



To Cull or Not to Cull: An Economist's Viewpoint

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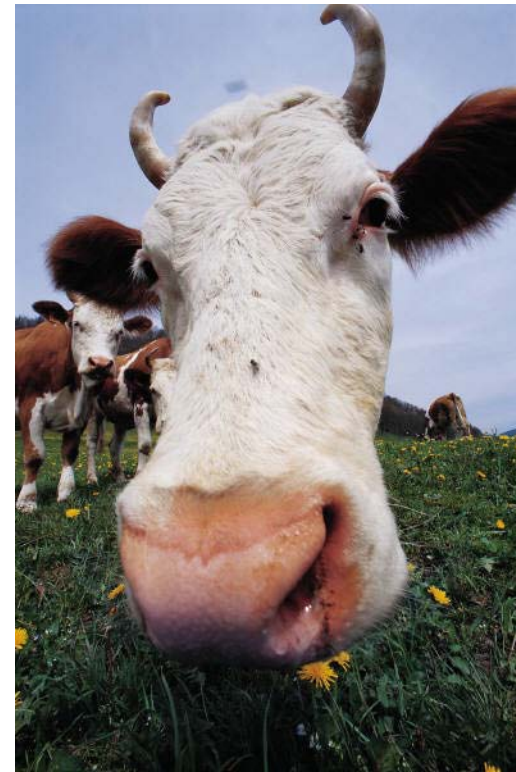
Ordinary Culling

Questions/Comments

- If a female is open, do I cull her?
- What if she is young (2-3 years old) and open?
- Should I keep borderline producers?
- I can't afford to increase numbers due to the cost of replacements.
- I have to cut something because it's getting drier.
- What are the economics of culling?

First...how do you define a “good” female?

- Longevity
- Breed early in the breeding season
- Deliver a live calf
- Rebreed early
- Wean a calf weighing approximately 55% of her weight
- Temperament
- Physical sound and correct



Common Culling Criteria

- Overall Herd Culling Policies

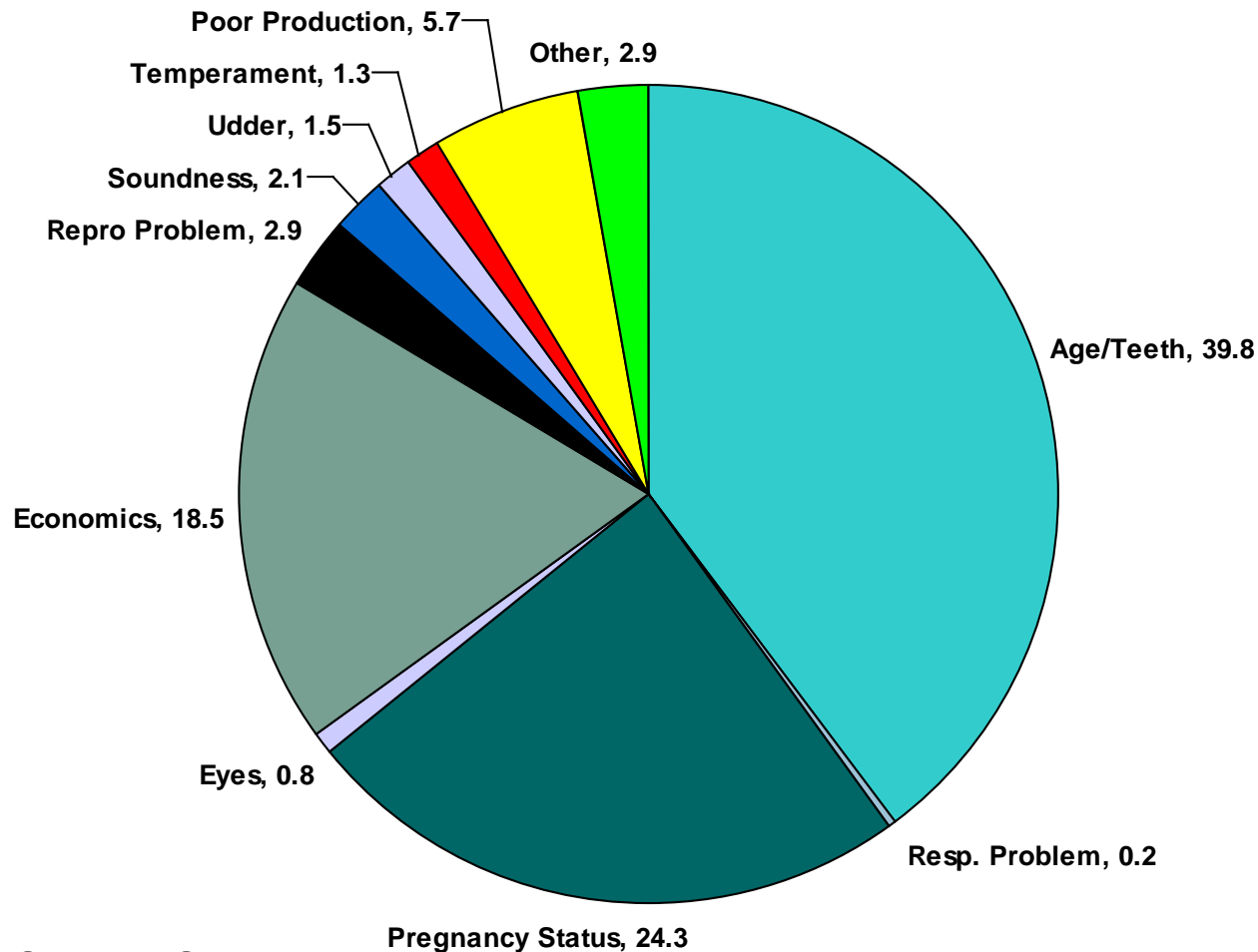
- Age
- Economic Decisions
 - Drought
 - Herd Reduction
 - Market Conditions

- Culling the Individual

- Pregnancy Status
- Physical Abnormalities
- Productivity Level
 - Replacing a sub par individual with one that will meet or exceed the culling candidate while pushing longevity forward.



Percent of Cows Sold by Reason





Common Culling Policies

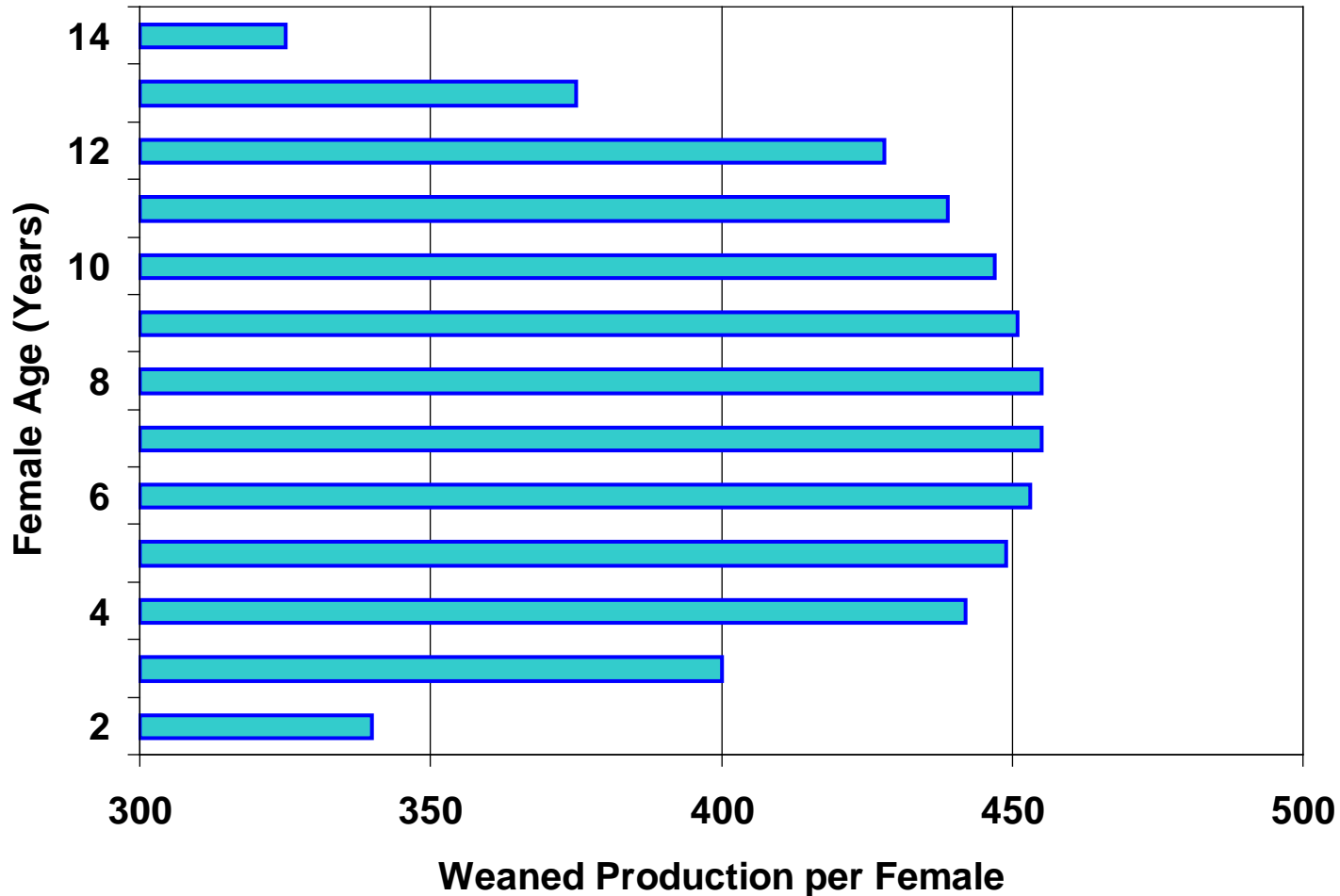
- Most culling policies made on the individual animal basis, not the herd.
- None (she always comes when I rattle the feed bag).
- Health
- Age
- Some minimum production level
 - If she's open, she's gone...
 - Wean a calf
 - Wean 55% of body weight.
 - Wean 55% of body weight and bred back early in the breeding season.



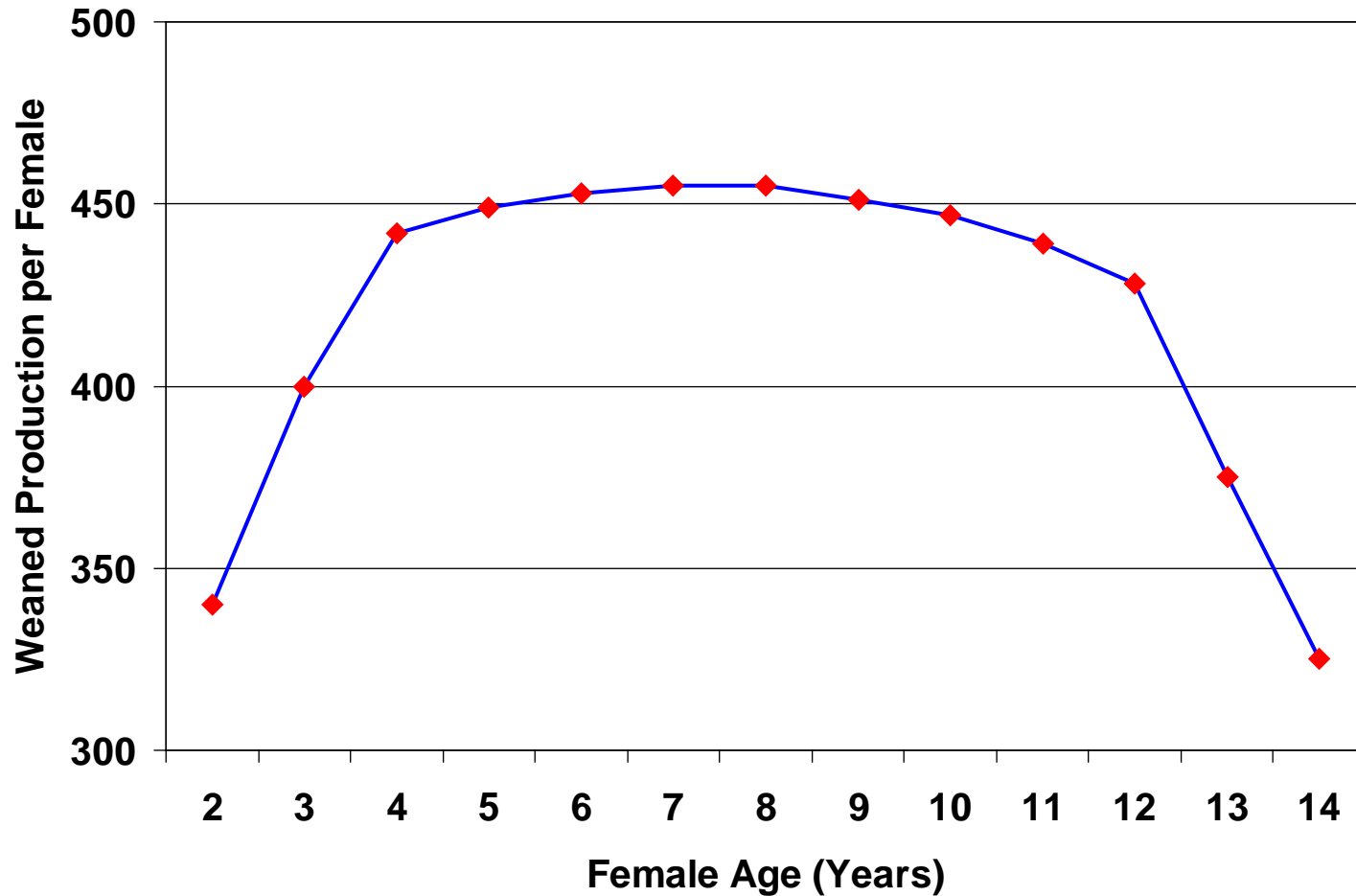
Ranch Goals – What are we trying to get accomplished?

- Pay property taxes (I just like cows)
- Breakeven (I just like cows, and I don't need the money, but I don't want to lose a lot either)
- Be Profitable (If I don't make money, I have to find something else to do)
- Genetic progression (I plan to have the “best performing” animals)
 - Current calf crop is your most current representation of the genetic progress.

Female Production by Age

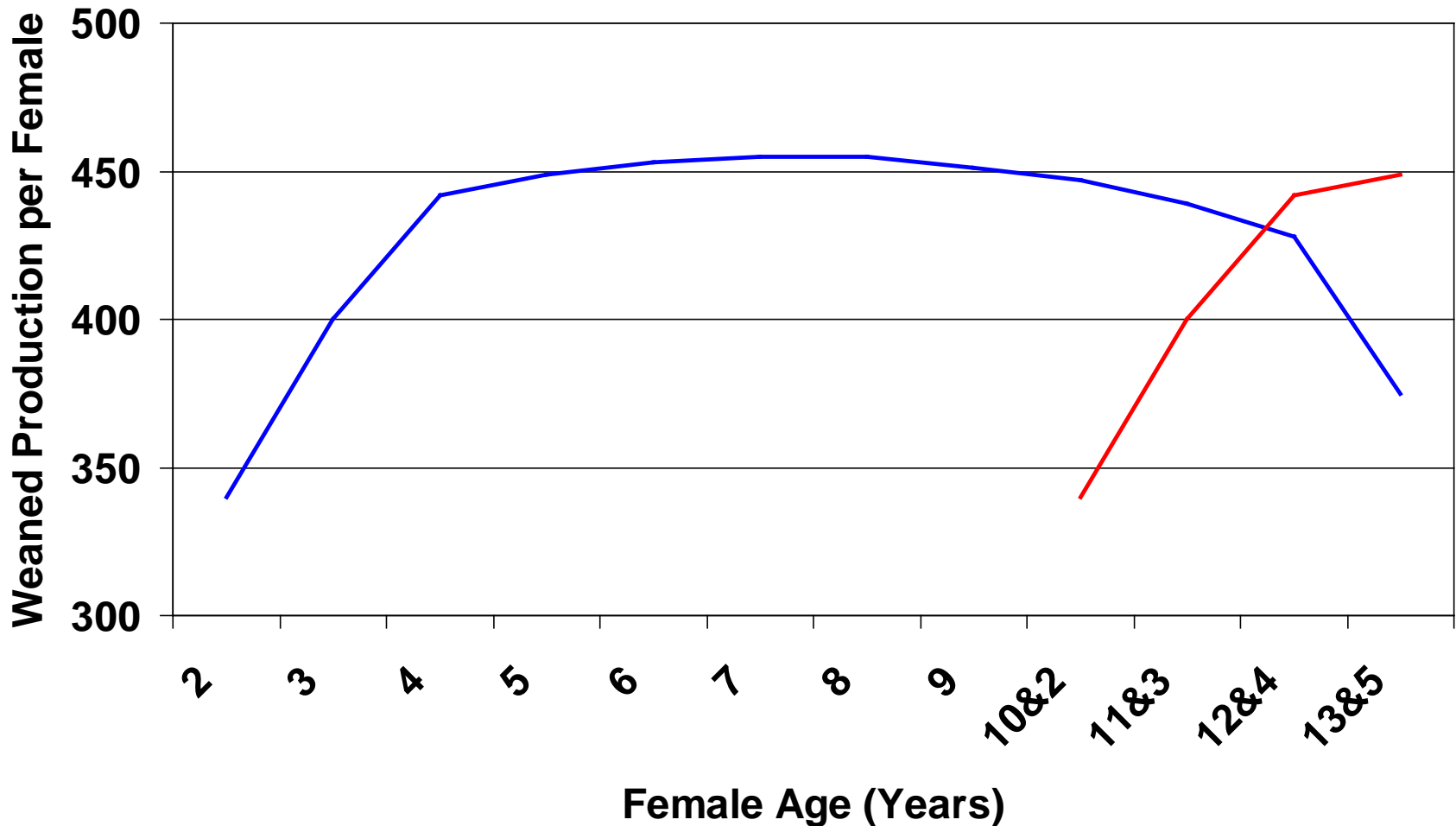


Female Production by Age



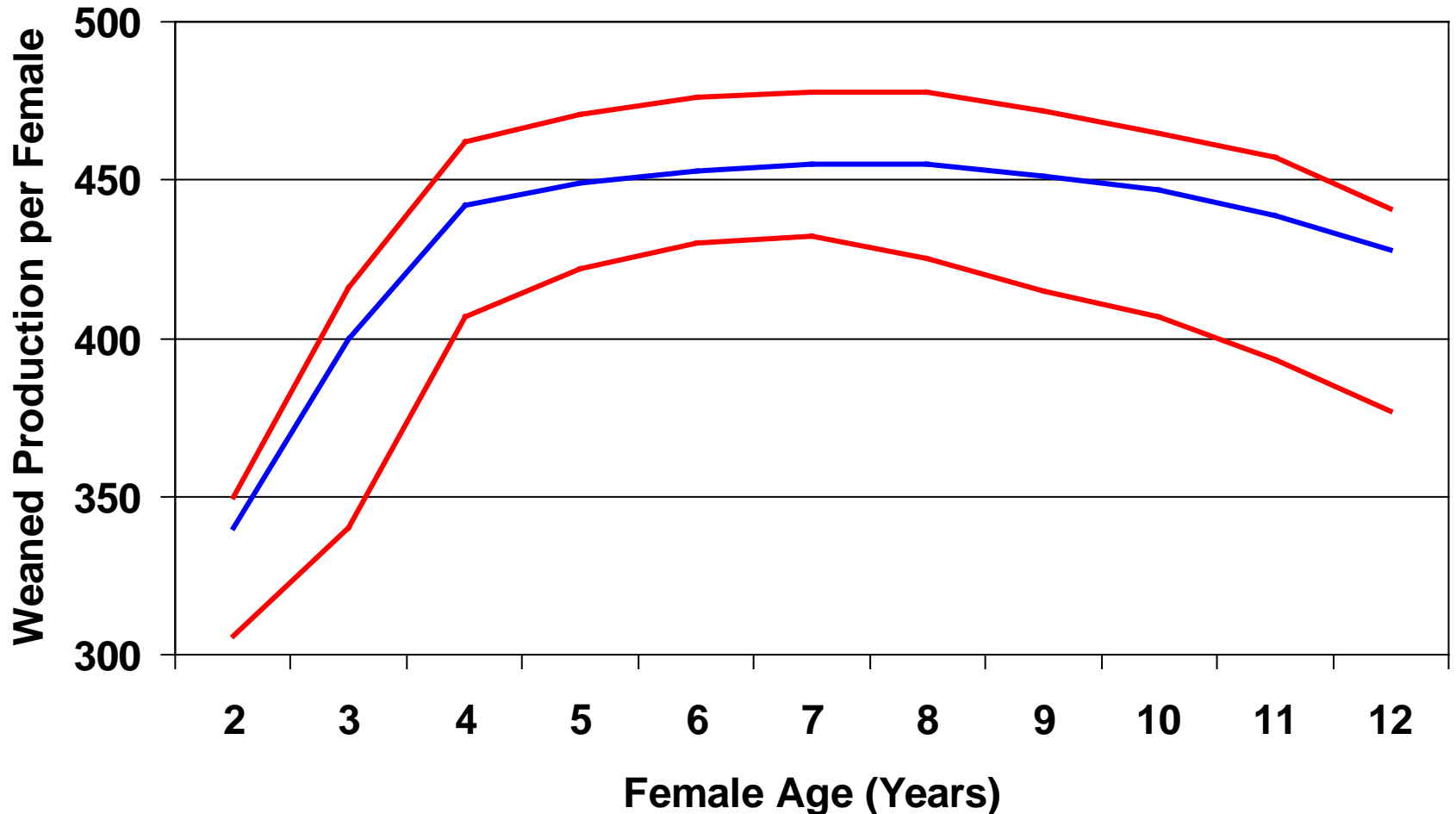
When to Replace a Capital Asset

Female Production by Age



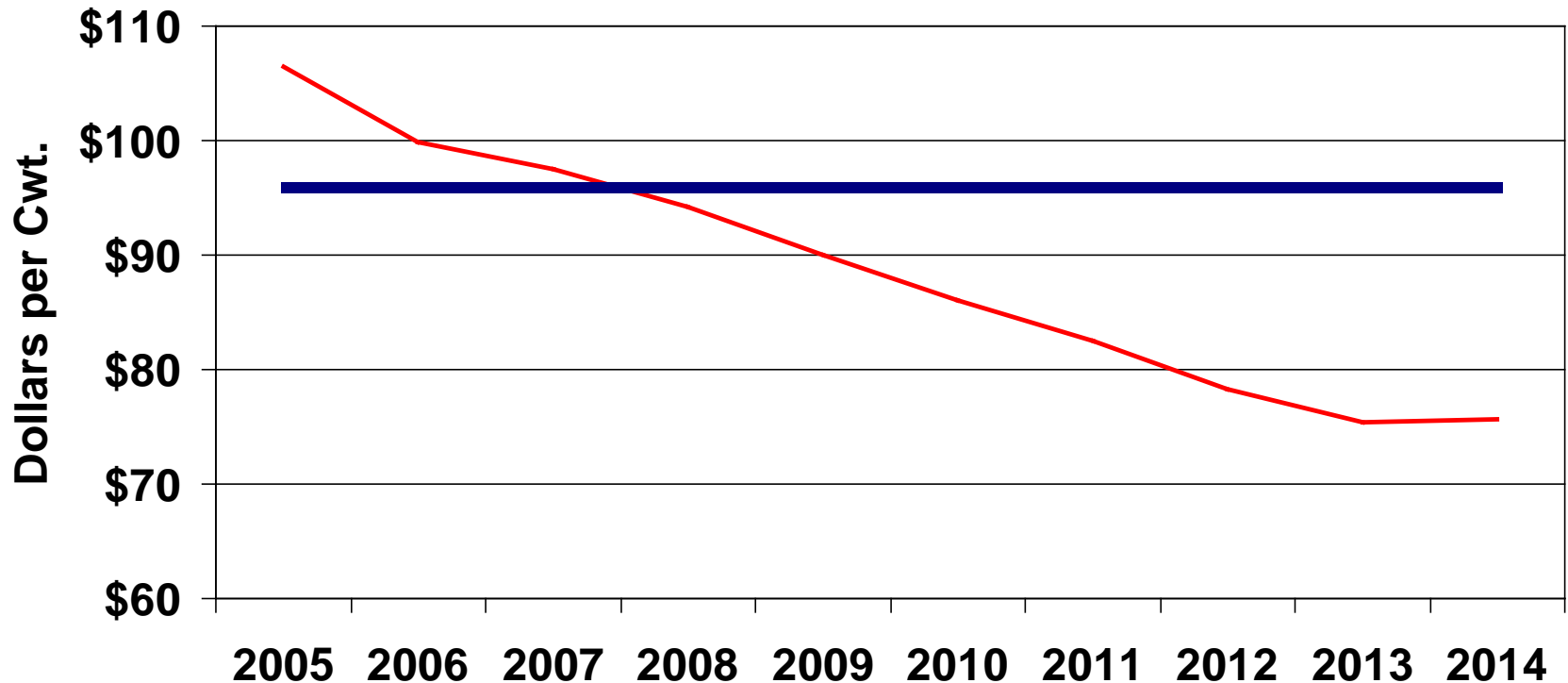
Not All Females Have the Same Odds of Production

Female Production by Age and Risk



Culling and Replacement Decisions are convoluted by Current and Future Prices

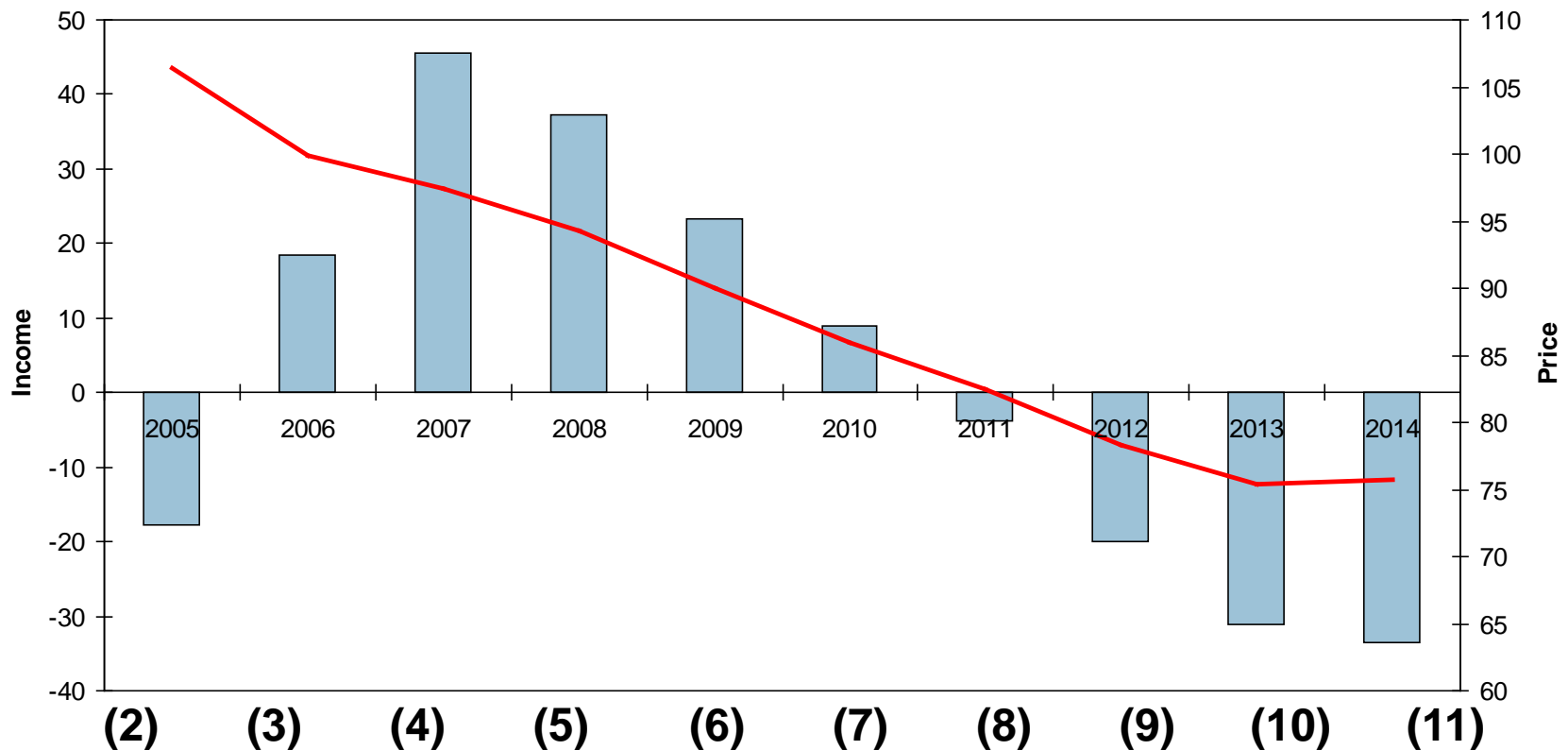
500 lbs Feeder Steer Projections



Herd Production by Age of Female (Group of 100 Females)

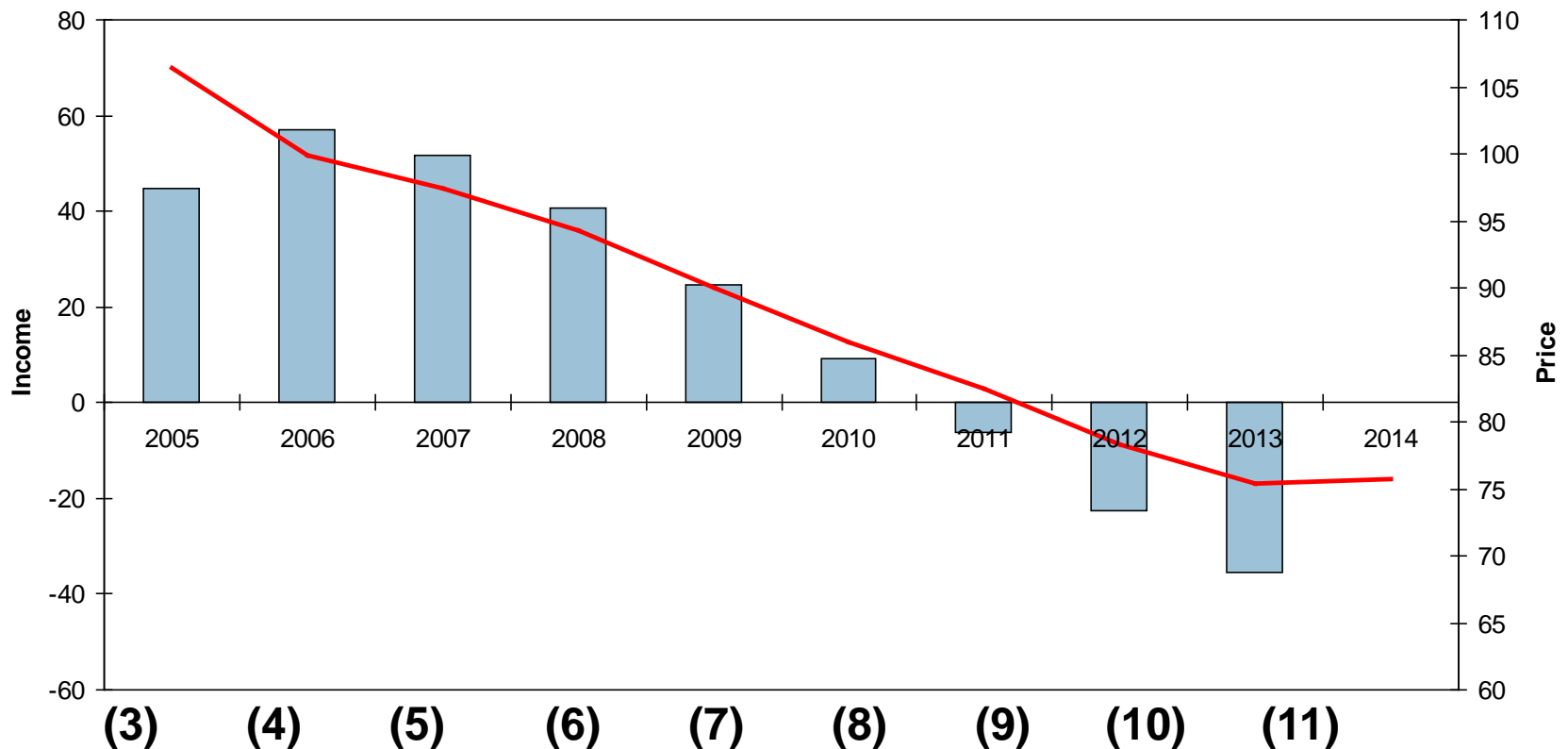


Projected NPV of Today's 2 Year Old Replacement Heifer Group



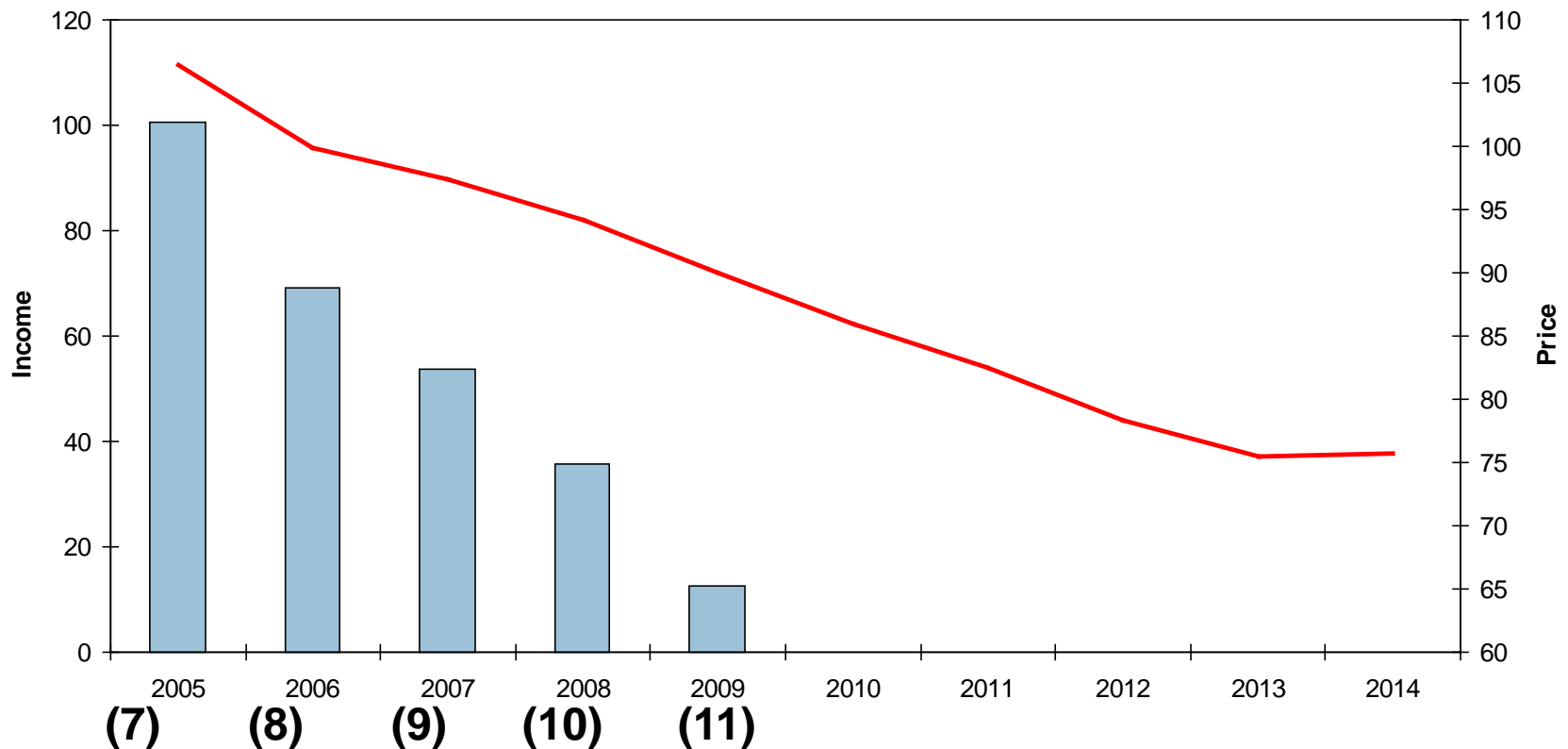
Ending Salvage Value (11 year old): \$262.22
NPV Sum: \$289.73

Projected NPV of Today's 3 Year Old Replacement Heifer Group



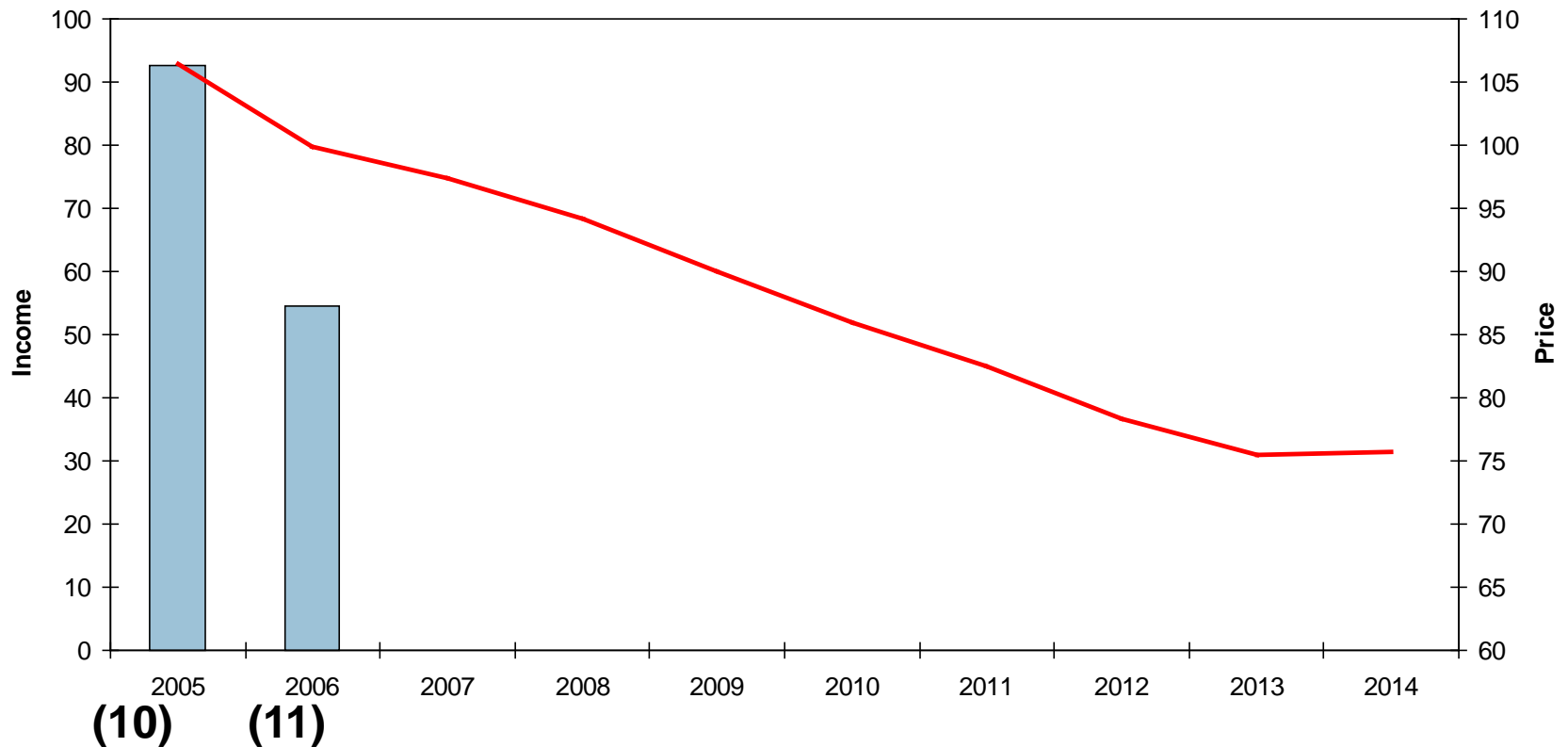
Ending Salvage Value (11 year old): \$270.77
NPV Sum: \$434.39

Projected NPV of Today's 7 Year Old Breeding Female Group



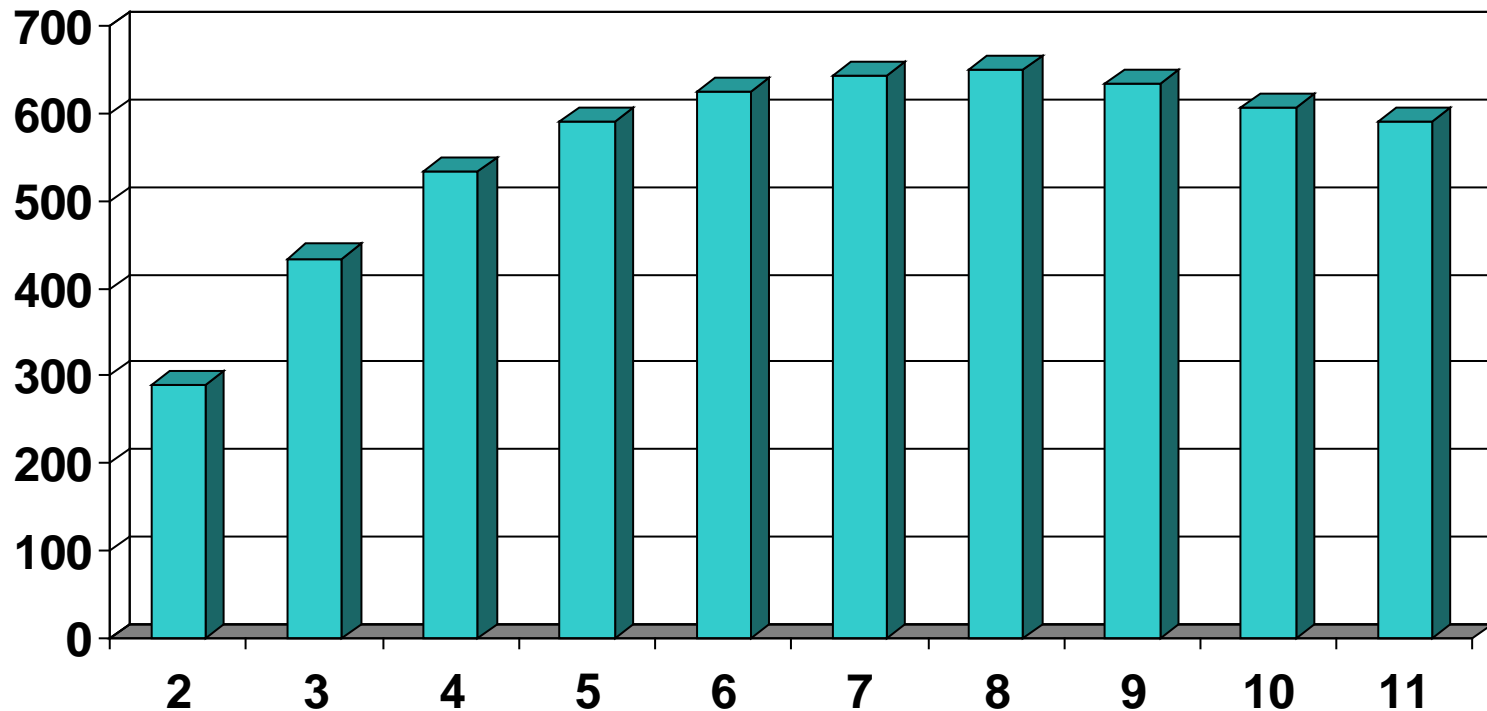
Ending Salvage Value (11 year old): \$372.12
NPV Sum: \$644.06

Projected NPV of Today's 10 Year Old Breeding Female Group



Ending Salvage Value (11 year old): \$459.06
NPV Sum: \$606.12

Projected NPV of Breeding Females by Age





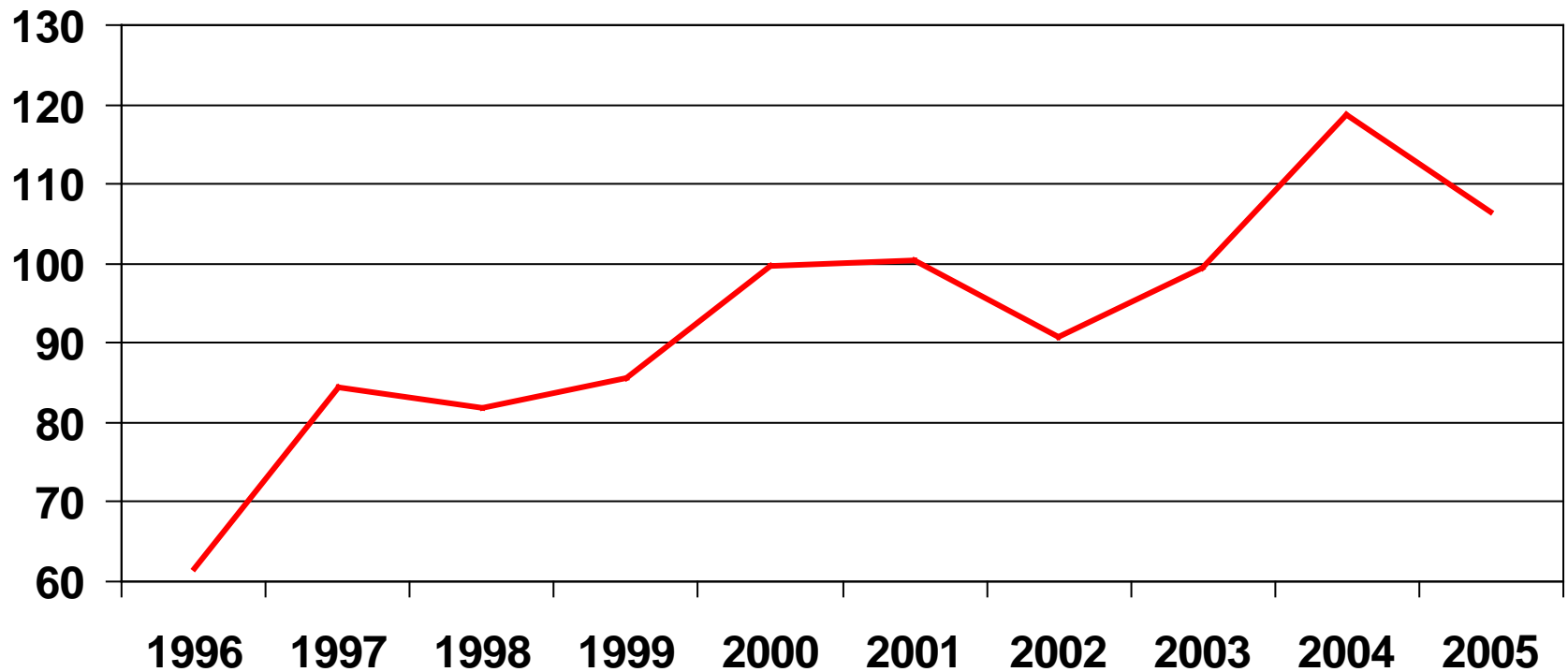
Culling/Replacement Decisions in the Face of Long Term Declining Prices

- Want to assure yourself of productivity today
 - ...to take advantage of today's prices.
 - ...by minimizing low producing females and high-risk females.
- Prepare for future lower prices
 - ...by having peak performing, low risk females at the time of the lower prices
 - Loading up on 5-8 year olds during times of low prices such that high production helps to alleviate the effort of the low prices.

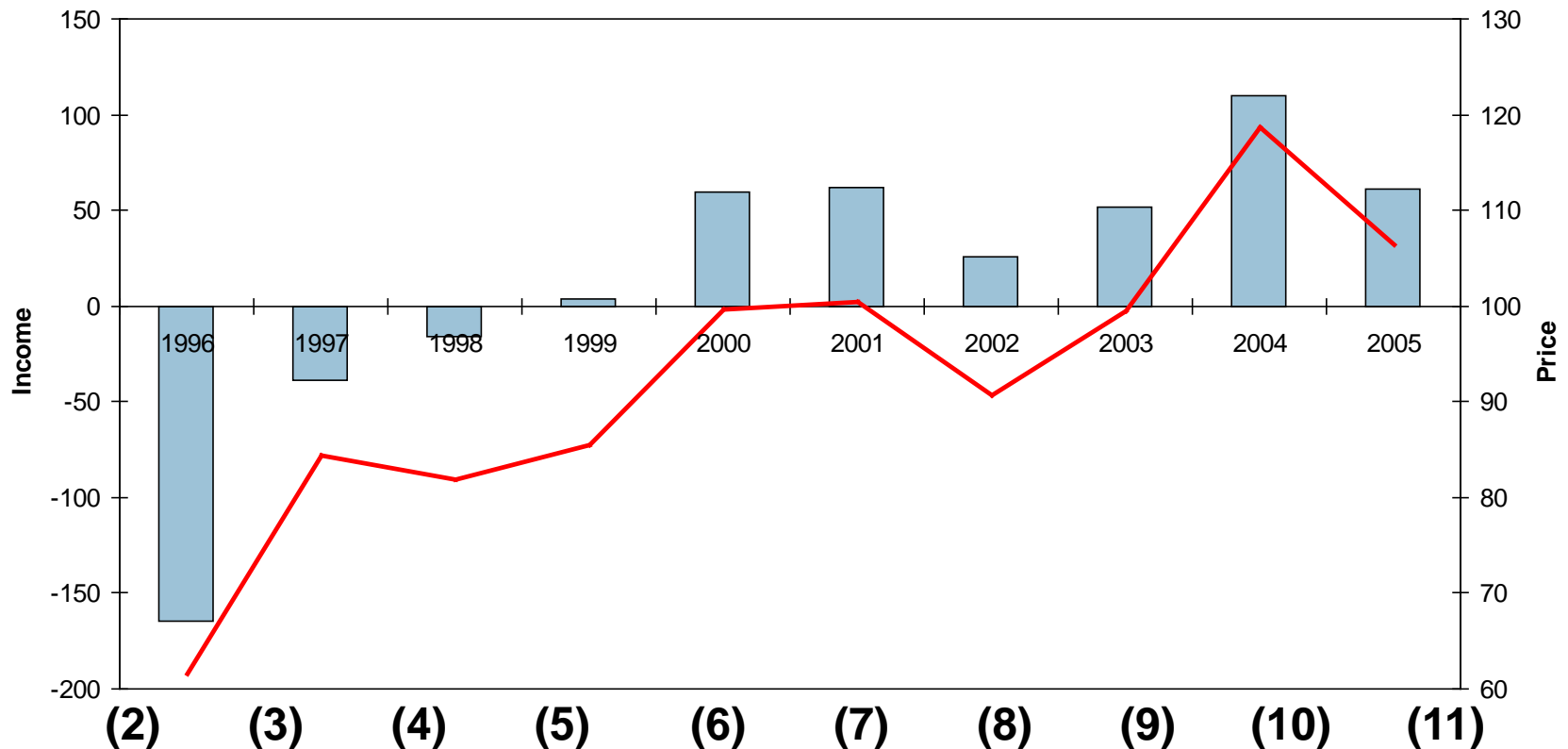


How does this change given
different annual price movements?

Actual Average Calf Prices - CattleFax

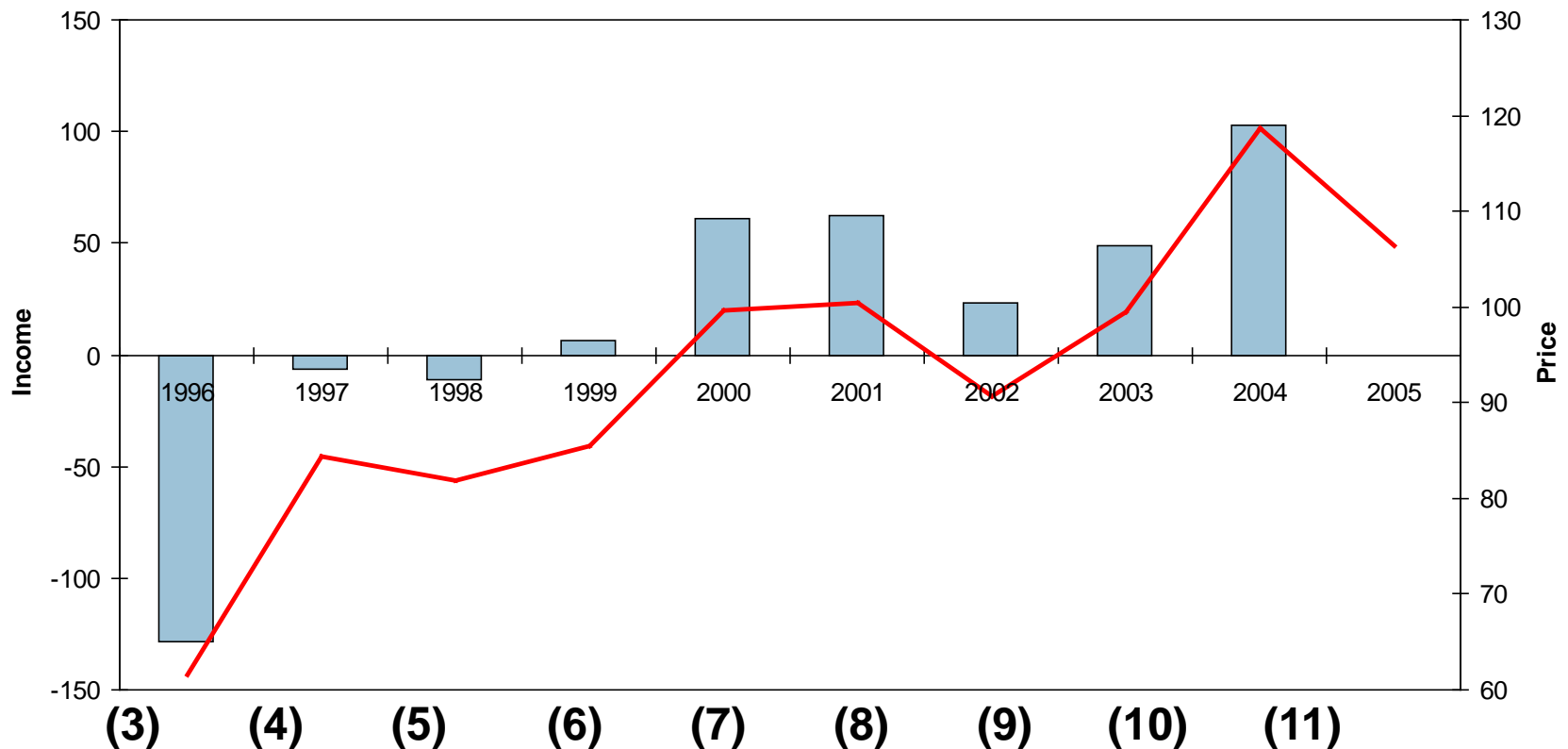


Projected NPV of Today's 2 Year Old Replacement Heifer Group



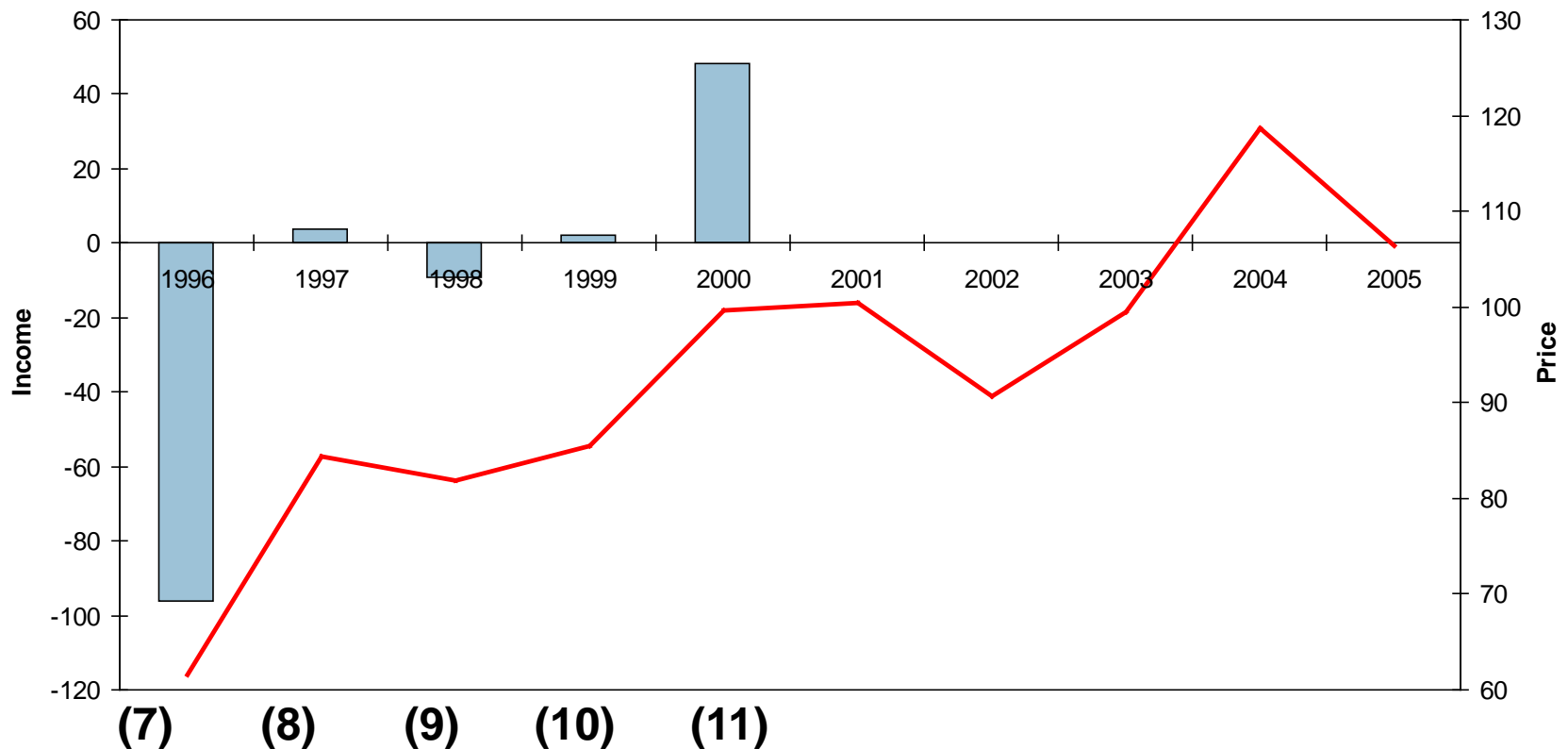
Ending Salvage Value (11 year old): \$368.84
NPV Sum: \$522.90

Projected NPV of Today's 3 Year Old Replacement Heifer Group



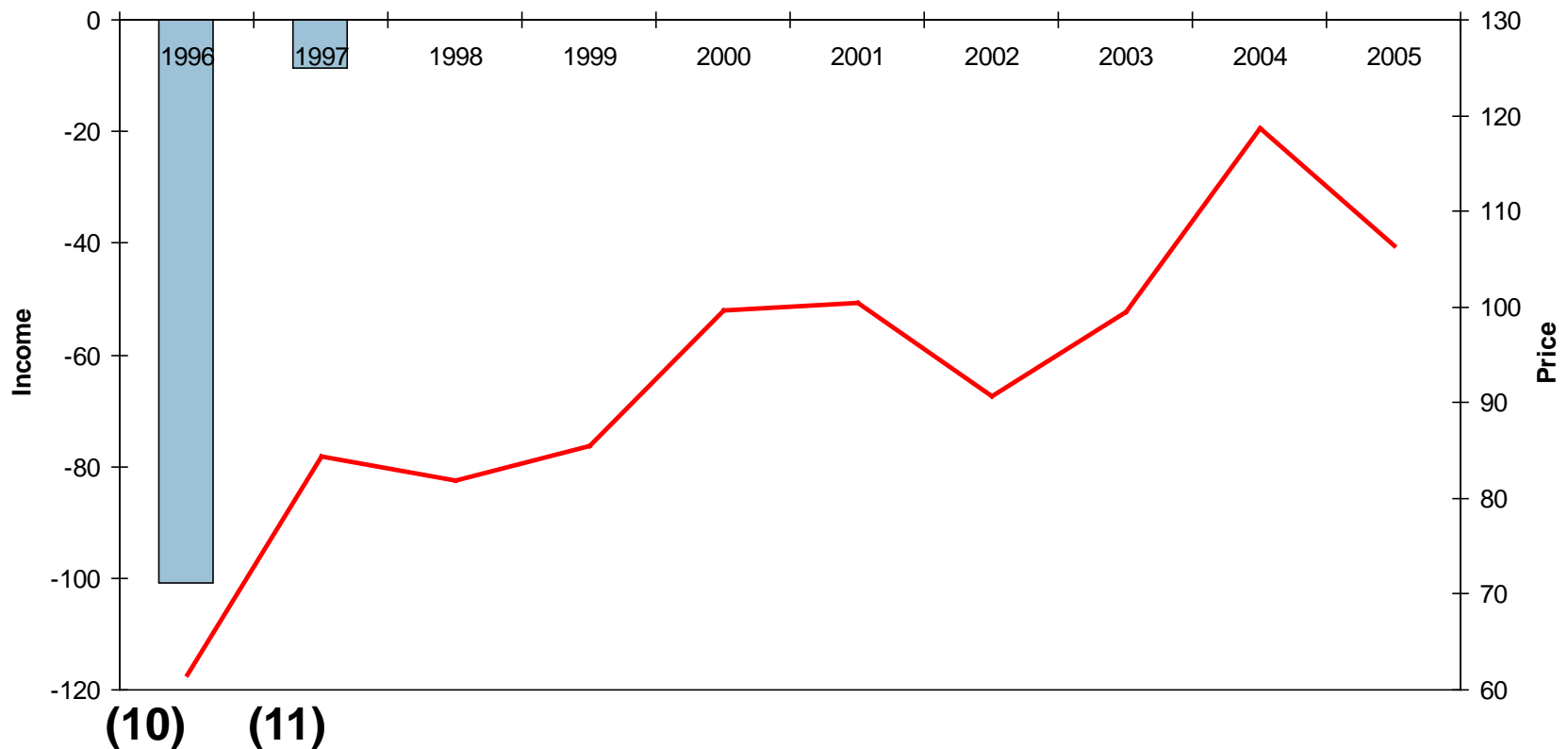
Ending Salvage Value (11 year old): \$426.27
NPV Sum: \$584.80

Projected NPV of Today's 7 Year Old Breeding Female Group



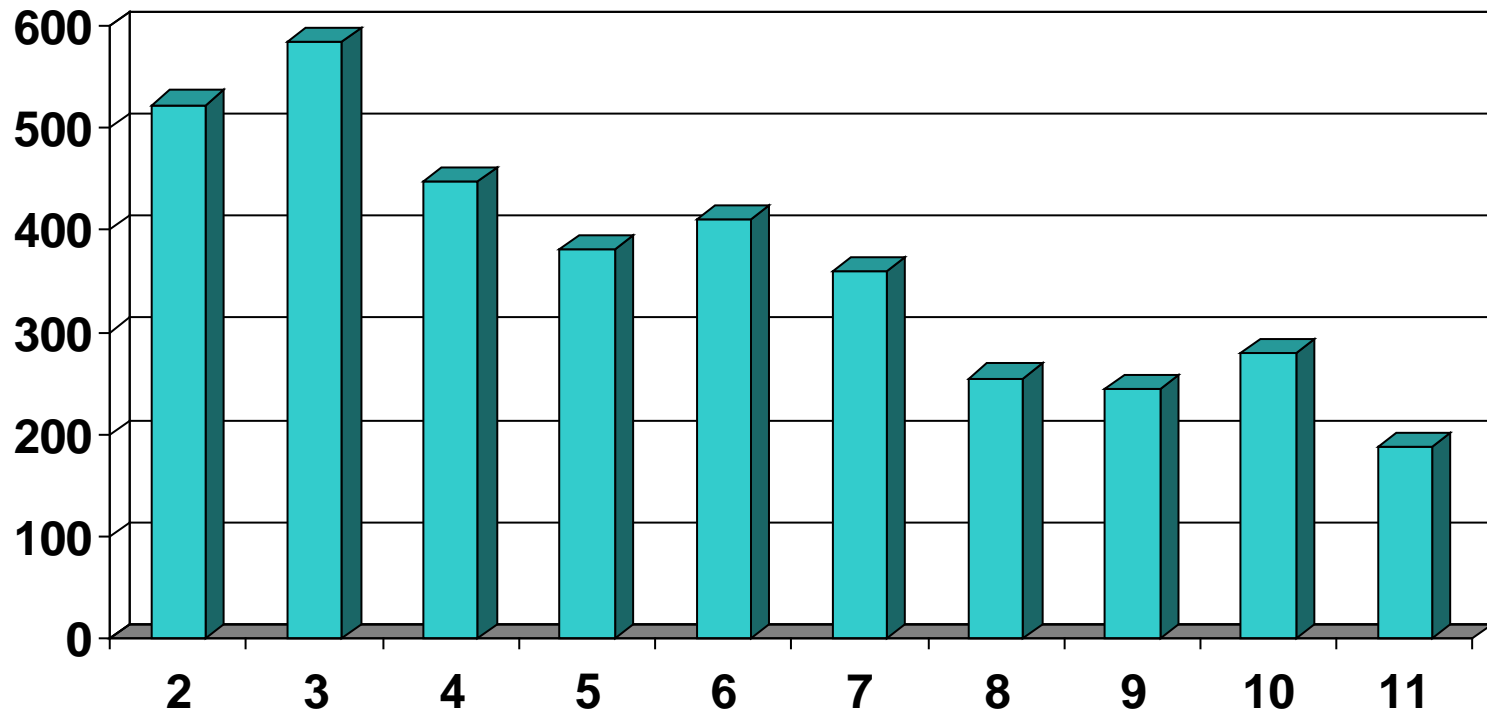
Ending Salvage Value (11 year old): \$411.19
NPV Sum: \$360.31

Projected NPV of Today's 10 Year Old Breeding Female Group



Ending Salvage Value (11 year old): \$388.16
NPV Sum: \$278.69

Projected NPV of Breeding Females by Age (Increasing Prices)





Culling Decisions (Outside of Normal Culling Practices)

- Do I keep an open female?
 - 9 years old
 - Average producer
 - Current Prices for all cattle are high, should remain high for the next two years, then start dropping.
 - Can replace her with a purchased coming two year old heifer.
- What do you think?



Culling Summary

- Not always a clear cut answer
- Must take into consideration
 - What the ranch is trying to get accomplished
 - Production risk of the female
 - Current and future prices
 - Cost of her replacement

Questions/Thanks

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