



Conclusions from the East-West Yana Project

Does Cleanout and DMP Manipulation Work?

YES!

1. Average B&C scores are bigger in the manipulated pasture:
 - 155.4 without DMP manipulation.
 - 163.9 with cleanout and DMP manipulation.
 - B&C scores in each age class are bigger.
 - West Yana bucks have more points
 - Mass is bigger.
2. Acres per 180+:
 - 42 acres/ 180+ in West Yana.
 - 157 acres/ 180+ in East Yana.
3. Percent of Bucks 180+:
 - East Yana: 13%
 - West Yana: 27%
4. 2017 Deer Movie Bucks 180+:
 - East Yana: 7 bucks
 - West Yana: 26 bucks

The Power of Supplemental Feed is Immense!

1. Mature Buck Average Scores:

- 130 B&C in the unhunted, unfed Faith Ranch in the 1980s.
- 154.4 B&C in East Yana after 15 years of feeding.
- A 19% increase in average score.

2. An epigenetic change—an measurable *Vogt Effect*.

- Vogt saw a 33% percent increase in antler size in pens.
- Hard to achieve a 19% increase in the wild without a feeder density of at least 100 acres per feeder.

Buck Mortality (Survival) with Feed

1. Average survival of fawns to yearlings: 81%
2. Mortality is less than 5% per year from 1 ½ to 7 ½ years old.
3. Mortality starts to increase at 8 ½ years old:
 - 13% from 7.5 years to 8.5 years.
 - 18% from 8.5 years to 9.5 years.
4. The East-West Yana Project reveals hard data for population modelling of a herd on feed. Survival is:
 - 0.5 to 1.5: 81%
 - 0.5 to 2.5: 77%
 - 0.5 to 3.5: 77%
 - 0.5 to 4.5: 73%
 - 0.5 to 5.5: 67%
 - 0.5 to 6.5: 66%
 - 0.5 to 7.5: 66%
 - 0.5 to 8.5: 54%

Which Young Bucks Should You Cull?

1. The cost of feeding bucks runs from \$150 to \$200 per year.
2. Harvesting does alone will not control a population on feed.
3. You can safely cull:
 - Spikes are safe.
 - 3 pointers are generally safe (but not as safe as spikes).
 - 2 ½ year olds: 7 points or less.
 - 3 ½ year olds: 8 points or less.
 - 4 ½ year olds: 9 points or less.
4. Faith Ranch's culling program based on this data:
 - We cull all bucks that appear 3 ½ years and old with 8 points or less.

Aging Bucks

1. Tooth wear is inaccurate and has a bias:
 - Overage 2 ½ and 3 ½ year olds.
 - Underage 4 ½ year olds and older.
2. Cementum aging doesn't work well in South Texas.
3. Body Traits:
 - If a buck has a) a PRONOUNCED Roman nose, a HUGE neck, or a HUGE body, he's almost certainly mature.
 - But most mature bucks don't have those features—so you will miss age many.
4. Better:
 - Track bucks from year to year.
 - Use the 4 ½ to 5 ½ year old jump to pin down age.
 - Another way to look at it: if a buck's antlers start to flatline from year to year, he was 5 ½ years old when he started to flatline.
 - We need to look at that more closely in future years.

What Else Can the East-West Yana Project Reveal?

1. At what age do antlers peak?
2. Peak antler age and rainfall.
3. What happened to the lack of 4 ½, 5 ½, and 6 ½ 180+ bucks in East Yana this year? Rainfall?
4. The 4 ½ to 5 ½ year old jump; exceptions to the asymptote.
5. Do super old deer explode in antler size because they stop using energy for breeding?
6. Mortality of REALLY old bucks on supplemental feed.
7. Paternity and which bucks breed.
8. Epigenetic change over time?
 - Antler size of unmanipulated (East Yana) bucks.
 - Body weights of West Yana bucks.
9. Does line breeding produce bigger bucks?
10. Heritability and breeding values.

End of Aging Bucks on the Hoof



Me: Do a scatterplot of individual buck scores at 4 and 5 and 6 to see the jump. And analyze individual deer.



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