58.08                        |
|   | Raised Feed  | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Labor & Management                                       | \$4,859.56                              | \$48.60                         | \$16.20                        |
|   | Machinery & Equipment                                    | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Other  | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Other  | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Other  | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | Total Depreciation                                       | \$0.00                                  | \$0.00                          | \$0.00                         |
|   | •  |   |                                 |                                |
|   | Cull and Death Loss Adjustmment  Total Indirect Cost     | \$0.00<br>\$22,283.19                   | \$0.00<br>\$222.83              |                                |
| E | Total Production Cost (C + D)                            | \$80,933.19                             | \$809.33                        |                                |
| F | Net Production Cost (E - B)                              | \$80,933.19                             | \$809.33                        |                                |
| G | Production Margin (A - F)                                | (\$2,933.19)                            | (\$29.33)                       |                                |
| Н | General and Administrative Cost                          |   |                                 |                                |
|   | Cash Cost Summary  | \$67.82                                 | \$0.68                          | \$0.23                         |
|   | Depreciation   | \$0.00                                  | \$0.00                          | \$0.00                         |
| ı | Operating Margin (A - F - H)                             | (\$3,001.01)                            | (\$30.01)                       |                                |
| J | Financing Cost   | \$2,401.36                              | \$24.01                         | \$8.00                         |
| K | Net Cost (F + H + J)                                     | \$83,402.37                             | \$834.02                        |                                |
| L | Net Margin (A - K)                                       | (\$5,402.37)                            | (\$54.02)                       |                                |
| M | Cost Summary Net Production Cost (F)                     |   | <b>\$/Head Sold</b><br>\$809.33 | <b>\$/Cwt Solo</b><br>\$107.91 |
|   | Operating Cost (F + H)                                   |   | \$810.01                        | \$108.00                       |
|   | Total Unit Cost (F + H + J)                              |   | \$834.02                        | \$111.20                       |
|   |  |   | \$/Head Day                     | \$/Cwt Gair                    |
| N | Total Non Cattle Unit Cost Before Cost                   | Adjustment                              | \$1.39                          | \$83.84                        |
|   |  |   | \$/Head                         |                                |

O Non Cattle Cash Cost Summary \$251.52

### **Stocker Profit Center Commodity Report**

Farm/Ranch: '04 Raised Stockers Beginning Fiscal Year: 2005

**Production Center: Stockers** 

|    |  | Total                 | \$/Head<br>Sold              | \$/Cwt<br>of gain         |
|----|--|-----------------------|------------------------------|---------------------------|
| Α  | Revenue  |                       |                              |                           |
|    | Sales  | \$232,548.60          | \$854.96                     |                           |
| В  | Revenue - Cost Adjustment                                | \$0.00                | \$0.00                       | \$0.00                    |
| С  | Direct Production Cost                                   |                       |                              |                           |
|    | Cattle Cost  | \$0.00                | \$0.00                       |                           |
|    | Transf. Non Cattle Cost from Pred./Back. Non-Cattle Cost | \$130,680.00          | \$480.44                     |                           |
|    | Feed Purchased   | \$1,191.00            | \$4.38                       | \$1.46                    |
|    | Lease for Grazing  | \$0.00                | \$0.00                       | \$0.00                    |
|    | Animal Health  | \$2,720.00            | \$10.00                      | \$3.33                    |
|    | Other Direct Cost  | \$0.00                | \$0.00                       | \$0.00                    |
|    | Depreciation   | \$0.00                | \$0.00                       | \$0.00                    |
|    | Cull and Death Loss Adjustment                           | \$0.00                | \$0.00                       | Ψ0.00                     |
|    | Death Loss   | \$0.00                | \$0.00                       |                           |
|    | Total Direct Cost  | \$134,591.00          | \$494.82                     |                           |
|    | Total Direct Cost  | \$134,591.00          | φ494.0Z                      |                           |
| D  | Indirect Production Cost                                 | \$47,392.45           | \$174.24                     | \$58.08                   |
|    | Grazing<br>Raised Feed                                   | \$47,392.45<br>\$0.00 | \$174.24<br>\$0.00           | \$0.00                    |
|    |  |                       |                              |                           |
|    | Labor & Management                                       | \$7,899.56            | \$29.04                      | \$9.68                    |
|    | Machinery & Equipment                                    | \$0.00                | \$0.00                       | \$0.00                    |
|    | Other  | \$0.00                | \$0.00                       | \$0.00                    |
|    | Other  | \$0.00                | \$0.00                       | \$0.00                    |
|    | Other  | \$0.00                | \$0.00                       | \$0.00                    |
|    | Total Depreciation                                       | \$0.00                | \$0.00                       | \$0.00                    |
|    | Cull and Death Loss Adjustmment                          | \$0.00                | \$0.00                       |                           |
|    | Total Indirect Cost                                      | \$55,292.01           | \$203.28                     |                           |
| E  | Total Production Cost (C + D)                            | \$189,883.01          | \$698.10                     |                           |
| F  | Net Production Cost (E - B)                              | \$189,883.01          | \$698.10                     |                           |
| G  | Production Margin (A - F)                                | \$42,665.59           | \$156.86                     |                           |
| н  | General and Administrative Cost                          |                       |                              |                           |
|    | Cash Cost Summary  | \$663.06              | \$2.44                       | \$0.81                    |
|    | Depreciation   | \$0.00                | \$0.00                       | \$0.00                    |
| I  | Operating Margin (A - F - H)                             | \$42,002.53           | \$154.42                     |                           |
| J  | Financing Cost   | \$0.00                | \$0.00                       | \$0.00                    |
| K  | Net Cost (F + H + J)                                     | \$190,546.07          | \$700.54                     |                           |
| L  | Net Margin (A - K)                                       | \$42,002.53           | \$154.42                     |                           |
| M  | Cost Summary   |                       | ¢/⊔ood Sold                  | \$/Cv4 5014               |
| M  | Net Production Cost (F)                                  |                       | \$/Head Sold<br>\$698.10     | \$/Cwt Sold               |
|    | Operating Cost (F + H)                                   |                       | :                            | \$87.45<br>\$97.75        |
|    | Total Unit Cost (F + H + J)                              |                       | \$700.54<br><b>\$700.5</b> 4 | \$87.75<br><b>\$27.75</b> |
|    | 10tai 0111t C0St (F + F + J)                             |                       | \$700.54                     | \$87.75                   |
|    |  |                       | ¢/Lland Davi                 | ¢/Cust Coin               |
| N, | Total Non Cattle Unit Coat Before Coat                   | Adiustment            | \$/Head Day                  | \$/Cwt Gain               |
| N  | Total Non Cattle Unit Cost Before Cost                   | Aujustment            | \$1.22                       | \$73.37                   |
|    |  |                       | \$/Head                      |                           |

S/Head
O Non Cattle Cash Cost Summary \$220.10

### **Crop Commodity Report - Sales**

Farm/Ranch:TTAP EnterprisesCommodity Report:'05 Wheat-Grain

 Fiscal Year
 2005

 Production:
 15,000

 Sales:
 15,000

Total Acres: 500.00 Yield: 30.00

|    |   | Total            | \$/Acre of Sales | \$/Bushel of Sales | % of Total<br>Cost |
|----|---|------------------|------------------|--------------------|--------------------|
|    |   | TOLAI            | OI Sales         | OI Sales           | COSI               |
| A. | Revenue                                       |                  |                  |                    |                    |
|    | Sales   | \$48,750.00      | \$97.50          | \$3.25             |                    |
| В. | Revenue - Cost Adjustment                     | \$18,779.00      | \$37.56          | \$1.25             |                    |
| C. |   |                  |                  |                    |                    |
|    | Cash Cost Summary                             | \$42,374.53      | \$84.75          | \$2.82             | 57%                |
|    | Depreciation                                  | \$0.00           | \$0.00           | \$0.00             | 0%                 |
|    | Sub-total Direct                              | \$42,374.53      | \$84.75          | \$2.82             |                    |
| D. | Indirect Production Cost                      |                  |                  |                    |                    |
|    | Labor & Management                            | \$3,968.31       | \$7.94           | \$0.26             | 5%                 |
|    | Machinery & Equipment                         | \$14,593.63      | \$29.19          | \$0.97             | 20%                |
|    | Other #2                                      | \$0.00           | \$0.00           | \$0.00             | 0%                 |
|    | Other #3 Total Depreciation                   | \$0.00<br>\$0.00 | \$0.00<br>\$0.00 | \$0.00<br>\$0.00   | 0%<br>0%           |
|    | Sub-total Indirect                            | \$18,561.94      | \$37.12          | \$0.00<br>\$1.24   | 0%                 |
|    | ous-total maneet                              | ψ10,301.34       | ψΟΙ.12           | ψ1.2-              |                    |
| E. | Total Production Cost (C + D)                 | \$60,936.47      | \$121.87         | \$4.06             |                    |
| F. | Net Production Cost (E - B)                   | \$42,157.47      | \$84.31          | \$2.81             |                    |
| G. | Production Margin (A - F)                     | \$6,592.53       | \$13.19          | \$0.44             |                    |
| н. | General and Administrative Cost               |                  |                  |                    |                    |
|    | Cash Cost Summary                             | \$4,476.14       | \$8.95           | \$0.30             | 6%                 |
|    | Depreciation                                  | \$0.00           | \$0.00           | \$0.00             | 0%                 |
| I. | Operating Margin (A - F - H)                  | \$2,116.39       | \$4.23           | \$0.14             |                    |
| J. | Financing Cost                                | \$8,567.74       | \$17.14          | \$0.57             | 12%                |
| K. | Net Cost (F + H + J)                          | \$55,201.35      | \$110.40         | \$3.68             |                    |
| L. | Net Margin (A - K)                            | (\$6,451.35)     | (\$12.90)        | (\$0.43)           |                    |
| М. | Cost Summary                                  |                  |                  |                    |                    |
|    | Net Production Cost (F)                       | \$42,157.47      | \$84.31          | \$2.81             |                    |
|    | Operating Cost (F + H)                        | \$46,633.61      | \$93.27          | \$3.11             |                    |
|    | Total Unit Cost (F + H + J)                   | \$55,201.35      | \$110.40         | \$3.68             |                    |
| N. | Total Unit Cost Before Adjustment (E + H + I) | \$73,980.35      | \$147.96         | \$4.93             |                    |
| Ο. | Cash Cost Summary (N - Non Cash Costs)        | \$73,980.35      | \$147.96         | \$4.93             |                    |

### **TTAP Enterprise's Financial Projections**

Tom and Julie employed the Risk Management Specialists of the Extension Agricultural Economics group to analyze their operation using their Farm Assistance analysis. Farm Assistance develops a financial and economic projection for the ranch assuming a strategic plan of action (long term plan of operation). The initial projection is called the "baseline." One purpose of the baseline is to give the manager a sense of where the business may be headed financially. The baseline represents the status quo of the operation projected ten years into the future.

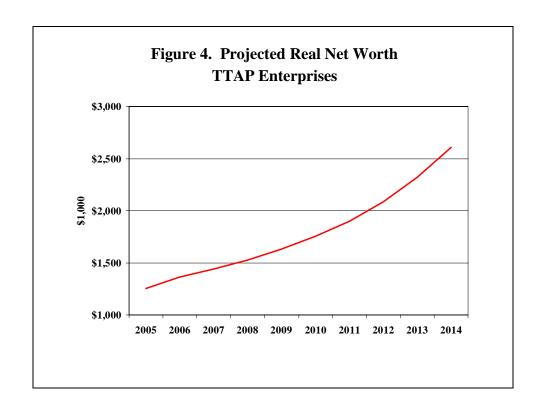
The general assessment of the operation is that "on average" the financial position and performance of the ranch improves over the ten year planning horizon. The commercial cattle herd maintained a 400 cow inventory throughout the projection period. Approximately 272 stocker cattle calves were transferred from the cattle herd to a stocker operation where ownership was maintained. Another stocker cattle group consisting of about 100 head was purchased in each of the ten year simulation. Wheat was planted on 1,000 acres and roughly half of the acres would be utilized by the stocker operations and the remaining acreage is harvested. An additional 200 acres of sorghum was expected to be double cropped and harvested.

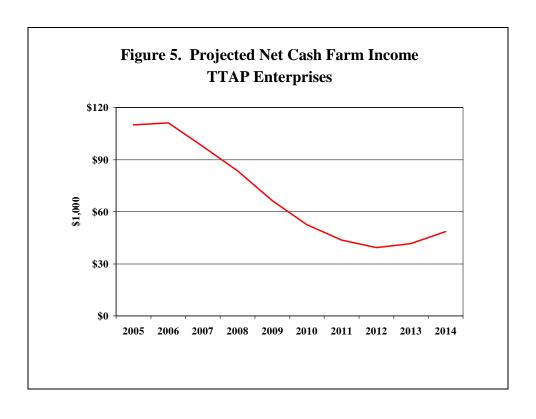
Over the simulation period, the projected net worth of the operation is expected to increase from its current \$1.4 million to over \$2.5 million by 2014. This increase occurs even in the face of declining cattle prices between 2006 and 2012. This increase is depicted in figure 4.

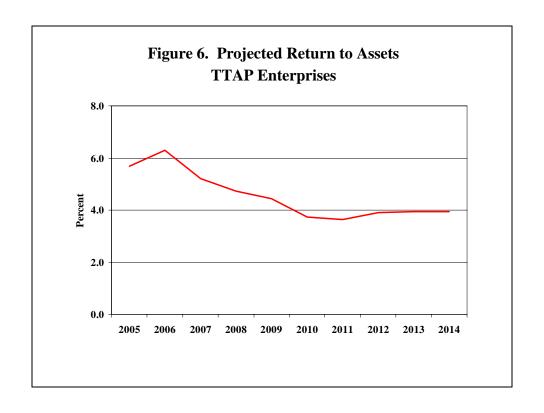
The ranch is anticipated to have an average annual net cash farm income of \$69,000 with possible outcomes ranging from \$39,000 to \$111,000. The risk profile (i.e. variability) of net cash farm income indicates that this could vary as much as \$80,000 below or \$50,000 above mean levels. Net cash farm income of the operation is correlated to cattle prices. With the increase in national cattle numbers, cattle prices are expected to decline until 2012. Net cash farm income for the operation is expected to follow this pattern until 2012. This is shown in figure 5.

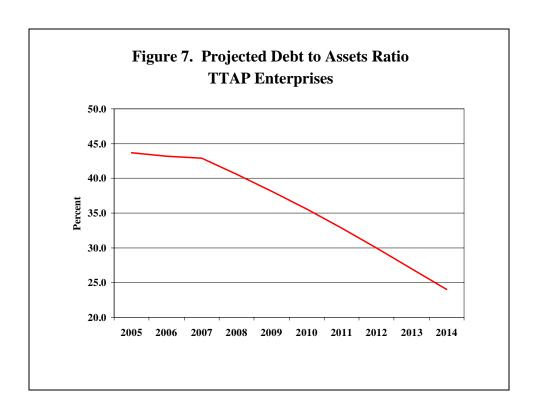
TTAP Enterprises has set financial goals of exceeding 5.25 percent return on assets and reducing the debt to asset ratio to below 43 percent prior to January 2007. Given the current projections, both goals should be met. These projections are shown in figures 6 and 7.

Ratio analysis of the operation shows an improving financial outlook over the planning horizon. TTAP Enterprises should start planning for any worst case scenarios that may happen.









# Marketing Plan for TTAP Enterprises

TTAP Enterprises has updated the following Marketing Plan in October, 2005. This marketing plan will address the issues of: setting price goals, breakeven sensitivity analysis, market outlooks, and seasonal price trends which will be used to arrive at a tactical decision. All of these sections are presented below.

### **Setting Price Goals**

The information provided in the Financial Plan of TTAP Enterprises Business Plan was used to determine the prices required to cover both total variable as well as total costs of production. Specifically, it was found that TTAP Enterprises must obtain an average price of \$88.25 per cwt for stocker cattle to cover total variable costs. This price is the weighted average of the prices required to cover total variable costs associated with both the raised (\$82.39/cwt) and purchased (\$105.25/cwt) stocker cattle. Furthermore, TTAP Enterprises must obtain an average selling price of \$93.77 per cwt to cover all costs of stocker cattle production. Again, this is a weighted average of the price required to cover all costs associated with both raised (\$87.75/cwt) and purchased (\$111.20/cwt) stocker cattle.

A similar analysis of the price required to cover total variable and total costs of production for both wheat and grain sorghum found the following. TTAP Enterprises must obtain an average price of \$3.66 per bushel to cover total variable costs of production for wheat and \$4.93 per bushel to cover total costs. An average price of \$1.56 per cwt must be obtained to cover total variable costs and \$3.89 per cwt to cover all costs associated with producing grain sorghum.

### **Breakeven Sensitivity Analysis**

A sensitivity analysis of the prices required to cover total variable costs and total costs associated with TTAP Enterprises stocker cattle, wheat, and grain sorghum production suggested that as yields decreased, the total variable and total cost of production increased for all three commodities. On the other hand, if events such as weather caused an unexpected increase in yields, all production costs decreased. Specifically if TTAP Enterprises has an unexpected change in yields (due to events such as weather), the total cost of production for stocker cattle will change by about \$2.00 per cwt for every 5 percent change in yields. The total cost of production for wheat was found to change by about \$0.20 per bushel for every 5 percent change in yields. Finally, the total cost of production associated with grain sorghum was found to change by about \$0.15 per cwt for every 5 percent change in yields.

### **Market Outlook Summary**

The general market outlook for all three commodities produced by TTAP Enterprises suggested the following. The long range outlook for the cattle market suggests cattle prices will continue to remain at high levels through the year 2007. After that time, the market will slowly slide downward. The long range wheat outlook suggests that wheat prices will bottom out during this year (the 2005/06 wheat crop year). After this, wheat prices are projected to steadily increase.

Finally, the long range outlook suggests grain sorghum prices will increase slightly from this year forward.

### **Seasonal Price Trends**

An analysis of historical prices found that there does appear to be a seasonal price trend for cattle in Texas. Specifically, the price of all types of cattle appears to be higher in the late Winter/early Springs months (February, March, April) and lower in the Fall months (September, October, and November). The one exception is found in Fed Steer prices in Texas. The lowest prices are generally found in the summer months (June, July, August, and September).

Seasonal price trends were also found in wheat and corn (which is being used as a substitute for grain sorghum due to a lack of information). The seasonal trend for wheat is that the lowest price of the year is found in July. Prices then tend to slowly increase until about November. After November, prices slowly start to decline until July. As with wheat, the lowest price of the year for corn appears to be in July. After July, prices increase steadily until about April. Corn prices then fall quickly from this high in April to the low in July.

### **Tactical Decisions**

Using the information provided above, the following tactical decisions were made regarding the marketing of TTAP Enterprise's stocker cattle. Given that the general price level of cattle are in the top third of historical prices, the long term outlook for cattle is down, the short term market outlook is flat, seasonal price outlook is down, and the current local basis is in the middle third, TTAP Enterprises has decided to price 100 percent of its cattle that will be ready in May through forward contracts. This decision follows the a priori decision for this commodity.

TTAP Enterprises has decided to follow the a priori decision regarding wheat under the conditions that are currently being observed. Specifically, the general price level is in the middle third, the long term outlook is up, the short term outlook is down, the seasonal price trend outlook is up, and current local basis is in the middle third. TTAP Enterprises would like to just sit and watch this market for a couple more months and see if prices will follow the seasonal trend.

The tactical marketing decision regarding grain sorghum is to not do anything. Grain sorghum has always been a secondary crop for TTAP Enterprises and will remain that way. Given this information, TTAP Enterprises will harvest the crop and get the best local price available.

# **Strategic Marketing Plan Worksheet 1 Industry Profile – Beef**

Source: http://www.ers.usda.gov/Briefing/ & http://www.ers.usda.gov/Briefing/Cattle/Trade.htm

### **Background**

With its abundant grasslands and large grain supply, the United States has developed a beef industry that is largely separate from its dairy sector. The United States has the largest fed-cattle industry in the world, and is the world's largest producer of beef, primarily high-quality, grainfed beef for domestic and export use. The industry is roughly divided into two production sectors: cow-calf operations and cattle feeding.

### **Cattle Cycle**

The cattle cycle refers to increases and decreases in cattle herd size over time. The cattle cycle is usually 8-12 years in duration, the longest of all meat animals. The last cattle cycle lasted 12 years and the present cycle is in its 14th year, with 2 more years of decline likely. The cattle cycle is determined by the combined effects of cattle prices and the time needed to breed, birth, and raise cattle to market weight.

Given the dry conditions that have persisted since 1998, retention of enough heifers to turn the cycle is unlikely to begin until forage conditions improve and heifers are retained. The first real opportunity for meaningful change will come with heifers born in 2004. These heifers were born in late winter-early spring 2004 and would be weaned in the fall, bred in late spring-early summer 2005, and calve 9 months later. These additional heifers and calves could result in an expansion to be first reported in the January 1, 2007, cattle inventory report. The National Agricultural Statistics Service (NASS) provides information on cattle numbers in semi-annual inventory reports.

### **Cow-Calf Operations**

These operations are located throughout the United States, typically on land not suited or needed for crop production. Cow-calf operations are dependent upon range and pasture forage conditions, which are in turn dependent upon variations in the average level of rainfall and temperature for the area. Beef cows harvest forage from grasslands to maintain themselves and raise a calf with very little, if any, grain input. The cow is maintained on pasture year round, as is the calf until it is weaned. If additional forage is available at weaning, some calves may be retained for additional grazing and growth until the following spring when they are sold. The average beef cow herd is 40 head, but operations with 100 or more beef cows comprise 9 percent of all beef operations and 51 percent of the beef cow inventory. Operations with 40 or fewer head are largely part of multi-enterprises, or are supplemental to off-farm employment.

### **Cattle Feedlots**

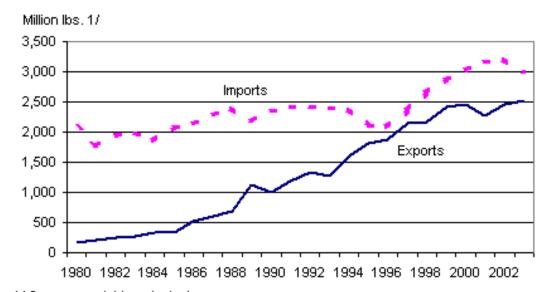
Cattle feeding is concentrated in the Great Plains, but is also important in parts of the Corn Belt, Southwest, and Pacific Northwest. Cattle feedlots produce high-quality beef, grade Select or higher, by feeding grain and other concentrates for about 140 days. Depending on weight at placement, feeding conditions, and desired finish, the feeding period can be from 90 to as long as 300 days. Average gain is 2.5-4 pounds per day on about 6 pounds of dry-weight feed per pound of gain. While most of a calf's nutrient inputs until it is weaned are from grass, feedlot rations are generally 70 to 90 percent grain and protein concentrates.

Feedlots with less than 1,000 head of capacity comprise the vast majority of U.S. feedlots but market a relatively small share of fed cattle. In contrast, lots with 1,000 head or more of capacity comprise less than 5 percent of total feedlots but market 80-90 percent of fed cattle. Feedlots with 32,000 head or more of capacity market around 40 percent of fed cattle. The industry continues to shift toward a small number of very large specialized feedlots, which are increasingly vertically integrated with the cow-calf and processing sectors to produce high-quality fed beef. NASS provides monthly Cattle on Feed reports.

### U.S. Beef Trade

The United States, while the largest producer of beef in the world, is a net beef importer. Most beef produced and exported from the United States is grain-finished, high-quality choice cuts. Most beef that the United States imports is grass-fed beef, destined for processing, primarily as ground beef.

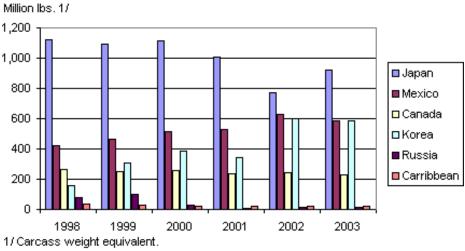
### U.S. beef trade



1/ Carcass weight equivalent.

Source: Bureau of the Census, U.S. Department of Commerce.

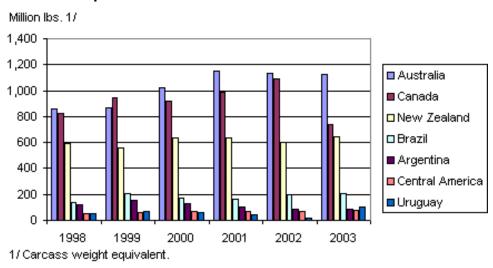
### U.S. beef exports



Source: Bureau of the Census, U.S. Department of Commerce.

The largest export market for U.S. beef is Japan, which through 2000 imported at least twice as much U.S. beef as the second-largest U.S. export market. However, imports by Japan fell by about one-third late in 2001 when BSE was discovered in the Japanese cattle herd. Mexico is the second-largest market for U.S. beef, and continued growth is expected but at a slower pace than in the past. The third-largest export market for U.S. beef, and the fastest growing, has been South Korea. The Korean market became fully liberalized at the end of 2001 and rapid growth is expected to continue. Canada, in fourth place, has been gradually declining in importance for several years. The Canadian market is expected to grow slowly at best.

### U.S. beef imports



Source: Bureau of the Census, U.S. Department of Commerce.

Over the past several years, the largest percentage of U.S. beef imports has come from Australia, with Canada a close second. The third-largest exporter of beef to the United States is New Zealand. The United States also imports a significant portion of its cooked beef from Argentina

and Brazil, but their combined share of the U.S. beef market is less than half that of the three largest exporters. The remainder of U.S. beef imports comes from Central America and Uruguay.

In May 2003, Canada reported the discovery of a case of BSE in one of its beef cows. Cattle and beef products from Canada were barred entry into the United States after the announcement. In August 2003, beef imports from Canada resumed but were restricted to boneless products from cattle under 30 months of age. As of early 2004, the trade situation continues to evolve as officials review the risks and revise trading rules accordingly.

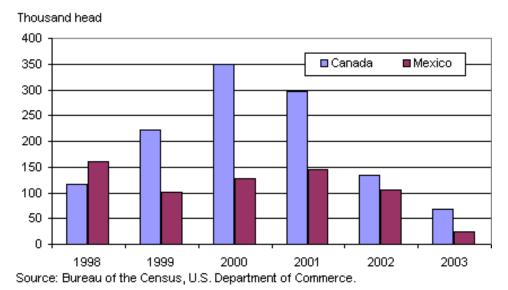
# U.S. cattle trade Thousand head 3,000 2,500 2,000 1,000 1,000 Exports

The United States imports a significantly greater volume of cattle than it exports. The countries from which the United States imports cattle are also the same ones to which it exports cattle: Canada and Mexico. The geographical proximity of these countries and complementarity of their cattle and beef sectors explains why they are the United States' only significant cattle trading partners. Imports of Canadian cattle into the United States, however, have been banned since the May 2003 BSE announcement.

Source: Bureau of the Census, U.S. Department of Commerce.

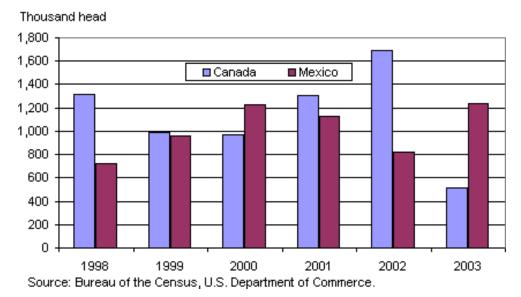
1982 1984 1986 1988 1990 1992 1994 1996 1998 2000 2002

### U.S. cattle exports



U.S. cattle exports to Canada and Mexico vary from year to year in the relative percentage exported to each country, although the absolute level of trade has been greater over the last several years. Historically, the United States exported primarily slaughter cattle to both countries. However, changes in Canada's policies have led to increased exports of feeder cattle.

### U.S. cattle imports



In past years, cattle imports from Canada and Mexico have varied. The relative share of cattle imported from Mexico has tended to increase over the last several years. Imports from Mexico tend to be lighter cattle for finishing in U.S. feedlots, while those from Canada tended to be primarily for slaughter.

### **Strategic Marketing Plan Worksheet 1 (Continued)**

**Industry Profile – Wheat** 

**Source: USDA-ERS** 

http://www.ers.usda.gov/Briefing/

### **Background**

The United States is a major wheat-producing country, with output typically exceeded only by China, the European Union, and, sometimes, India. During the early 2000s, wheat ranked third among U.S. field crops in both planted acreage and gross farm receipts, behind corn and soybeans. Presently, almost half of the U.S. wheat crop is exported.

The U.S. wheat sector enters the 21st century facing many challenges, despite a strong domestic market for wheat products. U.S. wheat harvested area has dropped off 28 million acres, or nearly one-third from its peak in 1981, because of declining returns compared with other crops and alternative options under government programs. Despite rising global wheat trade, U.S. share of the world market has eroded in the past two decades.

### U.S. Wheat Classes

Wheat is the principal food grain produced in the United States. Wheat varieties grown in the United States are classified as "winter wheat" or "spring wheat," depending on the season each is planted. Winter wheat production represents 70-80 percent of total U.S. production. Winter wheat varieties are sown in the fall and usually become established before going into dormancy when cold weather arrives. In the spring, plants resume growth and grow rapidly until summertime harvest. In the Northern Plains, where winters are harsh, spring wheat and durum wheat are planted in the spring and harvested in the late summer or fall of the same year.

The five major classes of U.S. wheat are hard red winter, hard red spring, soft red winter, white, and durum. Each class has a somewhat different end use and production tends to be region-specific.

- Hard red winter (HRW) wheat accounts for about 40 percent of total production and is grown primarily in the Great Plains (Texas north through Montana). HRW is principally used to make bread flour.
- Hard red spring (HRS) wheat accounts for about 25 percent of production and is grown
  primarily in the Northern Plains (North Dakota, Montana, Minnesota, and South Dakota).
  HRS wheat is valued for high protein levels, which make it suitable for specialty breads
  and blending with lower protein wheat.
- Soft red winter (SRW) wheat, accounting for 15-20 percent of total production, is grown primarily in States along the Mississippi River and in the Eastern States. Flour produced from milling SRW is used in the United States for cakes, cookies, and crackers.

- White wheat, accounting for 10-15 percent of total production, is grown in Washington, Oregon, Idaho, Michigan, and New York, and its flour is used for noodle products, crackers, cereals, and white-crusted breads.
- Durum wheat, accounting for 3-5 percent of total production, is grown primarily in North Dakota and Montana and is used in the production of pasta.

Wheat milling byproducts—such as bran (outer seed coat of a wheat kernel), shorts (more inward layers of the seed coat that contain some starchy or floury components), and middlings (an intermediate fraction that consists of a combination of bran and shorts)—are used by feed manufacturers in the production of animal feeds.

### **U.S.** Wheat Supply

Wheat area has dropped from its early 1980s highs, due mostly to declining returns relative to other crops and alternative options under government programs. Authorization of the Conservation Reserve Program (CRP) in the 1985 Farm Act, followed by planting flexibility provisions in the 1990 Farm Act, provided wheat farmers with other options for use of their acreage. Under the 1990 Act, farmers participating in commodity programs could plant up to 25 percent of their base wheat acreage to crops other than wheat without losing base acreage. Farmers thus had an incentive to grow crops promising higher returns or to earn rental payments from idling land under the CRP.

Planting flexibility facilitated expansion of soybeans, corn, and other crops in traditional wheat areas. The 1996 Farm Act completed the market orientation of crop planting by eliminating the requirement to maintain base acreage of program crops in order to qualify for government payments.

The role and nature of government assistance to the farm sector is under intense debate because of variable commodity prices. While low profitability of wheat has encouraged some farmers to switch to other crops, many farmers cannot easily switch from wheat. In addition to watching market prices to decide what and how much to plant, farmers are strongly influenced by loan deficiency payments. Farmers in the Eastern United States, with higher rainfall, have more profitable alternatives to wheat than in other wheat-growing regions. Profitable alternative crop choices to dryland wheat in the Plains regions, while more limited, do exist.

Loss of wheat acreage to row crops on the Plains reflects strong genetic improvements in corn and soybeans, producing varieties that could be planted farther west and north in the region, areas with drier conditions or shorter growing seasons. The pace of genetic improvement has been slower for wheat than for some other field crops, making wheat less competitive for cropland. Genetic improvement is slower because of genetic complexity and because of lower potential returns to commercial seed companies, which discourage investment in research. In the corn sector, for example, where hybrids are used, farmers generally buy seed from dealers every year. However, many wheat farmers, particularly in the Plains States, use saved seed instead of buying from dealers every year.

### U.S. Wheat Use

U.S. consumer demand for food products made from wheat flour is relatively unaffected by changes in wheat prices or disposable income. However, demand is closely tied to population, tastes, and preferences.

The strength of the domestic market for wheat has developed out of the historic turnaround that occurred in the 1970s in U.S. per capita wheat consumption. For nearly 100 years, per capita wheat consumption declined in the United States, as hard physical labor became less common and diets diversified. Wheat consumption dropped from over 225 pounds per person in 1879 to 180 pounds in 1925 before bottoming out at 110 pounds in 1972. By 1997, consumption had rebounded to 147 pounds per capita. The rise in consumption benefited the U.S. wheat processing industry, which has operated near full capacity over the last 25 years, while expanding and modernizing.

However, the growth in per capita consumption appears to have ended. Since 1997, per capita consumption has fluctuated slightly from year to year, dropping 10 pounds during 2001 and 2002, and leveling off in 2003. The sharp drop may reflect, in part, the increasing numbers of weight-conscious consumers following diets that include fewer carbohydrates. Another force reducing flour usage (and thus, wheat consumption) is the expanding production of extended shelf life bread. The outcome for U.S. bakers is a reduction in "stales" (bread that does not sell and is taken back by the baker) from as high as 15 percent of sales to less than 8 percent. Reducing stales directly reduces the quantity of flour required to supply the same level of consumer demand. The downturn in per capita consumption has created some financial distress because of milling and baking overcapacity and has raised concerns about prospective consumer tastes and preferences.

Almost half of the U.S. wheat crop is exported. The importance of exports varies by class of wheat. The white and HRS classes rely more than others on sales into export markets:

- White wheat, two-thirds of the crop exported
- HRS, half of the crop exported
- SRW and durum, about one-third of each exported
- HRW, slightly over one-third exported

In the 1990s and early 2000s, world wheat consumption continued to expand in response to rising population and incomes, but the volume of world trade gained only slightly. Distribution of global wheat trade broadened as small purchases by a larger number of importing countries—in Southeast Asia, North Africa, and the Middle East—have together become more important than the very large purchases in the past by the former Soviet Union and China.

The United States has lost share in global wheat trade over the years, and export competition will not abate in the foreseeable future. Agricultural policy reforms in the European Union's (EU) Agenda 2000 are expected to promote wheat production in EU countries over other crops.

Traditional exporters (Argentina, Australia, and Canada) are expected to continue to be very competitive. Other suppliers, such as Eastern Europe and parts of the former Soviet Union, also may provide increased export competition if their infrastructure improves and if they upgrade the quality of wheat output while holding down costs.

### **U.S.** Wheat Prospects

Challenges for the U.S. wheat sector will not abate in the foreseeable future. Other crops will be included in farmers' production decisions under current farm legislation. Although wheat products have proven to be competitive with other foodstuffs in the domestic market in recent years, foreign competition will continue to pressure U.S. wheat producers.

Research to develop new varieties and new growing methods may improve market competitiveness and increase the cost efficiency of wheat production. Improved varieties of U.S. hard white wheat, for example, have been developed using traditional genetic breeding methods, and some breeders and industry analysts believe these hard whites may open new market prospects to U.S. producers in Asia and the Middle East, where Australian white wheat now dominates. Development of genetically modified, herbicide-tolerant wheat varieties promises significant benefits to spring wheat growers, but may also introduce some uncertainty in marketing.

### Strategic Marketing Plan Worksheet 1 (Continued) Industry Profile - Grain Sorghum http://www.ers.usda.gov/Briefing/

### **Background**

Grain sorghum is the third most important cereal crop grown in the United States and the fifth most important cereal crop grown in the world. The United States is currently positioned as the number one producer and exporter of sorghum on the world market. The United States' share of world trade in sorghum has not dropped below 70 percent in the last decade. World trade in sorghum is dominated by U.S. exports to Mexico. Other importing countries and regions include Japan, Israel, Eritrea, South Africa and the European Union.

Grain sorghum is utilized in food and industries around the world, as well as being a staple feed ingredient in the U.S. Worldwide, more than 50 % of sorghum is grown directly for human consumption. Other uses for grain sorghum include the production of wallboard for the housing industry and ethanol.

### **Sorghum Supply**

Historically, Kansas and Texas have been the largest grain sorghum producing states in the United States. Between 1982 and 2002 the two states combined have produced, on average, 62.4 percent of the sorghum in the United States. U.S. sorghum production in 2003 was 411 million bushels. Of that, Kansas raised 130.5 million bushels in 2003 and Texas grew nearly 154 million bushels.

### **Sorghum Demand**

Sorghum has a variety of uses including food for human consumption, feed grain for livestock, and industrial applications such as ethanol production. The area planted to sorghum worldwide has increased by 66 percent over the past 50 years while yield has increased by 244 percent. Around half of sorghum produced is fed to livestock and half is consumed by humans and used in other applications. Currently most human consumption of sorghum occurs in low-income countries whereas high-income countries typically use sorghum as a component in livestock feed. Sorghum is a versatile plant as it can tolerate drought, soil toxicities, a wide range of temperatures, and high altitudes. As 25 percent of the population is expected to undergo severe water shortage by 2025, the crop's adaptability suggests that it may soon play a larger role in supplying the world with grain.

While globally, about 50 percent of sorghum is consumed by humans, in the United States over 90 percent of the sorghum consumed is used as a component in livestock feed. Corn is the main substitute of sorghum for use in feed. The starch and protein in sorghum are more difficult for animals to digest than those in corn. This gives corn a distinct advantage for feed usage. However, research is being conducted to develop processing methods that allow animals to digest sorghum more readily. Processing breaks the seed coat, reduces particle size, and

increases surface area. Some methods of processing make the end-use value of sorghum comparable to that of corn because more starch and protein are able to be digested in sorghum.

While many new sorghum food products are currently being developed, the grain's food use has been limited thus far. These limitations are mainly due to two characteristics of the plant. First, phenolic acid and tannins cause flour made from sorghum to have a bitter flavor. Second, the lack of gluten restricts sorghum's usefulness in the food industry. Recently a food grade sorghum has been developed that does not contain phenolic acid or tannins and, hence, its flour does not have a bitter taste. These varieties are being used in snack food applications in the United States and Japan and can also be used to replace wheat flour in some baked products. The lack of gluten may be an advantage in a niche market targeting people who are gluten intolerant.

Besides feed and food applications, sorghum is utilized in several other products. Archer Daniels Midland produces wallboard for the housing industry using sorghum. Due to its lack of conductivity, sorghum is becoming a popular material for biodegradable packaging materials. In industrial applications sorghum is increasingly being utilized in ethanol production. Currently around 10 percent of the U.S. sorghum crop is consumed by ethanol production. Ethanol can be produced from various crops including corn, wheat, and grain sorghum.

Corn is used most often in ethanol production and sorghum is second. Eight plants in the United States use sorghum to produce ethanol. Five of these plants are located in Kansas. Since Kansas is continuously a top producer of sorghum, this crop is a reliable source for ethanol production. Kansas produces between 65 and 70 million gallons of fuel ethanol each year. This production generates a demand for about 26 million bushels of grain.

### **Prices**

U.S. sorghum production averaged \$4.40/cwt. in 2003. Corn averaged \$2.45/bushel in 2003. Since the crops are close substitutes and have similar growing seasons, it is expected that their prices would move together. The average price difference between 1982 and 2002 was 19 cents per bushel premium on corn.

### Strategic Marketing Plan Worksheet 2 – Assessing Risk Tolerance A Priori Decision Tree – 6 Months Away From Marketing Month

| Commodity      | Months<br>Away From<br>Market<br>Month | How Does The<br>Price Compare<br>to Historical<br>Prices | General<br>Long Range<br>Outlook for<br>Prices | Marketing Action What is My Marketing Decision                                 |
|----------------|--|--|--|--|
| Stocker Cattle | 6 Months                               | Top Third  |  | Price 75% of expected production to ensure at least 20% profit & watch market. |
| Stocker Cattle | 6 Months                               | Top Third  | $\iff$   | Price 50% of expected production to ensure at least 20% profit & watch market  |
| Stocker Cattle | 6 Months                               | Top Third  |  | Price 100% of expected production  |
|                |  |  |  |  |
| Stocker Cattle | 6 Months                               | Middle Third   | Î  | Hold tight & watch market  |
| Stocker Cattle | 6 Months                               | Middle Third   | $\iff$   | Hold tight & watch market  |
| Stocker Cattle | 6 Months                               | Middle Third   | Ţ.   | Price 30% of expected production to ensure at least break-even                 |
|                |  |  |  |  |
| Stocker Cattle | 6 Months                               | Lower Third  | Î  | Hold tight, watch market & hope for the best.                                  |
| Stocker Cattle | 6 Months                               | Lower Third  | $\iff$   | Hold tight, watch market & hope for the best.                                  |
| Stocker Cattle | 6 Months                               | Lower Third  | Ţ  | Hope for a turnaround  |

### Strategic Marketing Plan Worksheet 2 - Assessing Risk Tolerance A Priori Decision Tree – 6 Months Away From Marketing Month

| Commodity | Months<br>Away From<br>Market<br>Month | How Does The<br>Price Compare<br>to Historical<br>Prices | General<br>Long Range<br>Outlook for<br>Prices | Marketing Action What is My Marketing Decision                                 |
|-----------|--|--|--|--|
| Wheat     | 6 Months                               | Top Third  | Î  | Price 75% of expected production to ensure at least 20% profit & watch market. |
| Wheat     | 6 Months                               | Top Third  | $\iff$   | Price 50% of expected production to ensure at least 20% profit & watch market  |
| Wheat     | 6 Months                               | Top Third  |  | Price 100% of expected production  |
|           |  |  |  |  |
| Wheat     | 6 Months                               | Middle Third   |  | Hold tight & watch market  |
| Wheat     | 6 Months                               | Middle Third   | $\iff$   | Price 33% of expected production & watch market                                |
| Wheat     | 6 Months                               | Middle Third   | Ţ.   | Price 100% of expected production to ensure at least break-even                |
|           |  |  |  |  |
| Wheat     | 6 Months                               | Lower Third  |  | Hold tight, watch market & hope for the best.                                  |
| Wheat     | 6 Months                               | Lower Third  | —————————————————————————————————————          | Hold tight, watch market & hope for best                                       |
| Wheat     | 6 Months                               | Lower Third  | Ţ.   | Watch market & hope for a turnaround   |

### Strategic Marketing Plan Worksheet 2 – Assessing Risk Tolerance A Priori Decision Tree – 6 Months Away From Marketing Month

| Commodity     | Months<br>Away From<br>Market<br>Month | How Does The<br>Price Compare<br>to Historical<br>Prices | General<br>Long Range<br>Outlook for<br>Prices | Marketing Action What is My Marketing Decision |
|---------------|--|--|--|--|
| Grain Sorghum | 6 Months                               | Top Third  |  | N/A  |
| Grain Sorghum | 6 Months                               | Top Third ←⇒   |  | N/A  |
| Grain Sorghum | 6 Months                               | Top Third  | Ţ.   | N/A  |
|               |  |  |  |  |
| Grain Sorghum | 6 Months                               | Middle Third   | Î  | N/A  |
| Grain Sorghum | 6 Months                               | Middle Third   | $\iff$   | N/A  |
| Grain Sorghum | 6 Months                               | Middle Third   | Ĵ  | N/A  |
|               | <u> </u>                               |  | Г  |  |
| Grain Sorghum | 6 Months                               | Lower Third  |  | N/A  |
| Grain Sorghum | 6 Months                               | Lower Third  | —————————————————————————————————————          | N/A  |
| Grain Sorghum | 6 Months                               | Lower Third  | Ţ  | N/A  |

### Strategic Marketing Plan Worksheet 3 – Assessing Risk Tolerance A Priori Decision Tree – 3 Months Away From Marketing Month

| Commodity      | Months<br>Away From<br>Market<br>Month | How Does The<br>Price Compare<br>to Historical<br>Prices | General<br>Long Range<br>Outlook for<br>Prices | Marketing Action What is My Marketing Decision                                |  |
|----------------|--|--|--|---|--|
| Stocker Cattle | 3 Months                               | Top Third  |  | Hold tight but watch market   |  |
| Stocker Cattle | 3 Months                               | Top Third  | $\iff$   | Price 75% of expected production to ensure at least 20% profit & watch market |  |
| Stocker Cattle | 3 Months                               | Top Third  | - I  | Price 100% of expected production   |  |
|                |  |  |  |   |  |
| Stocker Cattle | 3 Months                               | Middle Third   |  | Hold tight & watch market   |  |
| Stocker Cattle | 3 Months                               | Middle Third   | $\iff$   | Hold tight & watch market   |  |
| Stocker Cattle | 3 Months                               | Middle Third   | Ţ.   | Price 100% of expected production to ensure at least break-even.              |  |
|                |  |  |  |   |  |
| Stocker Cattle | 3 Months                               | Lower Third  |  | Hold tight, watch market & hope for the best.                                 |  |
| Stocker Cattle | 3 Months                               | Lower Third  | $\iff$   | Hold tight, watch market & hope for best                                      |  |
| Stocker Cattle | 3 Months                               | Lower Third  | Ţ.   | Talk to banker  |  |

### Strategic Marketing Plan Worksheet 3 – Assessing Risk Tolerance A Priori Decision Tree – 3 Months Away From Marketing Month

| Commodity | Months<br>Away From<br>Market<br>Month | How Does The<br>Price Compare<br>to Historical<br>Prices | General<br>Long Range<br>Outlook for<br>Prices | Marketing Action What is My Marketing Decision                                  |
|-----------|--|--|--|---|
| Wheat     | 3 Months                               | Top Third  |  | Hold Tight But Watch<br>Market  |
| Wheat     | 3 Months                               | Top Third  | $\iff$   | Price 100% of expected production to ensure at least 20% profit & watch market. |
| Wheat     | 3 Months                               | Top Third  |  | Price 100% of expected production   |
|           |  |  |  |   |
| Wheat     | 3 Months                               | Middle Third   | Î  | Hold tight & watch market   |
| Wheat     | 3 Months                               | Middle Third   | $\iff$   | Hold tight & watch market   |
| Wheat     | 3 Months                               | Middle Third   | Ţ.   | Price 100% of expected production to ensure at least break-even.                |
|           |  |  |  |   |
| Wheat     | 3 Months                               | Lower Third  | Î  | Hold tight, watch market & hope for the best.                                   |
| Wheat     | 3 Months                               | Lower Third  | $\iff$   | Hold tight, watch market & hope for best  |
| Wheat     | 3 Months                               | Lower Third  | Ţ  | Hope for a turnaround   |

### Strategic Marketing Plan Worksheet 3 – Assessing Risk Tolerance A Priori Decision Tree – 3 Months Away From Marketing Month

| Commodity     | Months<br>Away From<br>Market<br>Month | How Does The<br>Price Compare<br>to Historical<br>Prices | General<br>Long Range<br>Outlook for<br>Prices | Marketing Action What is My Marketing Decision |  |
|---------------|--|--|--|--|--|
| Grain Sorghum | 3 Months                               | Top Third  |  | N/A  |  |
| Grain Sorghum | 3 Months                               | Top Third  | $\iff$   | N/A  |  |
| Grain Sorghum | 3 Months                               | Top Third  |  | N/A  |  |
|               |  |  |  |  |  |
| Grain Sorghum | 3 Months                               | Middle Third   | Î  | N/A  |  |
| Grain Sorghum | 3 Months                               | Middle Third   | $\iff$   | N/A  |  |
| Grain Sorghum | 3 Months                               | Middle Third   |  | N/A  |  |
|               |  |  |  |  |  |
| Grain Sorghum | 3 Months                               | Lower Third  |  | N/A  |  |
| Grain Sorghum | 3 Months                               | Lower Third  | $\iff$   | N/A  |  |
| Grain Sorghum | 3 Months                               | Lower Third  | Ţ.   | N/A  |  |

# **Strategic Marketing Plan Worksheet 4 Setting Price Goals**

| Commodity                   | Expected Yearly<br>Production | Variable per Unit<br>Cost of Production | Total per Unit Cost of Production |
|-----------------------------|-------------------------------|---|-----------------------------------|
|                             |                               |   |                                   |
| Stocker Cattle <sup>1</sup> | 2,921.40 cwt                  | \$88.25/cwt                             | \$93.77/cwt                       |
| (Raised)                    | (2,171.40 cwt)                | (\$82.39/ cwt)                          | (\$87.75/ cwt)                    |
| (Purchased)                 | (750.00 cwt)                  | (\$105.25/cwt)                          | (\$111.20/cwt)                    |
|                             |                               |   |                                   |
| Wheat                       | 15,000 bu.                    | \$3.66/bu.                              | \$4.93/bu.                        |
|                             |                               |   |                                   |
| Grain Sorghum               | 4,200 cwt.                    | \$1.56/cwt.                             | \$3.89/cwt.                       |

<sup>&</sup>lt;sup>1</sup>.Variable costs were determined by the following formula:
(Direct Variable Stocker Cost) + [(Direct Wheat Variable Cost/Total Wheat Cost)\*(Grazing Cost)]

### Strategic Marketing Plan Worksheet 5 Breakeven Sensitivity Analysis

| Commodity      | Yield<br>Sensitivity | Expected<br>Yearly<br>Production | Variable per<br>Unit Cost of<br>Production | Total per Unit  Cost of  Production |  |  |
|----------------|----------------------|----------------------------------|--|-------------------------------------|--|--|
|                |                      |                                  |  |                                     |  |  |
|                | 20% Yield Decrease   | 2,337.12 cwt                     | \$99.69/cwt                                | \$106.59/cwt                        |  |  |
|                | 15% Yield Decrease   | 2,483.19 cwt                     | \$96.23/cwt                                | \$102.72/cwt                        |  |  |
|                | 10% Yield Decrease   | 2,629.26 cwt                     | \$93.21/cwt                                | \$99.35/cwt                         |  |  |
|                | 5% Yield Decrease    | 2,775.33 cwt                     | \$90.57/cwt                                | \$96.38/cwt                         |  |  |
| Stocker Cattle | Average Yields       | 2,921.40 cwt                     | \$88.25/cwt                                | \$93.77/cwt                         |  |  |
|                | 5% Yield Increase    | 3,067.47 cwt                     | \$86.15/cwt                                | \$91.41/cwt                         |  |  |
|                | 10% Yield Increase   | 3,213.54 cwt                     | \$84.29/cwt                                | \$89.31/cwt                         |  |  |
|                | 15% Yield Increase   | 3,359.61 cwt                     | \$82.64/cwt                                | \$87.44/cwt                         |  |  |
|                | 20% Yield Increase   | 3,505.68 cwt                     | \$81.18/cwt                                | \$85.78/cwt                         |  |  |
|                |                      |                                  |  |                                     |  |  |
|                | 20% Yield Decrease   | 12,000 bu.                       | \$4.13/bu.                                 | \$5.72/bu.                          |  |  |
|                | 15% Yield Decrease   | 12,750 bu.                       | \$3.99/bu.                                 | \$5.49/bu.                          |  |  |
|                | 10% Yield Decrease   | 13,500 bu.                       | \$3.87/bu.                                 | \$5.28/bu.                          |  |  |
|                | 5% Yield Decrease    | 14,250 bu.                       | \$3.76/bu.                                 | \$5.09/bu.                          |  |  |
| Wheat          | Average Yields       | 15,000 bu.                       | \$3.66/bu.                                 | \$4.93/bu.                          |  |  |
|                | 5% Yield Increase    | 15,750 bu.                       | \$3.57/bu.                                 | \$4.78/bu.                          |  |  |
|                | 10% Yield Increase   | 16,500 bu.                       | \$3.50/bu.                                 | \$4.65/bu.                          |  |  |
|                | 15% Yield Increase   | 17,250 bu.                       | \$3.43/bu.                                 | \$4.53/bu.                          |  |  |
|                | 20% Yield Increase   | 18,000 bu.                       | \$3.37/bu.                                 | \$4.42/bu.                          |  |  |
|                |                      |                                  |  |                                     |  |  |
|                | 20% Yield Decrease   | 3,360 cwt                        | \$1.76/cwt                                 | \$4.67/cwt                          |  |  |
|                | 15% Yield Decrease   | 3,570 cwt                        | \$1.70/cwt                                 | \$4.44/cwt                          |  |  |
| Grain Sorghum  | 10% Yield Decrease   | 3,780 cwt                        | \$1.65/cwt                                 | \$4.24/cwt                          |  |  |
|                | 5% Yield Decrease    | 3,990 cwt                        | \$1.60/cwt                                 | \$4.05/cwt                          |  |  |
|                | Average Yields       | 4,200 cwt                        | \$1.56/cwt                                 | \$3.89/cwt                          |  |  |
|                | 5% Yield Increase    | 4,410 cwt                        | \$1.52/cwt                                 | \$3.74/cwt                          |  |  |
|                | 10% Yield Increase   | 4,620 cwt                        | \$1.49/cwt                                 | \$3.61/cwt                          |  |  |
|                | 15% Yield Increase   | 4,830 cwt                        | \$1.46/cwt                                 | \$3.49/cwt                          |  |  |
|                | 20% Yield Increase   | 5,040 cwt                        | \$1.43/cwt                                 | \$3.38/cwt                          |  |  |

# Strategic Marketing Plan Worksheet 6 Market Outlook & Expectations – Beef Cattle Source: http://www.ers.usda.gov/Briefing/Cattle/Outlook.htm & http://www.ers.usda.gov/Briefing/Baseline/livstk.htm

### **Beef Prices Gain Relative to Competing Meats**

Cattle and beef prices strengthened as the cattle inventory reached the low point in the cattle cycle, and beef production declined. Although the cattle sector has been reducing cow slaughter and retaining heifers for the expansion phase of the new cattle cycle, beef production will not begin to expand to a large degree until mid-2007. Cow-calf operators, after suffering through drought in many areas from 1998 through 2004, are now able to expand due to improved forage conditions and continued strong prices for their calves. However, feedlot and stocker operator returns have been very erratic due to the record stocker/feeder cattle prices and difficulty in passing the higher calf prices on in the marketing system against relatively lower priced competing meats.

### **Herd Expansion Continues**

First-half female slaughter continues to decline fairly sharply. Total cow slaughter was down 7 percent, with beef cow slaughter down 8 percent and dairy cow slaughter down 5 percent. Similarly heifer slaughter is down 7 percent compared with first-half 2004. The mid-year *Cattle* report to be released July 22, will give a firmer indication of just how strong a herd expansion is under way. In addition the report will provide the first estimate on this year's calf crop, expected to show the first year-to-year gain since 1994. The number of heifers being retained will provide a first cut on the 2006 calf crop and rate of production expansion beginning in mid-2007 when the 2006 calf crop begins to be marketed from feedlots.

### **Spring Choice Beef Prices Set Record**

In 2001 and 2002 retail prices for Choice beef averaged \$3.35 a pound, while pork and broilers averaged \$2.68 and \$1.60 a pound, respectively. In 2004 beef prices had risen to \$4.04 a pound, while pork and poultry averaged \$2.79 and \$1.74 a pound. In the second quarter of this year beef prices averaged a record \$4.23 a pound. Pork prices averaged \$2.87 a pound and broilers averaged \$1.73 a pound. The beef/pork price ratio in 2001-2002 was 1.25, while in the second quarter it widened to 1.48. The beef/broiler price ratio has widened from 2.09 in 2001-2002 to 2.45. The near-record beef prices provide evidence of the present strong consumer demand for beef, but it also raises concern about the relatively high prices today against competing meats. In addition, higher petroleum, energy, and interest costs are taking a bigger bite out of consumers' discretionary incomes.

Second-quarter retail prices for Choice beef set a record this spring at \$4.23 a pound, up nearly 2 percent from the former record set in fourth-quarter 2003 at \$4.17 a pound and up over 3 percent from a year earlier. Beef prices have likely set the highs for the turning point of this cattle cycle as beef supplies increase seasonally in the second half of the year and as cattle under 30 months

of age enter the market from Canada. Pork and broiler production are expected to rise 3 to 4 percent over year-earlier levels in the second half of 2005, putting additional pressure on the relatively more expensive beef. After averaging \$4.26 a pound in April and May, Choice retail beef prices declined to \$4.18 a pound in June, about unchanged from June 2004.

### **Cattle Prices Also at Record Levels**

Cattle prices continued on a record setting path in the first half of this year with fed cattle prices averaging in the upper \$80s per cwt and Utility cows averaging in the upper \$50s, both the result of tight beef supplies and continued strong beef demand. First-half beef production was down over 1 percent from a year earlier and down nearly 10 percent from 2003 when the May 20 ban on Canadian beef /cattle due to Bovine Spongiform Encephalopathy (BSE) was implemented. The ban on Canadian boneless beef from cattle under 30 months of age was lifted in August 2003.

First-half prices for yearling feeder cattle were sharply above the year-earlier levels as tight supplies resulted in strong competition between cattle feeders and stocker operators. Producers in most of the country are experiencing the best grazing conditions in years. Although cattle feeders were in the black this spring, breakeven prices by mid-summer are moving toward the mid- to upper-\$80s per cwt, reflecting record feeder cattle prices and modestly higher grain prices. Fed cattle prices are expected to average in the lower \$80s this summer, putting margins in the red and taking some of the bloom off feeder cattle prices. Expected marginally larger feeder cattle supplies from this year's calf crop will also take some of the premium off stocker/feeder cattle prices.

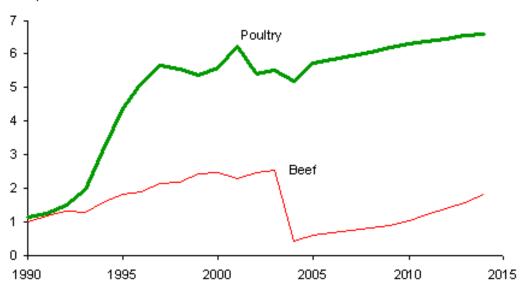
### U.S. Livestock Baseline Projections, 2005-2014

Livestock sector projections over the baseline period reflect strong domestic demand for meat. Beef and poultry exports rise from the reduced levels of 2004 that reflected concerns with bovine spongiform encephalopathy (BSE) and Avian influenza, respectively. The baseline assumes a gradual rebuilding of U.S. beef exports to Japan, reflecting the October 2004 U.S.-Japan beef trade framework agreement that will permit the resumption of beef trade between the two countries. While overall meat exports benefit from stronger foreign economic growth in the baseline, U.S. beef exports do not return to levels attained prior to the discovery of a U.S. BSE case in December 2003.

Moderate returns to red meat production lead to only small gains in beef and pork production in the second half of the projections. Larger gains in poultry output result in poultry becoming a larger proportion of total U.S. meat consumption as per capita beef consumption declines and per capita pork consumption levels off.

#### U.S. beef and poultry exports

Billion pounds



Source: *USDA Agricultural Baseline Projections t*o 2014, February 2005. Economic Research Service, USDA.

#### **Baseline Trade Assumptions for Cattle and Beef**

Due to uncertainties regarding the length of bans on trade in ruminants and ruminant products following the discovery of cases of BSE in the United States and Canada, the baseline projections for meats are based on a number of key assumptions related this issue.

#### **Canadian Beef Exports**

Canadian beef exports have rebounded from the lows of 2003 following the Canadian BSE case in May of that year, but do not fully recover to 2002 levels in the baseline projections.

#### U.S. Beef Exports

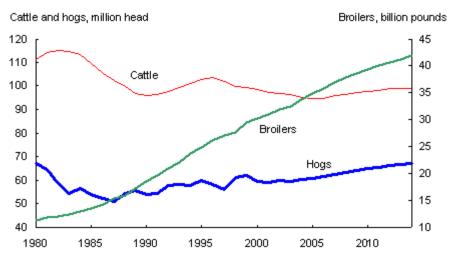
The baseline assumes a resumption of U.S. beef exports to Japan beginning in 2006, facilitated by the October 2004 U.S.-Japan beef trade framework agreement that will permit the reopening of beef trade between the two countries. Japanese imports of U.S. beef are assumed to grow slowly in the projections as the U.S. industry adopts the requirements under the framework agreement. The baseline also assumes a gradual recovery in U.S. beef exports to South Korea.

#### **Canadian Cattle Exports to the United States**

The resumption of imports from Canada of slaughter cattle under 30 months of age and feeder cattle is also assumed to begin in 2006 in the baseline. However, after the projections were prepared, a minimal risk rule was published which specifies USDA's regulations on meat and ruminant imports from regions with effective BSE prevention and detection measures. The rule becomes effective on March 7, 2005, and Canada will be the first country to be recognized as a minimal-risk region.

When the minimal risk rule becomes effective, imports of under-30-month-old steers and heifers from Canada for immediate slaughter and imports of Canadian feeder cattle that will enter U.S. feedlots are expected to lead to increased levels of cattle slaughter and beef production in the United States in 2005 and 2006, with somewhat lower cattle and beef prices. Larger beef supplies are also expected to pressure prices for other livestock and other meats.

#### Livestock inventories and broiler production



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

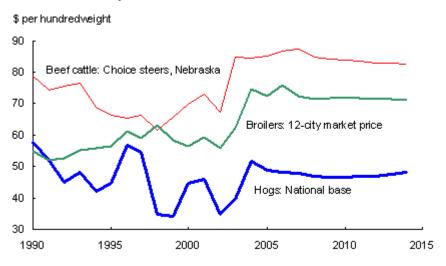
U.S. beef production increases from the sharp declines of 2003 and 2004. Despite the loss of export markets following the case of BSE in late 2003, strong domestic demand for beef has resulted in favorable producer returns which, together with favorable forage and feed grain supplies, begins the process of retention of cows and heifers for future expansion. Cattle herds are expected to increase somewhat from cyclical lows near 95 million head in 2005 and 2006. Rising slaughter weights augment gradual herd expansion over the remainder of the projections. Pork production grows slowly as the coordinated/integrated industrial structure dampens the U.S. hog cycle. Poultry production continues to rise, but at a lower rate than during the 1990s due to the maturity of domestic demand and slower export growth.

The trend toward larger livestock systems continues throughout the baseline period. Efficiency gains allow production to expand while real prices generally decline.

- Strong demand for consistent, higher quality beef continues in the domestic hotel and restaurant market and increasingly in the retail market. Additionally, the rebuilding of beef export markets is primarily for high-quality beef. Increasing movement toward transparent animal identification in international trade will strengthen quality assurance.
- Increased efficiency of the U.S. hog breeding herd is reflected in a shift to larger, more efficient operations and in the decline of smaller, less efficient operations. For the baseline, the increase in efficiency slows somewhat since larger, more efficient operations already account for a large share of the U.S. pig crop.
- Production coordination and market integration between the United States and Canada continues to increase in the hog sector. Canada is the major supplier of live hog imports to the United States. Feeder pigs produced in Canada are finished and processed in the United States, where feed grain prices remain favorable and processing costs are lower. Large wholesale and retail buyers source pork cuts where prices are attractive, with demand accommodated by trade between the two countries.

• The poultry sector has benefited from economies of scale associated with the industry's horizontal and vertical integration. Projected gains in efficiency over the next decade are smaller than in the past 25 years.

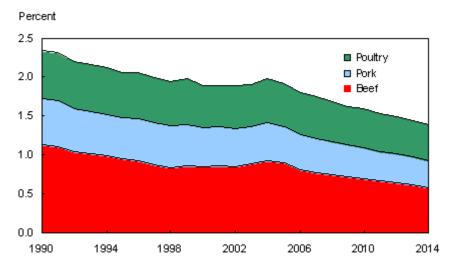
#### Nominal livestock prices



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Livestock prices are projected to average somewhat lower than the high levels of 2004, particularly in the second half of the projections period when per capita consumption flattens at record high levels.

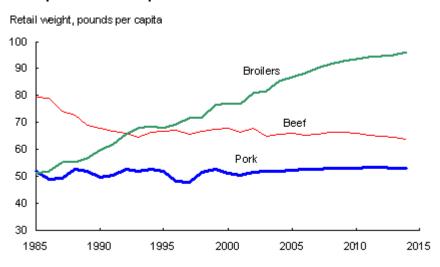
Percent of U.S. income spent on meat



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA. U.S. consumers buy more meat, but spend a smaller proportion of disposable income for these purchases, continuing a long-term trend. Over the next 10 years, consumer meat expenditures decline from about 2 percent to 1.4 percent of disposable income.

• Poultry expenditures continue to increase as a share of consumer spending on meats.

#### Per capita meat consumption



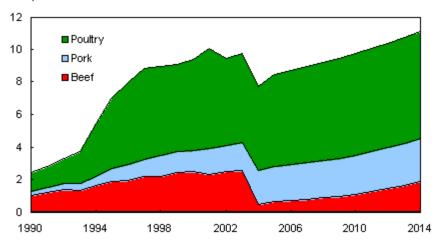
Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Higher levels of total per capita meat consumption are projected over the next decade, largely reflecting continued increases in poultry consumption. On a retail weight basis, per capita consumption rises to about 234 pounds from the 2004 level of 223 pounds.

- Per capita consumption of beef remains at relatively high levels through the baseline in part because beef exports, although growing, do not return to 2003 levels in the projections.
- Pork consumption remains stable at 52-53 pounds per person throughout the projections.
- Per capita consumption of relatively lower priced poultry increases throughout the baseline, allowing poultry to gain a larger share of total meat consumption and meat expenditures.

#### U.S. meat exports

Billion pounds



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

U.S. meat exports rise throughout the baseline period from the reduced levels in 2004 that reflected disease-related loss of markets, especially for beef and broilers. Improved global economic growth and rising demand for meats contribute to the gains in U.S. exports. The gradual recovery in beef exports to markets such as Japan and South Korea is also critical to the projections. The baseline assumes that Brazil and Argentina will not be recognized as free of foot-and-mouth disease (FMD) by key importing countries, such as Japan.

#### **Beef**

- U.S. beef exports primarily reflect demand for high-quality fed beef, with most U.S. beef exports typically going to markets in Pacific Rim nations. With the loss of those markets following the BSE case in the United States in late-December 2003, U.S. beef exports were sharply lower in 2004. However, U.S. beef exports are projected to rise slowly in the baseline as the October 2004 beef trade framework agreement between the United States and Japan facilitates the resumption of beef trade between the two countries. A gradual recovery in U.S. beef exports to South Korea is also assumed.
- U.S. imports of processing beef from Australia and New Zealand decline in the baseline as more, lower quality processing beef comes from domestic sources with the rebuilding of the cattle herd. The United States is a net beef importer on a volume basis through the projections as the recovery of high-quality fed beef exports does not reach prior levels.

#### **Pork**

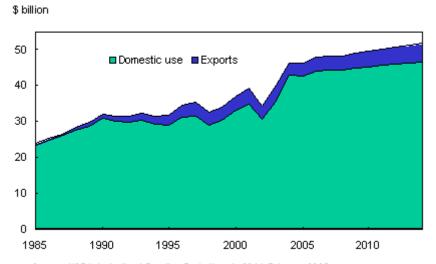
 U.S. pork exports benefit somewhat from reduced beef exports as import demand shifts among competing meats. Pacific Rim nations and Mexico remain key markets for longterm growth of U.S. pork exports. Canada continues to be a strong competitor in these markets. Brazil also is a major pork exporter. However, without nationwide FMD-free status, Brazil focuses its pork exports on Russia, Argentina, and Asian markets other than Japan and South Korea.

• While increased efficiency in pork production helps limit production costs, longer term gains in U.S. pork exports will be determined by costs of production and environmental regulations relative to competitors. Such costs tend to be lower in countries with growing pork industries, such as Brazil and Mexico.

#### **Poultry**

- U.S. broiler export growth is expected to slow from the rate of the 1990s. U.S. producers will face strong competition from other major broiler exporting countries, particularly Brazil.
- Major U.S. export markets include Asia, Russia, and Mexico. Gains in these markets reflect strong economic growth and rising consumer demand.

#### Farm value of domestically produced meat



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

The sharp decline in beef exports in 2004 lowered the overall meat export share of the total value of domestically produced meat from about 11 percent in 2003 to under 8 percent, based on a measure that weights exports of beef, pork, and chicken by farm-level prices. While U.S. meat exports grow in importance in the projections, the domestic market remains the dominant source of demand and exports only recover to 10 percent of the production value.

USDA-ERS Projected U.S. Beef Cattle Supply and Demand (March 14, 2005)

| OBDIT LING I TOJECICA O.I          | 3. Beer cattle | Suppiy u | na Denna | iia (iviaic | 711 1 1, 200 | ,,,                                   |        |        |                                       |        |        |
|------------------------------------|----------------|----------|----------|-------------|--------------|---------------------------------------|--------|--------|---------------------------------------|--------|--------|
| Item                               | Units          | 2005     | 2006     | 2007        | 2008         | 2009                                  | 2010   | 2011   | 2012                                  | 2013   | 2014   |
| Beginning stocks                   | Mil. lbs.      | 625      | 575      | 575         | 575          | 575                                   | 575    | 575    | 575                                   | 575    | 575    |
| Commercial production              | Mil. lbs.      | 24,775   | 24,808   | 25,213      | 26,034       | 26,458                                | 26,884 | 27,115 | 27,416                                | 27,692 | 27,941 |
| % change from previous year        |                | 1.1      | 0.1      | 1.6         | 3.3          | 1.6                                   | 1.6    | 0.9    | 1.1                                   | 1.0    | 0.9    |
| Farm production                    | Mil. lbs.      | 101      | 101      | 101         | 101          | 101                                   | 101    | 101    | 101                                   | 101    | 101    |
| Total production                   | Mil. lbs.      | 24,876   | 24,909   | 25,314      | 26,135       | 26,559                                | 26,985 | 27,216 | 27,517                                | 27,793 | 28,042 |
| Imports                            | Mil. lbs.      | 3,660    | 3,682    | 3,671       | 3,582        | 3,472                                 | 3,325  | 3,250  | 3,200                                 | 3,150  | 3,100  |
| Total supply                       | Mil. lbs.      | 29,161   | 29,166   | 29,560      | 30,292       | 30,606                                | 30,885 | 31,041 | 31,292                                | 31,518 | 31,717 |
| Exports                            | Mil. lbs.      | 620      | 682      | 750         | 825          | 908                                   | 1,044  | 1,200  | 1,381                                 | 1,588  | 1,826  |
| Ending stocks                      | Mil. lbs.      | 575      | 575      | 575         | 575          | 575                                   | 575    | 575    | 575                                   | 575    | 575    |
| Total consumption                  | Mil. lbs.      | 27,966   | 27,909   | 28,235      | 28,892       | 29,123                                | 29,266 | 29,266 | 29,336                                | 29,355 | 29,316 |
| Per capita, carcass wgt            | Pounds         | 94.3     | 93.2     | 93.4        | 94.7         | 94.6                                  | 94.2   | 93.3   | 92.7                                  | 92.0   | 91.1   |
| Per capita, retail wgt             | Pounds         | 66.0     | 65.2     | 65.4        | 66.3         | 66.2                                  | 65.9   | 65.3   | 64.9                                  | 64.4   | 63.7   |
| Prices:                            |                |          |          |             |              |                                       |        |        |                                       |        |        |
| Beef cattle, farm                  | \$/cwt         | 83.91    | 85.63    | 86.37       | 83.54        | 82.86                                 | 82.69  | 82.30  | 81.64                                 | 81.53  | 81.35  |
| Calves, farm                       | \$/cwt         | 111.89   | 110.49   | 109.89      | 107.50       | 104.44                                | 105.38 | 103.54 | 101.64                                | 100.76 | 99.74  |
| Retail: Beef & veal                | 1982-84=100    | 197.0    | 186.6    | 187.5       | 185.4        | 187.0                                 | 189.8  | 192.7  | 194.9                                 | 196.8  | 198.7  |
| Retail: Other meats                | 1982-84=100    | 176.1    | 178.2    | 180.2       | 182.0        | 184.3                                 | 186.8  | 189.3  | 192.0                                 | 194.9  | 197.9  |
| ERS retail beef                    | \$/lb.         | 4.10     | 3.88     | 3.90        | 3.86         | 3.89                                  | 3.95   | 4.01   | 4.06                                  | 4.10   | 4.14   |
| Costs and returns, cow-calf enterp | orise:         |          |          |             |              |                                       |        |        |                                       |        |        |
| Variable expenses                  | \$/cow         | 221.52   | 224.26   | 227.62      | 232.88       | 238.75                                | 243.44 | 247.46 | 250.51                                | 253.86 | 257.29 |
| Fixed expenses                     | \$/cow         | 125.71   | 131.06   | 136.39      | 140.95       | 143.78                                | 146.20 | 148.53 | 150.81                                | 153.12 | 155.71 |
| Total cash expenses                | \$/cow         | 347.23   | 355.32   | 364.01      | 373.83       | 382.53                                | 389.64 | 395.99 | 401.32                                | 406.97 | 413.00 |
| Returns above cash costs           | \$/cow         | 125.82   | 120.03   | 115.86      | 102.44       | 88.27                                 | 92.42  | 85.76  | 79.52                                 | 77.17  | 73.76  |
| Cattle inventory                   | 1000 head      | 94,732   | 94,711   | 95,842      | 96,490       | 97,171                                | 97,646 | 98,170 | 98,671                                | 98,901 | 98,776 |
| Beef cow inventory                 | 1000 head      | 32,592   | 32,402   | 32,804      | 33,232       | 33,633                                | 33,927 | 34,066 | 34,241                                | 34,322 | 34,335 |
| Total cow inventory                | 1000 head      | 41,550   | 41,310   | 41,677      | 42,041       | 42,366                                | 42,585 | 42,650 | 42,765                                | 42,786 | 42,740 |
| 0 1 1 //                           | 1 / 11         |          | 0.7.1./  | 200511      | 10           | · · · · · · · · · · · · · · · · · · · | •      |        | · · · · · · · · · · · · · · · · · · · |        | •      |

Source: http://www.ers.usda.gov/publications/oce051/oce20051d.pdf

## Strategic Marketing Plan Worksheet 6 (Continued) Market Outlook & Expectations – Wheat

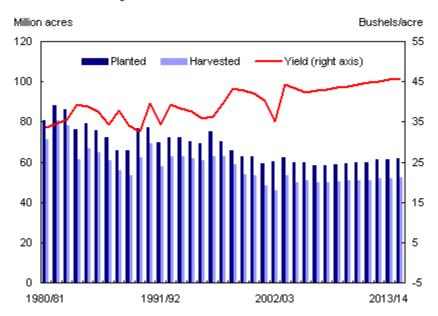
Source: http://www.ers.usda.gov/Briefing/Wheat/2005baseline.htm

#### **Supply**

Several long-term factors are important for determining the size of the U.S. wheat crop during 2005-14.

Planted wheat area in the United States has trended down since its peak of 88 million acres in 1981, in part because of lower returns relative to other crops. Increased planting flexibility under the 1996 Farm Act facilitated expansion of soybeans and corn into traditional wheat areas, especially the Plains States. In addition, more wheat land was planted to minor oilseeds, such as canola. Finally, USDA's Conservation Reserve Program (CRP) removed 8 to 10 million of acres of land from production that had traditionally been planted to wheat. About one-fourth of CRP acres in the baseline is land that has historically been planted to wheat.

#### Wheat area and yield



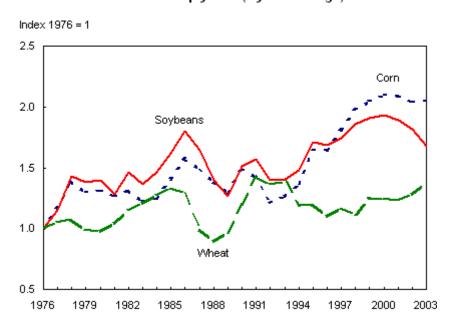
Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Changes in rotations, particularly in the dryland areas of the Great Plains, have also contributed to the decline in wheat acres. For example, in Kansas, a typical wheat-fallow rotation has been replaced most commonly by a rotation of wheat-grain sorghum-fallow, so that wheat is planted 1 year out of 3 years instead of 1 out of 2. Other crops, such as soybeans and corn, are also used in rotations. Studies from Kansas State University indicate that multi-crop rotations produce markedly higher net returns than a wheat-fallow rotation, primarily because of the inclusion of higher value, but riskier crops in the rotation mix.

Concerns about wheat disease problems in the Northern Plains, particularly scab (head blight) in North Dakota and Minnesota (caused by the fungus *Fusarium graminearum*), influenced planting decisions in the 1990s and will do so in the future. The increased incidence may stem in part from switches to corn plantings and minimum tillage in traditional wheat areas in the Northern Plains. Both activities provide hosts for disease organisms.

Loss of wheat acreage to row crops in the Great Plains reflects genetic improvements in corn and soybeans, producing varieties that can be planted farther west and north in the region, areas with drier conditions or shorter growing seasons. The pace of genetic improvement has been slower for wheat than for some other field crops, resulting in little growth in wheat yields, which makes wheat a less attractive option for farmers. Genetic improvement for wheat is slower because of genetic complexity and because of lower potential returns to commercial seed companies, factors which discourage investment in research. In the corn sector, for example, where hybrids are used, farmers buy seed from dealers every year. However, many wheat farmers, particularly in the Plains States, plant seed saved from the previous harvest instead of buying from dealers.

#### Indices of North Dakota crop yields (3-year average)



Source: National Agricultural Statistics Service, USDA.

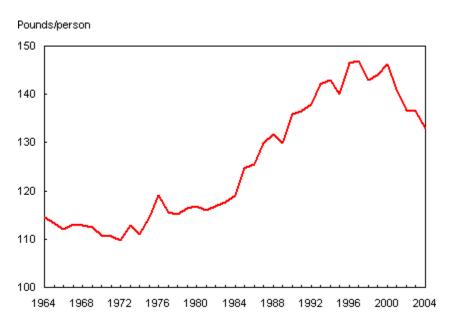
#### **Demand**

Several factors underlie the long-term developments that will determine the domestic and foreign demand for U.S. wheat during 2005-14.

Until recently, U.S. wheat producers could count on rising per capita food use of wheat flour to expand domestic demand for their crop. The strength of this domestic market developed out of the historic turnaround in U.S. per capita wheat consumption in the 1970s. U.S. per capita wheat consumption declined for nearly 100 years as caloric requirements decreased, because physical

labor became less common and diets diversified. Wheat consumption dropped from over 225 pounds per person in 1879 to a low of 110 pounds in 1972.

#### U.S. per capita wheat flour use



Source: Economic Research Service, USDA.

Between 1973 and 1997, the growth in per capita consumption reflected the boom in away-from-home eating, the desire of consumers for greater variety and more convenience in food products, promotion of wheat flour and pasta products by industry organizations, and wider recognition of health benefits stemming from eating high-fiber, grain-based foods. By 1997, consumption had rebounded to 147 pounds per capita.

Since 1997, growth in per capita food use appears to have ended. Notably, per capita flour consumption has dropped sharply to 133 pounds in 2004. These changes may reflect, in part, the increasing numbers of health- and weight-conscious people following diets that include fewer carbohydrates.

Another force reducing flour usage is the expanding production of extended shelf life (ESL) bread. New ESL technologies can double or even triple the shelf life of a fresh loaf, from several days to 10 or more. The outcome for U.S. bakers is a reduction in "stales" (meaning bread that does not sell and is taken back by the baker) from as high as 15 percent of sales to less than 8 percent. Reducing stales directly reduces the quantity of flour required to produce enough bread to meet the same level of consumer demand.

Russia and Ukraine have emerged as significant exporters of wheat in recent years. In the 1992/93 crop year (July-June), the two countries exported 33 and 4 million bushels of wheat, respectively. By 2002/03, exports had reached 464 and 243 million bushels, respectively. Russia's 2002/03 exports reflected nearly ideal weather and prevailing high prices. Production in Russia and Ukraine is unstable year to year because of variable weather conditions.

The Black Sea area is emerging from the economic adjustments experienced during its transition to independence following the breakup of the Soviet Union. One reason Russia has been able to export so much wheat is that its livestock sector has been reduced sharply, cutting the domestic demand for wheat feeding. In addition, investments in infrastructure were made, especially port facilities, by countries in the Black Sea region to enhance their future trade competitiveness.

#### Baseline projections for U.S. wheat supply and use

Highlighted here are key findings for U.S. wheat from the baseline analysis for 2005-14.

The starting wheat yield in the projections is 42.3 bushels per acre for 2005/06, based on 1985-2004 trend estimation. This is below the 2003/04 record yield of 44.2 bushels per acre and the 2004/05 yield of 43.2 bushels.

Yield growth projected in the baseline for wheat, corn, and soybeans reflects differing genetic gains. Wheat yields are projected to rise on average by 0.9 percent, or 0.4 bushels, per year over the projection period (based on 1985-2004 trend analysis). In contrast, corn and soybean yields are projected to rise 1.2 percent and 1.0 percent per year, respectively.

Wheat plantings drop to 58.5 million acres in 2006/07 and 2007/08, a result of a sharp drop in expected net returns (revenue minus variable costs) from 2004/05, reflecting a decline in the farm price (prices received by producers).

#### Dollar/acre Million acres 90 Planted area (right axis) 64 Farm price net returns only 80 63 62 70 61 60 60 59 50 Loan rate plus marketingloan-benefit net returns 58

U.S. planted area and net returns

40

Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

2002/03 2004/05 2006/07 2008/09

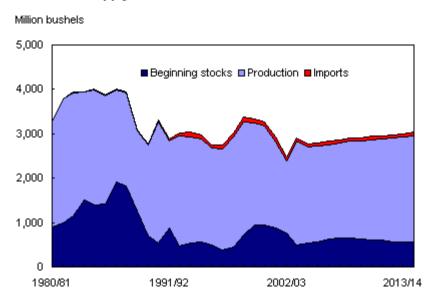
With rising wheat area and yields, U.S. production rises. Projected wheat supplies initially expand faster than use, raising ending stocks. Ending stocks begin to fall after 2006/07, as

2010/11

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export-driven total use continues to outpace production over the remainder of the projections period.

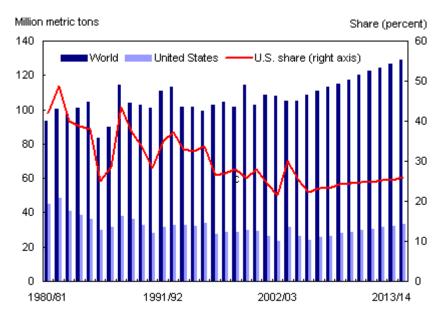
#### U.S. wheat supply



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

The U.S. share of world trade drops to a low of 22.3 percent in 2005/06. The average U.S. share over the previous 5 years was 25.8 percent. As U.S. exports begin to rise in the baseline, the U.S. market share rises to 26 percent in 2014/15.

World and U.S. wheat trade



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA. Per capita food use of wheat in the United States has fallen sharply in recent years, but the rate of decline is expected to slow in the longer term. Total projected food use is 920 million bushels in 2005/06, which then slowly rises 5 million bushels annually. This growth in total food use reflects:

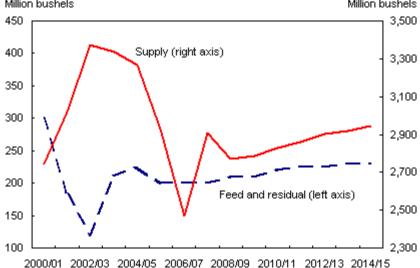
- a 0.9-1.0 percent decline in annual population growth,
- a slowing of the decline in per capita consumption from 0.5 percent annually to 0.3 percent by the end of the projection period, and
- a flour extraction rate of 74.6 percent, the long-term average for 1989-2003.

Total growth in the domestic market also reflects wheat fed to livestock. However, this component of wheat use is volatile, with year-to-year changes stemming mainly from the availability of lower quality wheat. Demand for wheat as feed depends upon supplies of wheat, the price of wheat relative to prices for corn and other feed grains, and the number of livestock being fed.

The feed-and-residual use estimate also includes a residual component that accounts for errors made in estimating other supply and use variables. Feed and residual use in the baseline rises slowly from 200 million bushels in 2005/06 to 230 million bushels by the end of the projection period, primarily reflecting increases in the total supply of wheat.

#### Million bushels Million bushels 450

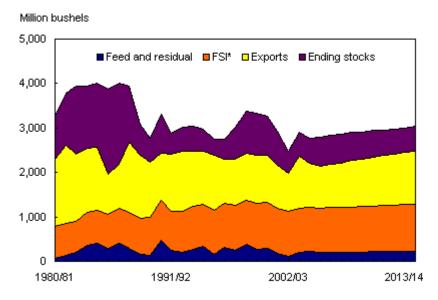
U.S. wheat supplies drive U.S. wheat feed and residual use



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

In the baseline projections, total use of U.S. wheat rises steadily after the early drop in exports. Initially, domestic use rises due primarily to increased feed and residual use, leading to gains in the total use of wheat. From 2006/07 to the end of the projections period, rising exports drive gains in total U.S. wheat use.

#### U.S. wheat utilization



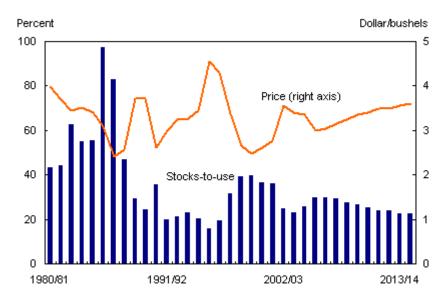
\*Food, seed, and industrial use.

Source: USDA Agricultural Baseline Projections to 2014, February 2005.

Economic Research Service, USDA.

The decline in the projected U.S. farm price occurs because of a rise in the stocks-to-use ratio (ending stocks divided by the sum of domestic use and exports) from 2003/04, as U.S. wheat exports faced increasing competition. This relatively poor export performance at the start of the projection period drops the projected U.S. farm price to nearly the level of the loan rate in 2005/06.

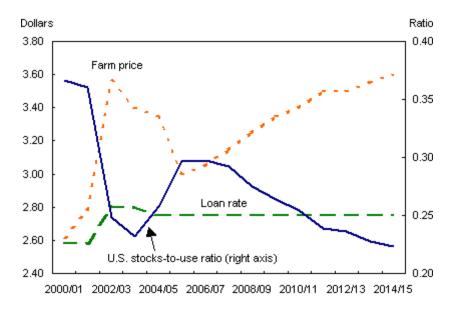
U.S. wheat price and stocks-to-use ratio



Source: USDA Agricultural Baseline Projections to 2014, February 2005.

Economic Research Service, USDA.

U.S. farm price, Ioan rate, and stocks-to-use ratio



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Planting incentives reflect expected net returns from the marketplace (expected farm price times projected yield minus variable costs), augmented by marketing loan benefits when prices are low. Projected prices in the baseline fall to \$3.00 per bushel in 2005/06 before rising back to \$3.60 per bushel by 2014/15. Because of the seasonality of wheat prices, farmers benefit from the marketing loan program when seasonal lows fall below the posted county price for wheat. When prices are low enough for marketing loan benefits, acres stay flat. Rising farm-price net returns due to rising farm prices and yields eventually raise projected planted area to 61.5 million acres in 2014/15, a level still below the 62.1 million acres in 2003/04. The projected harvested area throughout the baseline period is based on a 10-year, average harvested-to-planted ratio of 85 percent.

#### Baseline projections for world wheat trade

The USDA baseline also provides projections for global trends in wheat supply, use, and trade.

World wheat trade peaked in 1987/88 at 114 million metric tons, when both China and the Soviet Union were importing very large quantities of wheat. Imports by Eastern Europe, the former Soviet Union, and China have been much lower since then. Moreover, world wheat trade has not matched record levels despite significant growth in imports by developing countries since the late 1980s. Over the course of the 2005-14 baseline, China is expected to be the world's largest importer, but most of the growth in world trade is expected in developing countries with limited production potential. Their purchases will boost projected global wheat imports to 129 million metric tons by 2014/15.

Population growth is the main demand driver in most developing countries. Wheat imports are expected to grow slowly in Egypt, reaching 8 million metric tons, and matching China by 2014/15, because per capita consumption levels are already very high. By 2014/15, Brazil is expected to import nearly as much as China and Egypt. Brazil's climate does not favor wheat, and in some key wheat-producing states, winter corn is expected to have better returns than wheat. China is expected to maintain wheat imports at 8 million metric tons, as government policies encourage production and per capita consumption declines. In Iran, wheat imports are expected to grow slowly from recent low levels, remaining below 2 million metric tons as production incentives are assumed to continue.

Most of the growth in world wheat trade is expected to be captured by traditional exporters: Australia, Argentina, and the United States. Exports by the European Union (EU) and Eastern Europe will be limited by policies, including a 10-percent set aside, that attempt to limit imports and exports to other countries as EU expansion continues. Canada's wheat area is expected to continue to be limited by higher returns from other crops. India's wheat exports are expected to stop by 2008/09 as stocks tighten.

The U.S. wheat sector is facing a close balance between long-term productivity growth and price compared to other crops. Wheat-yield improvements are expected to continue lagging behind those for competing row crops. Domestic food use no longer provides the dynamic market growth experienced in the 1970s through the mid-1990s. U.S. exports will expand only as long as growth in U.S. supplies outpaces domestic use. Over the next 10 years, planted area of U.S. wheat is projected to fluctuate but rise to 61.5 million acres in 2014/15.

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USDA-ERS Projected U.S. Wheat Supply and Demand (March 14, 2005)

| OSDA-EKS Hojected O.S. V        | Theat Sup   | ory und D  | Ciliana (1) | Turon 11, | 2003)   |         |         |         |         |         |         |
|---------------------------------|-------------|------------|-------------|-----------|---------|---------|---------|---------|---------|---------|---------|
| U.S. wheat baseline             |             |            |             |           |         |         |         |         |         |         |         |
| Item                            | 2004/05     | 2005/06    | 2006/07     | 2007/08   | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
| Area (million acres):           |             |            |             |           |         |         |         |         |         |         |         |
| Planted acres                   | 59.7        | 60.0       | 58.5        | 58.5      | 59.0    | 59.5    | 60.0    | 60.0    | 61.0    | 61.0    | 61.5    |
| Harvested acres                 | 50.0        | 51.0       | 49.7        | 49.7      | 50.2    | 50.6    | 51.0    | 51.0    | 51.9    | 51.9    | 52.3    |
| Yields (bushels per acre):      | Г           |            |             |           |         |         |         |         |         |         |         |
| Yield/harvested acre            | 43.2        | 42.3       | 42.7        | 43.1      | 43.5    | 43.9    | 44.3    | 44.7    | 45.1    | 45.5    | 45.9    |
|                                 |             |            |             |           |         |         |         |         |         |         |         |
| Supply(million bushels):        |             |            |             |           |         |         |         |         |         |         |         |
| Beginning stocks                | 547         | 568        | 638         | 648       | 647     | 626     | 609     | 597     | 569     | 571     | 557     |
| Production                      | 2,158       | 2,155      | 2,120       | 2,140     | 2,185   | 2,220   | 2,260   | 2,280   | 2,340   | 2,360   | 2,400   |
| Imports                         | 65          | 65         | 70          | 70        | 70      | 70      | 75      | 75      | 75      | 75      | 75      |
| Supply                          | 2,770       | 2,788      | 2,828       | 2,858     | 2,902   | 2,916   | 2,944   | 2,952   | 2,984   | 3,006   | 3,032   |
|                                 |             |            |             |           |         |         |         |         |         |         |         |
| Use (million bushels):          |             |            |             |           |         |         |         |         |         |         |         |
| Food                            | 920         | 920        | 925         | 930       | 935     | 940     | 945     | 950     | 955     | 960     | 965     |
| Seed                            | 82          | 80         | 80          | 81        | 81      | 82      | 82      | 83      | 83      | 84      | 84      |
| Feed & residual                 | 225         | 200        | 200         | 200       | 210     | 210     | 220     | 225     | 225     | 230     | 230     |
| Domestic                        | 1,227       | 1,200      | 1,205       | 1,211     | 1,226   | 1,232   | 1,247   | 1,258   | 1,263   | 1,274   | 1,279   |
| Exports                         | 975         | 950        | 975         | 1,000     | 1,050   | 1,075   | 1,100   | 1,125   | 1,150   | 1,175   | 1,200   |
| Total use                       | 2,202       | 2,150      | 2,180       | 2,211     | 2,276   | 2,307   | 2,347   | 2,383   | 2,413   | 2,449   | 2,479   |
| Ending stocks                   | 568         | 638        | 648         | 647       | 626     | 609     | 597     | 569     | 571     | 557     | 553     |
| Stocks/use ratio, percent       | 25.8        | 29.7       | 29.7        | 29.3      | 27.5    | 26.4    | 25.4    | 23.9    | 23.7    | 22.7    | 22.3    |
| become, and racio, percent      | 23.0        | 23.7       | 23.7        | 23.3      | 27.3    | 20.1    | 23.1    | 23.3    | 23.7    | 22.7    | 22.3    |
| Prices (dollars per bushel):    |             |            |             |           |         |         |         |         |         |         |         |
| Farm price                      | 3.35        | 3.00       | 3.05        | 3.15      | 3.25    | 3.35    | 3.40    | 3.50    | 3.50    | 3.55    | 3.60    |
| Loan rate                       | 2.75        | 2.75       | 2.75        | 2.75      | 2.75    | 2.75    | 2.75    | 2.75    | 2.75    | 2.75    | 2.75    |
|                                 |             |            |             |           |         |         |         |         |         |         |         |
| Variable costs of production    | (dollars)   |            |             |           |         |         |         |         |         |         |         |
| Per acre                        | 73.08       | 74.65      | 75.67       | 76.37     | 77.09   | 77.89   | 78.77   | 79.68   | 80.61   | 81.54   | 82.49   |
| Per bushel                      | 1.69        | 1.76       | 1.77        | 1.77      | 1.77    | 1.77    | 1.78    | 1.78    | 1.79    | 1.79    | 1.80    |
|                                 |             |            |             |           |         |         |         |         |         |         |         |
| Returns over variable costs     | (dollars pe | er acre):  |             |           |         |         |         |         |         |         |         |
| Net returns 1/                  | 71.64       | 54.37      | 54.56       | 59.40     | 64.28   | 69.18   | 71.85   | 76.77   | 77.24   | 79.99   | 82.75   |
| 1/ Net returns include estimate | ates of man | rketing lo | an benefi   | ts.       |         |         |         |         |         |         |         |

Source: http://www.ers.usda.gov/publications/oce051/oce20051c.pdf

# Strategic Marketing Plan Worksheet 6 (Continued) Market Outlook & Expectations – Grain Sorghum Source: http://www.ers.usda.gov/Briefing/Corn/2005baseline.htm

#### USDA feed grains baseline, 2005-14

The gross domestic product is expected to grow in the United States and around the world, raising incomes and boosting demand for meat. A growing livestock industry will need increasing supplies of feed grains. A ban on methyl tertiary butyl ether (MTBE) in some States is boosting the use of ethanol in gasoline to comply with the Clean Air Act's requirement for oxygenates in the fuel. The majority of ethanol is made from grains, creating an increasing use for feed grains. Estimated net returns per acre are expected to be more favorable for corn than for other feed grains. As a result, acres planted to corn, the primary feed grain in the United States, are forecast to increase slightly. In contrast, plantings of oats may remain unchanged, but sorghum and barley acres may decline. The effect of these changes, as well as other factors, on the U.S. feed grains sector are evaluated in preparation of the Department's 10-year baseline projection.

Each year, USDA updates its 10-year projection of supply and utilization of major field crops grown in the United States, including feed grains. The commodity projections are used to forecast farm program costs and to prepare the President's budget. One key use of the projections is as a "baseline" from which to analyze the impacts of potential policy changes affecting U.S. agriculture. This discussion briefly summarizes the analysis underlying the feed grain projections for 2005-14.

The U.S. feed grain sector is expected to face a period of firm growth during the entire baseline period as growing economies throughout the world encourage consumption of livestock products. Ethanol for fuel will also boost corn use and, to some extent, sorghum use. Corn will continue as the feed grain of choice, because of rising yields, especially in the United States. Sorghum, barley, and oats will continue as specialty crops.

Increased global demand for meat is expected to boost world consumption of feed grains. However, production constraints, especially limited area, will keep many traditional grain-importing countries from expanding production as rapidly as use, boosting global coarse grain trade. Most of the growth is in corn trade, and the U.S. share of corn trade is expected to increase. Global barley trade is also expected to expand, but remain small. Sorghum trade is expected to decline due to reduced imports by Mexico, but later regain initial trade levels.

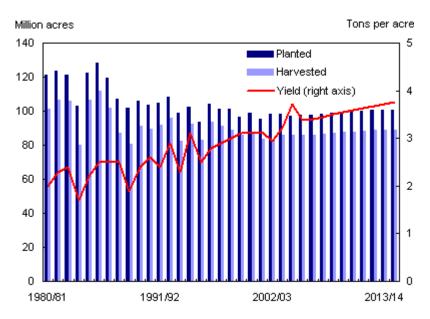
#### **Supply**

Supply reflects changes in land used for planting and gains in yields of the crops.

The number of acres planted to corn is expected to total 81 million in 2005 and increase to 84 million by the end of the baseline. Corn plantings are influenced by expected net returns for corn relative to competing crops. Net returns are determined by yields, production costs, and prices.

However, the number of acres available for crop plantings is limited. If more water were available for irrigation, additional land could be brought into production but that is not foreseen. As a result, feed grains compete for acres with other crops.

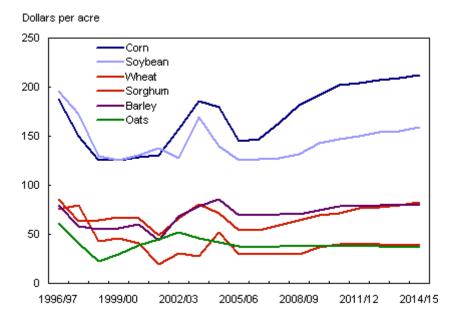
#### U.S. feed grain area and yield



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Among the feed grains, corn has the highest return above variable costs. Soybeans are the major competitor with corn and had returns above corn from 1996/97 through 2001/02. Net returns for soybeans are expected to be below net returns for corn throughout the baseline period, due to lower relative prices caused by increased South American production.

#### Net returns for various crops

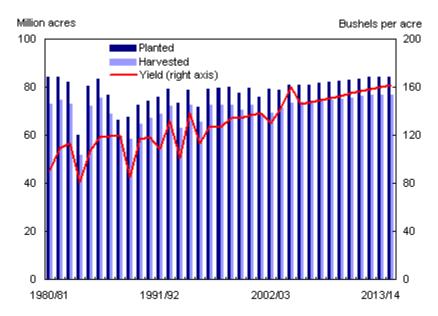


Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

There are benefits to growing crops that may not be reflected in a single year's cost and returns analysis and; thus, expected net returns do not explain all planting decisions. Maintaining rotations is an important objective for most farmers. This provides numerous agronomic benefits and may outweigh decisions based only on price signals. Soybeans and corn work well in rotation because many of the insects that attack one crop do not bother the other crop. Many corn farmers alternate annually between corn and soybeans. Corn is heavily fertilized for large yields and carryover fertilizer benefits soybeans in the following year. Likewise, soybeans roots can host bacteria that convert nitrogen from the air into a form usable by plants if the seed is inoculated prior to planting (a dust containing the nitrogen-fixing bacteria is added to the seed after cleaning). Carryover nitrogen from this process benefits the following corn crop. Before genetically modified, herbicide-tolerant soybeans became available, corn in the rotation was preferable for greater weed control. Now that soybeans can be sprayed to control the weed foxtail, corn may also benefit.

For the baseline analysis, yields for corn were determined by calculating the trend growth in yields since 1960 (1988 drought year was omitted). As a result of these calculations, corn yields are projected up 1.8 bushels per year over the baseline period. Increases in corn yields have been driven by continued improvements in plant genetics and equipment allowing faster earlier planting and harvesting, along with other advances such as better targeting of fertilizer needs.

#### U.S. corn area and yield



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

A similar analysis with 1988 included was performed for barley and oats, but their growth is considerably slower than corn. Barley yields are projected up by 0.6 bushels per year, while oats yields are up 0.4 bushels per year. Sorghum yields, based on a 10-year average, are expected to increase by 0.4 or 0.5 bushels per year.

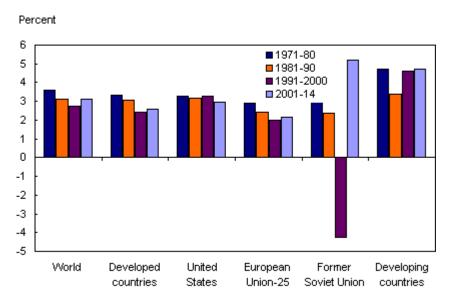
#### **Demand**

Demand for feed grains is derived from the demand for livestock feed, which is derived from the demand for meat, milk, and eggs.

The baseline assumes that growth in U.S. gross domestic product (GDP) moderates in the near term from the rapid growth in 2004 as the economy moves toward a long-run annual growth rate near 3 percent. Ongoing U.S. technological advances associated with computing and telecommunications will provide support for worldwide economic growth throughout the projection period.

World economic growth is projected to strengthen from the slow growth of 2001-03, averaging over 3 percent through 2014. Most countries of the world move close to long-run sustainable economic growth rates. Relatively high oil prices in 2004 and beyond will constrain Asia and its manufacturing sector, which is far more dependent on energy for GDP growth than more developed economies.

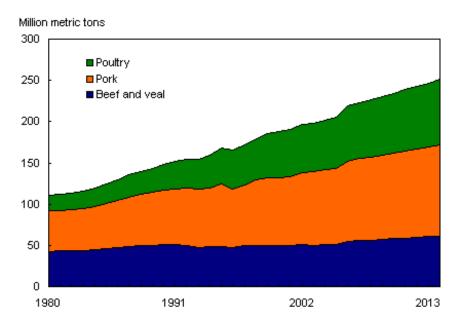
### World gross domestic product (GDP) growth rates, decade averages



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

As economies expand, consumers shift to more meat in their diets and this requires more feed grains for meat production. Diets in the United States already have adequate quantities of meat, but an expanding economy will keep meat consumption brisk. Internationally, expanding economies are likely to change diets, especially in developing economies. As a result, the baseline analysis expands world trade in feed grains and increases exports from the United States.

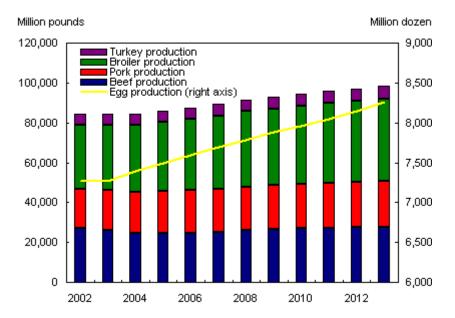
#### Estimated global meat production



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Production of U.S. livestock products is expected to increase during the baseline period. U.S. beef production was down in 2004 because of reduced cattle numbers in prior years and small calf crops. In addition, with normal weather, heifers are likely to be held back to rebuild the herds. The combination of a small calf crop and larger numbers of replacement heifers will slow beef production increases in 2006. Beginning in 2007, beef production will continue increasing through the end of the baseline period. As increased numbers of cattle go on feed, more feed grains will be needed.

#### Domestic livestock and poultry production



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Pork production in 2005 is expected to be up 1 percent from 2004, and then continue increasing through 2014. The greatest gains are forecast for 2006 at 1.8 percent per year and 2008 at 1.5 percent. Production may slow during the remainder of the baseline period, but still rise nearly 1 percent per year. The increase in hog numbers will necessitate more feed grains, primarily corn.

Broiler production is projected to increase throughout the baseline period. With beef production down in 2004, broiler production was up 4.2 percent. But growth will slow to about 3 percent per year during the baseline. Thus, feed needs for the broiler industry are expected to grow over the period.

Feed needs for turkey and egg producers are also expected to increase during the baseline period. Projected turkey production is expected to be up about 2 percent annually during 2005-14. Egg production is projected to increase about 1 percent per year during the period.

Milk production is projected to increase slowly, around 2 percent annually through 2007/08, and then decline to near 1 percent growth in the out years. Dairy cow numbers are expected to continue their long-term decline throughout the baseline period. Production gains are the result of increased production per cow. As a result, feed needs are likely to increase.

Corn used for producing fuel alcohol has grown sharply since the early 1980s. As a result, fuel alcohol has become the largest component within the food, seed, and industrial (FSI) use category. The volume of total FSI has overtaken even corn exports in recent years. Corn's use in fuel alcohol production depends on the interaction of government incentives and policies, technology development, corn prices, prices of coproducts from ethanol production, and prices of energy substitutes.

Ethanol production expanded very rapidly until marketing year 1995/96 (September-August), when there was a major contraction due to tight corn supplies and record high corn prices. Since then, ethanol output has rebounded, especially since methyl tertiary butyl ether (MTBE), a competing oxygenate produced from methyl alcohol, was banned in many States and policies have encouraged ethanol use.

Policies are very important for the expansion of ethanol production. A federal tax credit for ethanol blending, currently 51 cents per gallon, is assumed to continue. However, the biggest factor underlying the recent expansion has been the adoption of ethanol by California, the Nation's largest gasoline market, after it prohibited the use of MTBE. The need to ramp up production to meet mandated use has boosted production, especially since New York and Connecticut have also banned MTBE. Ethanol is the principal replacement oxygenate where reformulated gasoline is used, requiring 2-percent oxygen by weight.

Policy-influenced market conditions are also critical determinants of ethanol production. More than half of all fuel ethanol is blended into conventional gasoline as a fuel or octane enhancer. Prices of ethanol relative to gasoline prices are a key component for determining how much ethanol is blended. The remaining ethanol is used for blending into reformulated gasoline, which will be important in California, New York, and Connecticut. It is also used in oxygenated gasoline for the winter carbon monoxide program. (The program requires the use of oxygenated gasoline for designated winter months. The intent of the oxygenate is to offset the increased carbon dioxide levels emitted from gasoline engines due to hard starting and lengthy warm-up periods in cold weather).

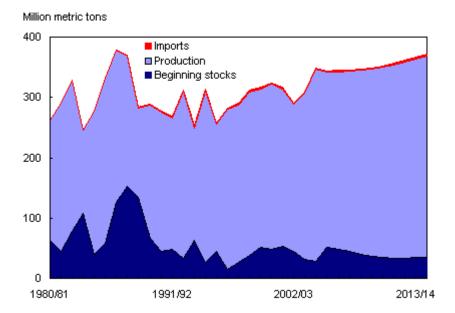
While use of oxygenates largely results from mandated clean air requirements, fuel producers can choose among competing oxygenates based on their relative prices. Some States offer incentives that also influence demand for ethanol. For instance, Illinois has a sales tax exemption for ethanol, while Minnesota has mandated a year-round minimum oxygen content requirement for all gasoline sold.

#### Baseline projections for U.S. feed grains supply and use

U.S. feed grain supplies and use are expected to increase over the baseline period, after a drop in 2005/06 from 2004/05 (because the trend yields used in the analysis are lower than the actual yields for 2004).

Feed grain production increases throughout the projection period, as yield growth accounts for most of the expanded output. Corn is expected to gain in share of total feed grain production and use. Corn area is projected to experience moderate growth over the baseline period and oats may remain unchanged. Sorghum and barley plantings are expected to decline slowly. Net returns for all four feed grains decline sharply the first year of the baseline because the trend yields used in the analysis are lower than the actual yields for 2004. Net returns for oats are nearly constant during the projection period, while net returns for corn, sorghum, and barley increase.

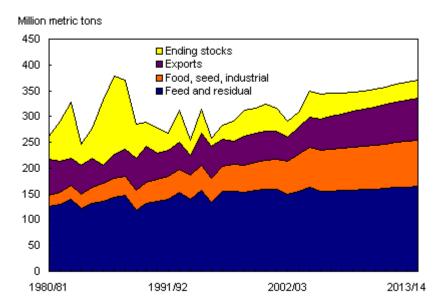
#### U.S. feed grain supply



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

After the first year of the baseline period, total feed grain use is projected to set new records. By 2014, exports are expected to grow about 45 percent from the 58 million metric tons in 2004/05, a robust growth rate relative to the past two decades. By 2009, exports are projected to surpass the old record set in 1979. Improved growth in global imports is expected, and U.S. feed grain exports are expected to encounter only moderately higher competition throughout the projection period.

#### U.S. feed grain utilization



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

U.S. ending stocks of feed grains are projected to decline slowly until 2011/12 then increase and remain between 34 and 35 million metric tons. These ending stocks are slightly below the average ending stocks in the 1990s of 41 million metric tons. Productivity is projected to account for most of production growth, with the remainder coming from increased plantings.

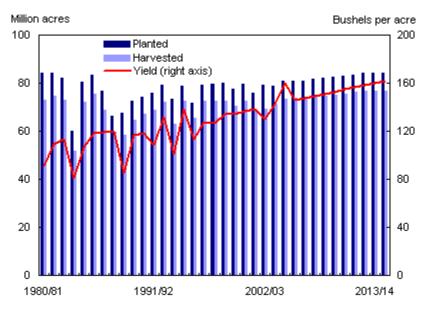
Corn area is expected to grow and yields increase, resulting in new record corn production. Use will likely also set records as livestock herds grow, raising feed needs, and industrial uses for corn expand. China becomes a net importer in 2007/08, contributing to projected exports of U.S. corn increasing throughout the baseline.

Corn prices in 2005/06 are expected to be higher than in 2004/05, reflecting supply growing less than total use. At the onset of the baseline, domestic corn use is strong, and continues expanding throughout the period. U.S. corn exports are also expected to grow. The U.S. share of global corn trade is expected to increase, mostly because of reduced exports and increased imports by China. Global corn trade is expected to grow, given rising global meat demand.

Planted area for corn is projected to remain relatively large and grow slowly over the baseline period, as use strengthens and prices improve. Corn competes mostly with soybeans for land and is used extensively in rotations with soybeans. Corn area grows relative to soybean area, as relative net returns are expected to favor corn throughout most of the baseline.

Gains in corn yields are expected to continue over the entire baseline period, facilitated by genetic improvements. Corn production is projected to increase, setting new records.

#### U.S. corn area and yield



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Feed and residual use is expected to decline in 2005/06, the initial year, but grow throughout the remainder of the projection period. Increasing U.S. meat production and associated livestock (measured by grain-consuming animal units) account for the rising use of grain.

Despite its growth, direct feed use of corn is not as strong as it would be without coproducts from ethanol production. Ethanol wet mills produce corn gluten feed, corn gluten meal, and corn oil as coproducts, while dry mills produce distiller's dried grains (DDG). The baseline assumes that each 56-pound bushel of corn that goes into dry-mill ethanol production results in 17.5 pounds of DDG as a coproduct. The protein content of DDG for beef cattle is about 23 percent, compared to 48 percent for soybean meal and about 10 percent for corn. The energy content of DDG falls between that of corn and soybean meal. Thus, the baseline assumes that the DDG coproduct of dry-mill ethanol production substitutes for about a 50-50 split of corn and soybean meal in feed rations, or about 8.75 pounds each of corn and soybean meal for each bushel of corn used for ethanol production.

Food, seed, and industrial (FSI) use of corn is anticipated to increase throughout the baseline period, beginning at a record level. Major growth is expected in ethanol use because many States are banning MTBE and ethanol is its principal replacement. Greater corn use is projected in the baseline as the ethanol industry expands production. Gains for high fructose corn syrup (HFCS) and most other food and industrial components are projected to be smaller than in the previous decade. Food and starch, other segments of FSI use, are mature markets and projected gains largely reflect population growth.

Projected exports demonstrate growth compared with the 1980s and 1990s, but remain below the record established in 1979/80 until the middle of the forecast period. World corn imports grow because of increased meat production.

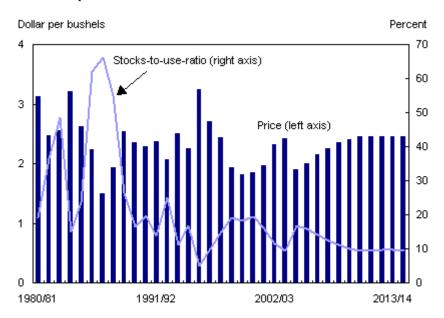
#### U.S. corn utilization

Billion bushels 16 ■ Ending stocks ■ Exports 14 ■ Ethanol ■ FSI less ethanol 12 ■ Feed and residual 10 8 6 4 2 0 1980/81 1991/92 2002/03 2013/14

Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

Ending stocks of corn are expected to decline to around 1.1 billion bushels toward the later part of the baseline period, but then increase. Prices strengthen from lows in the early 2000s to \$2.45 per bushel toward the end of the projection period, as the stocks-to-use ratio declines slightly.

#### U.S. corn price and stocks-to-use ratio



Source: *USDA Agricultural Baseline Projections to 2014,* February 2005. Economic Research Service, USDA.

Growth in sorghum production is expected to equal use, resulting in nearly constant ending stocks. Acres planted are expected to decline only slightly, but yields increase. Feed and residual use will vary depending upon supply, but food, seed, and industrial use (primarily ethanol production) will increase.

Sorghum production is projected to grow to 450 million bushels by 2014. This reflects a slight decline in plantings but trend yield growth of 0.4 to 0.5 bushels per year. Despite the projected yield growth during the baseline period, yields are not expected to exceed 1994's record of 72.7 bushels per acre.

Sorghum exports decline during the baseline, especially in 2006-08 when reduced tariffs on corn trade with Mexico lead to higher U.S. corn exports and lower sorghum shipments. With reduced U.S. sorghum exports, increased feed and residual use is projected. Food, seed, and industrial use rises slowly in the baseline, remaining record high due to growth in ethanol production.

Rising yields are expected to modestly increase barley production, reaching 255 million bushels by 2014. Planted acreage declines slightly over the period, as barley's net returns cannot compete for more area. Yield per acre is expected to increase 0.6 bushels over the period, in line with trend increases.

Food, seed, and industrial use was held steady over the baseline, mainly because beer production in the United States is expected to level off. Barley feed and residual use increases slightly during the baseline period in line with production. Barley exports are projected to be 15 million bushels per year, as shipments of feed barley to the Middle East continue. Imports are expected to remain unchanged at 25 million bushels, because of malting barley imports from Canada. The average barley price is projected to rise through the baseline, reaching \$2.65 per bushel by the end of the period.

Supplies grow modestly as increased yields and oat imports, principally from Canada, supplement domestic oats production. Food, seed, and industrial use is expected to remain unchanged, with some rise in feed and residual use, keeping ending stocks relatively constant.

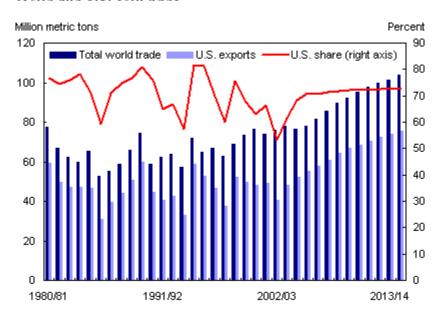
The declining long-term trend in oat acreage is projected to stabilize. With oat plantings expected to remain constant during the baseline period, slow growth in yields results in a 5 million bushel increase in production by the end of the period. The crop will remain important in some rotations and as a cover crop. There is also some modest growth in imports. Supplies drop in the beginning year of the baseline because plantings and yields decline. Supplies grow in subsequent years of the baseline, but do not reach the levels of 2004/05. Total use starts at 186 million bushels, increasing to 196 million due to higher feed use. Imports rise from 85 million bushels to 95 million, or 36-37 percent of supply, making up the difference between production and use. Feed and residual use ranges from 110 million bushels to 120 million. Oat prices increase over the baseline period, and imports supplement domestic supplies.

#### Baseline projections for world feed grains trade

The USDA baseline also provides projections for global trends in feed grain supply, use, and trade.

Increased global demand for meat is expected to boost world consumption of feed grains. However, production constraints, especially limited area, will keep many traditional importing countries from expanding production as rapidly as use, boosting global trade from 102 million metric tons in 2005/06 to 131 million in 2014/15. Most of the growth is in corn trade, up from 78 million metric tons in 2005/06 to 104 in 2014/15. The U.S. share of corn trade is expected to increase from 70.9 percent during 2005/06 to 72.7 percent by the end of the projection period.

#### World and U.S. corn trade



Source: USDA Agricultural Baseline Projections to 2014, February 2005. Economic Research Service, USDA.

As recently as 2002/03, China was the second largest corn exporter. China, however, is expected to limit exports and gradually increase imports of corn, becoming a net importer by 2007/08. Corn area expansion in Argentina is expected to be limited by profitable returns for soybeans. Area expansion is also expected to be limited in other exporting countries such as South Africa and Thailand. As Eastern European countries like Hungary join the European Union (EU), less corn is exported outside of Europe. However, Brazil is expected to remain a significant net exporter of corn because of attractive world prices and niche marketing.

China is key to the future of global corn trade. In recent years, China has maintained corn exports, while reducing stocks when production fell below domestic use. Chinese stocks are now thought to be reduced to levels that will limit future stock declines because they would likely boost internal prices. Meat demand in China is expected to rise because of strong income growth. Rapid gains in meat production are expected to increase corn feed use. While corn yield growth is projected to rise less than 1 percent per year, area increases will be limited by higher returns

from other land uses. So by 2007, China becomes a net importer of corn. Nonetheless, northeast China is expected to remain a surplus corn producing region and, because it is so close to South Korea—one of the world's largest corn importers—China is expected to continue exporting corn. However, southern China is further away, and is expected to be an increasingly corn deficit region, boosting imports during the baseline period.

Growth in global corn imports over the baseline period is not limited to China. Most corn importing countries are expected to increase imports as meat production rises because of factors that limit the growth in corn production. The largest increase in corn imports is expected for Mexico, where a switch from sorghum to corn is expected on top of strong growth in meat production. Imports by the rest of Latin America are expected to grow only modestly, at about the pace of population growth. With stronger economic growth, Egypt is expected to lead the growth in corn imports by North Africa and the Middle East. With limited barley area, and increasing barley exports, Canada is expected to increase corn imports to support meat production increases. Russia and other former Soviet Union countries increase corn imports faster than Ukraine increases exports, making the region a growing net importer of corn. However, some markets, like Japan, are expected to reduce imports due to slow growth in meat consumption combined with higher meat imports.

Global barley is expected to expand slowly, from 15 million metric tons in 2005/06 to over 17 million by the end of the baseline. Demand for feed barley is expected to grow in North Africa and the Middle East, where production increases are limited by the climate, but imports by Saudi Arabia are expected to be nearly flat. Imports of barley by Saudi Arabia depend on rainfall and grazing for sheep and camels. China leads import growth in barley for malting. EU stocks are expected to limit the pressure to subsidize EU barley exports, so EU barley exports are expected to remain near 3 million metric tons throughout the baseline. Barley exports by Australia, Canada, and Ukraine are expected to increase. U.S. barley trade is expected to remain small.

Sorghum trade is expected to decline from nearly 7 million metric tons in 2005/06 to less than 6 million in 2008/09 because of reduced imports by Mexico, but then show some recovery by the end of the baseline. Mexico's current system of variable rate quotas for corn with "cupos" for over quota imports tends to discourage corn imports and boost sorghum imports that do not have quotas. However, under the North American Free Trade Agreement, Mexican corn tariffs are phased down and disappear by 2008. As corn tariffs are reduced and then eliminated, Mexican feed compounders are expected to shift to corn, away from sorghum. Japan is also expected to reduce sorghum imports slightly as feed grain imports decline.

Other coarse grain trade is expected to grow very slowly over the baseline period, with a small increase in oats trade nearly offset by reduced rye trade. EU policy is expected to maintain oat production and exports, but a drop in EU rye production (due to reforms of the EU's Common Agricultural Policy that ended rye intervention prices) and exports is expected. Canada will remain the main supplier of imported oats to the U.S. market.

Yields per acre for U.S. feed grains will continue to increase, and corn yields will grow at the fastest rate. Rising corn yields help boost net returns, keeping planted area up. Slower yield growth for barley and other feed grains makes them less attractive to producers, leading to a

slight decline or no change in acres planted over the period. Corn production is projected up 16 percent over the 2005-14 period, sorghum is up 3 percent, barley up 6 percent, and oats are up 5 percent.

Strong use both domestically and worldwide keeps feed grain prices above U.S. loan rates during most of the baseline, reducing government farm program costs. Use of corn for corn sweeteners is expected to grow at the rate of population increase. Use of corn to produce ethanol for fuel will continue to climb. Feed and residual use will also expand over the period as livestock and poultry production continues to increase.

Increased global demand for meat is expected to boost world consumption of feed grains. Global trade in feed grains is expected to rise because many traditional importing countries will not be able to increase production as much as the gains in consumption. Most of the growth in trade is in corn and the U.S. share of the market is expected to increase.

USDA-ERS Projected U.S. Grain Sorghum Supply and Demand (March 14, 2005)

| 1                                       |           |           |            |           |         |         |         |         |         |         |         |         |
|---|-----------|-----------|------------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| U.S. sorghum baseline                   |           |           |            |           |         |         |         |         |         |         |         |         |
| Item                                    | 2003/04   | 2004/05   | 2005/06    | 2006/07   | 2007/08 | 2008/09 | 2009/10 | 2010/11 | 2011/12 | 2012/13 | 2013/14 | 2014/15 |
| Area (million acres):                   |           |           |            |           |         |         |         |         |         |         |         |         |
| Planted acres                           | 9.4       | 7.5       | 8.4        | 8.4       | 8.4     | 8.4     | 8.3     | 8.3     | 8.3     | 8.2     | 8.2     | 8.2     |
| Harvested acres                         | 7.8       | 6.6       | 7.0        | 7.0       | 7.0     | 7.0     | 6.9     | 6.9     | 6.9     | 6.8     | 6.8     | 6.8     |
| Yields (bushels per acre                | :):       |           |            |           |         |         |         |         |         |         |         |         |
| Yield/harvested acre                    | 52.7      | 71.9      | 62.5       | 63.0      | 63.4    | 63.9    | 64.3    | 64.8    | 65.2    | 65.7    | 66.1    | 66.6    |
| Supply and use (million bushels):       |           |           |            |           |         |         |         |         |         |         |         |         |
| Beginning stocks                        | 43        | 34        | 60         | 60        | 58      | 58      | 58      | 58      | 56      | 61      | 59      | 59      |
| Production                              | 411       | 472       | 440        | 440       | 445     | 445     | 445     | 445     | 450     | 445     | 450     | 455     |
| Imports                                 | 0         | 0         | 0          | 0         | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| Supply                                  | 454       | 505       | 500        | 500       | 503     | 503     | 503     | 503     | 506     | 506     | 509     | 514     |
| Use (million bushels):                  |           |           |            |           |         |         |         |         |         |         |         |         |
| Feed & residual                         | 200       | 195       | 165        | 175       | 190     | 200     | 190     | 185     | 180     | 175     | 170     | 165     |
| Food, seed, & industrial                | 20        | 50        | 50         | 52        | 55      | 60      | 60      | 62      | 65      | 67      | 70      | 72      |
| Domestic                                | 220       | 245       | 215        | 227       | 245     | 260     | 250     | 247     | 245     | 242     | 240     | 237     |
| Exports                                 | 201       | 200       | 225        | 215       | 200     | 185     | 195     | 200     | 200     | 205     | 210     | 215     |
| Total use                               | 421       | 445       | 440        | 442       | 445     | 445     | 445     | 447     | 445     | 447     | 450     | 452     |
| Ending stocks                           | 34        | 60        | 60         | 58        | 58      | 58      | 58      | 56      | 61      | 59      | 59      | 62      |
| Stocks/use ratio, percent               | 8.1       | 13.5      | 13.6       | 13.1      | 13.0    | 13.0    | 13.0    | 12.5    | 13.7    | 13.2    | 13.1    | 13.7    |
| Prices (dollars per bush                | uel):     |           |            |           |         |         |         |         |         |         |         |         |
| Farm price                              | 2.39      | 1.75      | 1.85       | 2.00      | 2.10    | 2.20    | 2.25    | 2.30    | 2.30    | 2.30    | 2.30    | 2.30    |
| Loan rate                               | 1.98      | 1.95      | 1.95       | 1.95      | 1.95    | 1.95    | 1.95    | 1.95    | 1.95    | 1.95    | 1.95    | 1.95    |
| Variable costs of production (dollars): |           |           |            |           |         |         |         |         |         |         |         |         |
| Per acre                                | 97.94     | 102.83    | 105.26     | 106.08    | 106.58  | 107.38  | 108.33  | 109.46  | 110.61  | 111.78  | 112.96  | 114.17  |
| Per bushel                              | 1.86      | 1.43      | 1.68       | 1.68      | 1.68    | 1.68    | 1.68    | 1.69    | 1.70    | 1.70    | 1.71    | 1.71    |
| Returns over variable co                | sts (doll | ars per a | cre):      |           |         |         |         |         |         |         |         |         |
| Net returns 1/                          | 28.01     | 51.76     | 29.11      | 29.37     | 29.73   | 33.20   | 36.35   | 39.58   | 39.35   | 39.33   | 39.07   | 39.01   |
| 1/ Net returns include e                | stimates  | of market | ing loan 1 | penefits. |         |         |         |         |         |         |         |         |

#### Strategic Marketing Plan Worksheet 7 Seasonal Price Trends

Complete the following regarding the commodities you produce.

| Commodity Name                   | Stock | er Cattle |
|----------------------------------|-------|-----------|
| Is there a seasonal price trend? | Yes   | No        |
| If "Yes", discuss:               |       |           |

There appears to be a seasonal price trend in Texas for all types of cattle. Specifically, the price of all types of cattle appears to be higher in the Late Winter/Early Spring months (February, March, April) and lower in the Fall months (September, October, and November). The one exception is found in Fed Steer prices in Texas. The lowest prices are generally found in the Summer months (June, July, August, and September).

FIGURE 1. SEASONAL PRICE INDEXES -- TEXAS
By Cattle Class, 1991-2000

Index

1.10

Cull Cows
4-500 Steer
Calves
5-800 Steer
Calves
T-800
Feeder
Steers
Fed Steers
Fed Steers

| Toyog | Cattla       | Drigo | Cancanal | Indiana | 1001 200 | 0 Average    |
|-------|--------------|-------|----------|---------|----------|--------------|
| Texas | <b>C</b> ame | Price | Seasonal | mances  | 1991-711 | iii a veraoe |

|                   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   | OCT   | NOV   | DEC   |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 4-5 CWT<br>STEERS | 1.008 | 1.044 | 1.059 | 1.060 | 0.995 | 1.000 | 1.006 | 0.995 | 0.961 | 0.946 | 0.953 | 0.973 |
| 5-6 CWT<br>STEERS | 0.994 | 1.036 | 1.061 | 1.058 | 1.019 | 1.016 | 1.013 | 0.998 | 0.960 | 0.942 | 0.946 | 0.956 |
| 7-8 CWT<br>STEERS | 1.009 | 1.018 | 1.019 | 1.015 | 0.986 | 1.001 | 1.025 | 1.012 | 0.986 | 0.976 | 0.971 | 0.982 |
| UTILITY<br>COWS   | 0.998 | 1.054 | 1.060 | 1.045 | 1.009 | 1.042 | 1.021 | 1.022 | 0.971 | 0.922 | 0.912 | 0.945 |

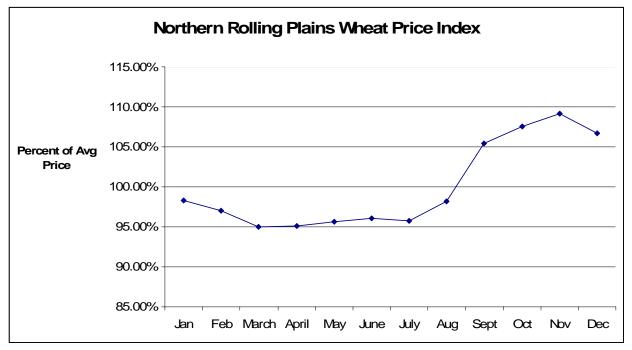
Source: <a href="http://ag.arizona.edu/arec/wemc/cattlemarket/cattlepriceseasonality2002.pdf">http://ag.arizona.edu/arec/wemc/cattlemarket/cattlepriceseasonality2002.pdf</a>

#### Strategic Marketing Plan Worksheet 7 (Continued) Seasonal Price Trends

Complete the following regarding the commodities you produce.

| Commodity Name                   | Wheat  |  |  |  |  |
|----------------------------------|--------|--|--|--|--|
| Is there a seasonal price trend? | Yes No |  |  |  |  |
| If "Yes", discuss:               |        |  |  |  |  |

After bottoming out in July, wheat prices tend to slowly increase until about November. After November, wheat prices tend to decrease.

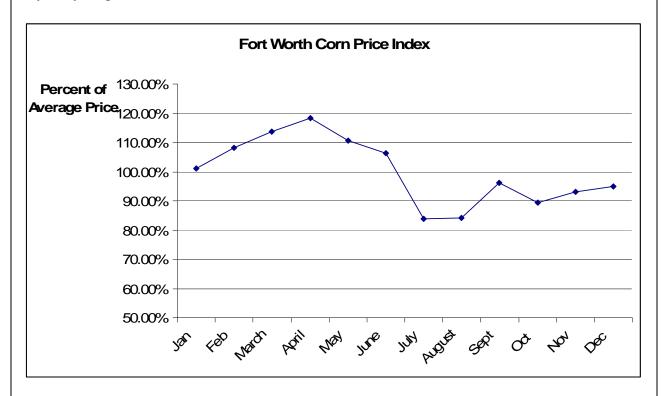


#### Strategic Marketing Plan Worksheet 7 (Continued) Seasonal Price Trends

Complete the following regarding the commodities you produce.

| Commodity Name                   | Grain Sorghum |  |  |  |
|----------------------------------|---------------|--|--|--|
| Is there a seasonal price trend? | Yes No        |  |  |  |
| If "Yes", discuss:               |               |  |  |  |

The corn market (used as a substitute for grain sorghum) appears to gradually increase from late August until January. From January through April (where it reaches its maximum), corn prices increase at a faster rate. After April, the market price decreases reaching a bottom in late July/early August.



Source of data: <a href="http://agecoext.tamu.edu/resources/basis/online/">http://agecoext.tamu.edu/resources/basis/online/</a>

### **Strategic Marketing Plan Worksheet 9 Available Price Risk Tools - Livestock**

Complete the following table regarding the commodities you currently produce.

| Commodity      | Pricing Alternatives                  | Check all alternatives available for this commodity & you are comfortable with using | Explain<br>Those<br>Without<br>Checks. |
|----------------|---------------------------------------|--|--|
|                | Cash Market (Auction Barn)            | V  |  |
|                | Private Treaty                        | √  |  |
|                | Telephone, Video, & Satellite Auction | √  |  |
|                | Forward Contract                      | V  |  |
|                | Retained Ownership                    | √  |  |
|                | Basis Contract                        |  | Don't<br>Understand                    |
|                | Minimum Price Contract                | √  |  |
| Stocker Cattle | Grid Pricing                          | √  |  |
|                | Hedging in Futures Markets            |  | Don't<br>Understand                    |
|                | Options Markets                       |  | Don't<br>Understand                    |
|                | Farm Program                          | V  |  |
|                | Cooperatives/Groups                   | V  |  |
|                | Other (Please list):                  |  |  |
|                |                                       |  |  |
|                |                                       |  |  |

### Strategic Marketing Plan Worksheet 8 Available Price Risk Tools - Crops

Complete the following table regarding the commodities you currently produce.

| Commodity | Pricing Alternatives       | Check all alternatives available for this commodity & you are comfortable with using | Explain Those<br>Without<br>Checks.   |
|-----------|----------------------------|--|---------------------------------------|
|           | Cash Market at Harvest     | √  |                                       |
|           | Speculative Storage        |  | I do not have the storage facilities. |
|           | Forward Contract           | V  |                                       |
|           | Hedge to Arrive Contract   |  | Don't<br>Understand                   |
|           | Basis Contract             |  | Don't<br>Understand                   |
|           | Minimum Price Contract     | V  |                                       |
| Wheat     | Hedging in Futures Markets |  | Don't<br>Understand.                  |
|           | Options Markets            |  | Don't<br>Understand.                  |
|           | Farm Program               | V  |                                       |
|           | Cooperatives/Groups        | V  |                                       |
|           | Other (Please list):       |  |                                       |
|           |                            |  |                                       |
|           |                            |  |                                       |

### Strategic Marketing Plan Worksheet 8 (Continued) Available Price Risk Tools - Crops

Complete the following table regarding the commodities you currently produce.

| Commodity     | Pricing Alternatives       | Check all alternatives available for this commodity & you are comfortable with using | Explain Those<br>Without<br>Checks.   |
|---------------|----------------------------|--|---------------------------------------|
|               | Cash Market at Harvest     | √  |                                       |
|               | Speculative Storage        |  | I do not have the storage facilities. |
|               | Forward Contract           | V  |                                       |
|               | Hedge to Arrive Contract   |  | Not enough production.                |
|               | Basis Contract             |  | Not done in the area for this crop.   |
|               | Minimum Price Contract     |  | Not done in the area for this crop.   |
| Grain Sorghum | Hedging in Futures Markets |  | Don't<br>Understand.                  |
|               | Options Markets            |  | Don't<br>Understand.                  |
|               | Farm Program               | V  |                                       |
|               | Cooperatives/Groups        |  | Do not belong.                        |
|               | Other (Please list):       |  |                                       |
|               |                            |  |                                       |
|               |                            |  |                                       |

# **Strategic Marketing Plan Worksheet 10 Projected Marketing Schedule**

|                   | Month/Strategy                 |                                |                                |                                |               |     |     |     |      |               |     |     |
|-------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------|-----|-----|-----|------|---------------|-----|-----|
| Commodity         | Jan                            | Feb                            | Mar                            | Apr                            | May           | Jun | Jul | Aug | Sept | Oct           | Nov | Dec |
|                   |                                |                                |                                |                                |               |     |     |     |      |               |     |     |
| Stocker<br>Cattle | Lock in price for 40% of Prod. | Lock in price for 50% of Prod. |                                |                                | Cash<br>Sales |     |     |     |      |               |     |     |
| Wheat             |                                |                                | Lock in price for 10% of Prod. | Lock in price for 40% of Prod. | Cash<br>Sales |     |     |     |      |               |     |     |
| Grain<br>Sorghum  |                                |                                |                                |                                |               |     |     |     |      | Cash<br>Sales |     |     |
|                   |                                | T                              |                                |                                |               | ı   |     | T   | T    |               | T   |     |
|                   |                                |                                |                                |                                |               |     |     |     |      |               |     |     |
|                   |                                |                                |                                |                                |               |     |     |     |      |               |     |     |
|                   |                                |                                |                                |                                |               |     |     |     |      |               |     |     |
|                   |                                |                                |                                |                                |               |     |     |     |      |               |     |     |
|                   |                                |                                |                                |                                |               |     |     |     |      |               |     |     |

# **Strategic Marketing Plan Worksheet 11 Evaluating the Plan**

Evaluate the marketing actions taken during the last year.

| Evaluate the marketing actions taken during the last year. |   |                             |   |  |  |  |
|--|---|-----------------------------|---|--|--|--|
| Commodity  | Action Taken<br>Last Year               | Success/Failure of the Plan | Explanation   |  |  |  |
|  |   |                             |   |  |  |  |
| Stocker Cattle   | Sold cash cattle<br>in May 2004         | Success                     | I lucked out. Cattle prices began rising in mid-April 2004. The cash market ended up settling at \$105/cwt in May. However, I was unprotected for the entire year. If the market had gone the other way, I would have not realized such a return.   |  |  |  |
|  |   |                             |   |  |  |  |
| Wheat  | Sold cash<br>wheat in May<br>2004       | Mildly<br>Successful        | Cash wheat sold for \$3.19/bu. It had reached a high of \$3.84 and a low of \$3.03. After May 2004, the wheat price continued to slide downward. Therefore, I could have taken advantage of higher prices with some price risk management tools, however I did not sell at the bottom. Furthermore, storage would not have helped me this year. |  |  |  |
|  |   |                             |   |  |  |  |
| Grain Sorghum  | Sold cash<br>sorghum in<br>October 2004 | Success &<br>Failure        | Grain sorghum is used to just generate cash flow. It is not a primary crop, and doesn't utilize many acres. Because of this, our options are limited.   |  |  |  |

### **Tactical Marketing Plan Worksheet 1 Decision Making Information**

Complete the following table regarding the commodities you currently produce under current market conditions.

| Commodity   |    | Stocker Cattle   |
|---|----|--|
| Expected Yearly Production (Raised Stocker Cattle) (Purchased Stocker Cattle)   |    | 2,921.40 cwt (2,171.40 cwt) (750.00 cwt)   |
| Variable Cost of Production per Unit  (Raised Stocker Cattle)  (Purchased Stocker Cattle)  Total Cost of Production (Break-Even)  (Raised Stocker Cattle)  (Purchased Stocker Cattle) |    | \$88.25/cwt<br>(\$82.39/cwt)<br>(\$105.25/cwt)<br>\$93.77/cwt<br>(\$87.75/cwt)<br>(\$111.20/cwt) |
| Are Futures/Option Contracts an Alternative?  | No | Yes  |
| If "Yes", what is the current futures price?  |    | N/A  |
| If "Yes", what is an at-the-money- put cost?  | •  | N/A  |
| What is the expected local basis at harvest (sale)?   | •  | N/A  |
| Will selling futures (buying a put) cover variable costs?   | No | Yes  |
| Will selling futures (buying a put) ensure at least break-even?   | No | Yes  |
| Are forward contracts available for this commodity?   | No | Yes  |
| If "Yes" what is the forward contract price?  |    | 102.50/cwt   |
| Will the forward contract price cover variable costs?   | No | Yes  |
| Will the forward contract price ensure at least break-even?   | No | Yes  |
| Are basis contracts available?  | No | Yes  |
| If "Yes", what is the current offer?  |    | - \$1.00/cwt   |
| If "Yes", is the current offer equal to or better than historical basis at harvest (sales) time?  | No | Yes  |

# **Tactical Marketing Plan Worksheet 1 (Continued) Decision Making Information**

Complete the following table regarding the commodities you currently produce under current market conditions.

| Commodity  | -   | Wheat      |
|--|-----|------------|
| Expected Yearly Production   | -   | 15,000 bu. |
| Variable Cost of Production per Unit   |     | \$3.66/bu. |
| Total Cost of Production (Break-Even)  | -   | \$4.93/bu. |
| Are Futures/Option Contracts an Alternative?   | No  | Yes        |
| If "Yes", what is the current futures price?   |     | N/A        |
| If "Yes", what is an at-the-money- put cost?   | -   | N/A        |
| What is the expected local basis at harvest (sale)?  | -   | N/A        |
| Will selling futures (buying a put) cover variable costs?  | No  | Yes        |
| Will selling futures (buying a put) ensure at least break-even?                                  | No  | Yes        |
| Are forward contracts available for this commodity?  | No  | Yes        |
| If "Yes" what is the forward contract price?   |     | \$3.39     |
| Will the forward contract price cover variable costs?  | No  | Yes        |
| Will the forward contract price ensure at least break-even?                                      | No  | Yes        |
|  |     |            |
| Are basis contracts available?   | No_ | Yes        |
| If "Yes", what is the current offer?   |     | - \$0.35   |
| If "Yes", is the current offer equal to or better than historical basis at harvest (sales) time? | No  | Yes        |
|  |     |            |

# **Tactical Marketing Plan Worksheet 1 (Continued) Decision Making Information**

Complete the following table regarding the commodities you currently produce under current market conditions.

| Commodity  |    | Grain Sorghum |
|--|----|---------------|
| Expected Yearly Production   |    | 4,200 cwt     |
| Variable Cost of Production per Unit   |    | \$1.56/cwt    |
| Total Cost of Production (Break-Even)  |    | \$3.89/cwt    |
| Are Futures/Option Contracts an Alternative?   | No | Yes           |
| If "Yes", what is the current futures price?   |    | N/A           |
| If "Yes", what is an at-the-money- put cost?   |    | N/A           |
| What is the expected local basis at harvest (sale)?  |    | N/A           |
| Will selling futures (buying a put) cover variable costs?  | No | Yes           |
| Will selling futures (buying a put) ensure at least break-even?                                  | No | Yes           |
| Are forward contracts available for this commodity?  | No | Yes           |
| If "Yes" what is the forward contract price?   |    | \$3.30/cwt    |
| Will the forward contract price cover variable costs?  |    | Yes           |
| Will the forward contract price ensure at least break-even?                                      |    | No            |
| Are basis contracts available?   | No | Yes           |
| If "Yes", what is the current offer?   |    | N/A           |
| If "Yes", is the current offer equal to or better than historical basis at harvest (sales) time? | No | Yes           |
|  |    |               |

## **Tactical Marketing Plan Worksheet 2 Tactical Decision**

Complete the following regarding the commodities you produce.

| Commodity Nan  |                 | ig the commodities   | Stocker Cattle                         |              |  |  |  |
|--|-----------------|--|--|--------------|--|--|--|
| Current Month a  | and Year        |  | August 2005                            |              |  |  |  |
| Months from Ha   | rvest (or sale) |  | 9 Months                               |              |  |  |  |
| General Price Le   | evel            | Top Third  | Middle<br>Third                        | Bottom Third |  |  |  |
| Long Term Price Outlook  |                 | Î  | $\iff$                                 | Ţ            |  |  |  |
| Short Term Price Outlook   |                 | Î  | $\iff$                                 | Ţ            |  |  |  |
| Seasonal Price Trend Outlook   |                 | Î  | $\qquad \qquad \Longrightarrow \qquad$ | Ţ            |  |  |  |
| Current Local Ba   | asis            | Top Third  | Middle<br>Third                        | Bottom Third |  |  |  |
| A Priori Decision for this situation  Price 100% of Expected Product |                 |  | oduction                               |              |  |  |  |
|  |                 |  |  |              |  |  |  |
| Decision:  |                 | of expected production of cattle that will be ready in May se of forward contracts.  |  |              |  |  |  |
| Why?   |                 | my a priori decision for this situation. Also, another BSE sult in a drop in prices. |  |              |  |  |  |

### **Tactical Marketing Plan Worksheet 2 (Continued) Tactical Decision**

Complete the following regarding the commodities you produce.

| Commodity Nan                |  | ig the commodities     | Wheat              |              |  |
|------------------------------|--|------------------------|--------------------|--------------|--|
| Current Month a              | nd Year  | August 2005            |                    |              |  |
| Months from Ha               | rvest (or sale)  |                        | 9 Months           |              |  |
| General Price Le             | evel   | Top Third Middle Third |                    | Bottom Third |  |
| Long Term Price Outlook      |  | Î                      | $\iff$             | Ţ            |  |
| Short Term Price Outlook     |  | Î                      | $\iff$             | Ţ            |  |
| Seasonal Price Trend Outlook |  | Î                      | $\iff$             | Ţ            |  |
| Current Local Ba             | asis   | Top Third              | Bottom Third       |              |  |
| A Priori Decision situation  | n for this   | Hold T                 | ight and Watch the | Market       |  |
|                              |  |                        |                    |              |  |
| Decision:                    | Hold Tight and Watch the Market.   |                        |                    |              |  |
| Why?                         | While the short term outlook is down, seasonal price trends suggest a strengthening in prices in the near term. Also, the a priori decision that is being used is for six months away from harvest. We are currently nine months away. I would like to just sit and watch this market for a couple more months and see if prices will follow the seasonal trend. However, if prices do in fact fall \$0.15, I will reconsider this decision. |                        |                    |              |  |

## **Tactical Marketing Plan Worksheet 2 (Continued) Tactical Decision**

Complete the following regarding the commodities you produce.

| Commodity Name                  |  | Grain Sorghum   |              |  |
|---------------------------------|--|-----------------|--------------|--|
| Current Month and Y             | ear  | August 2005     |              |  |
| Months from Harvest sale)       | (or  | 2 Months        |              |  |
| General Price Level             | Top Third  | Middle<br>Third | Bottom Third |  |
| Long Term Price<br>Outlook      | Î  | <>              | Ţ            |  |
| Short Term Price<br>Outlook     |  | <>              | Ţ            |  |
| Seasonal Price Trend<br>Outlook | Î  | $\iff$          | Ţ            |  |
| Current Local Basis             | Top Third  | Middle<br>Third | Bottom Third |  |
| A Priori Decision for situation | this   | N/A             |              |  |
|                                 | ·  |                 |              |  |
| Decision: N/A.                  |  |                 |              |  |
|                                 | Grain sorghum is a secondary crop. I will do what I have always done. I will harvest the crop and get the best local price I can for the crop. |                 |              |  |