Ranching in Conservation: TN Cattle Company Bay Area and state wide operations.

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TN Cattle Company

Who are we and what do we do?

- 5th generation of a pioneering family to the Dublin
- Vertically integrated cattle company: raising cow/calves, stockers and organic hay
- Sustainable management through rangeland improvements and grazing practices
- Habitat management/restoration and environmental mitigation

TN Cattle Company Mission Statement

- TN Cattle Company with proper management will raise the highest quality beef without sacrificing the resources and biodiversity of habitats that are so very vital to our existence. Through resource management and quality sensible improvements we will ensure the profitability of our company and the environment for future generations.

TN Cattle Company

- Our existence is not solely about raising cattle but rather about being stewards of the land and providing multiple value added services for the environment and habitats that we work and live in.

Cattle Operations

- 6 conservation easements
- Totaling 7,100 acres
- 2,300 acres of public access rangelands
- From Watersheds to Wetland Habitats

Grazing Operations

What is Grazing For Conservation

- Definition Conservation
- con·ser·va·tion
- ˌkänsərˈvāSH(ə)n/
- *noun*
- the action of conserving something, in particular.

Grazing For Conservation

- Definition of Grazing
- graze[1]
- grāz/
- *verb*
- gerund or present participle: **grazing**
- (of cattle, sheep, etc.) eat grass in a field.
- "cattle **graze on** the open meadows"

How does TN Cattle Company Graze for Conservation

- Identify management goals
- Utilize livestock foraging habits to conserve and maintain habitats
- Implement rangeland improvements
- Example: SFPUC San Antonio Reservoir Lease operation

Identifying Management Goals

- Example goals Include:
  - Habitat management for species
  - Water quality
  - Non-native invasive plant species control, fuels reduction, habitat manipulation/restoration.
- Communication is key
- Work with resource managers, biologist, agencies and land owners identify goals related to habitat and species
  - Permits, private landowners goals

Economics of Grazing for Conservation

- Short term return diminishes
- Long-term sustainability/profits
  - Sustainability is achieved through type of livestock operation and management
- Example San Antonio Reservoir Lease
  - Cow/Calf operation supplemented by a stocker operation.
  - Resident cow herd is supplemented by a stocker operation in fall
  - Emergency situations stocker is more adaptive and flexible compared to cow herd

Utilizing livestock to conserve and maintain habitats

Utilizing livestock to conserve and maintain habitats

- Using grazing and livestock class to increase compaction of wetlands to increase ponding duration.
- California tiger salamander
  - Non-Exclusionary, lower residual matter, enable movement of CTS, turbid water
- California red-legged frog
  - Mix of surface water and vegetation cover, potential of partial exclusion fencing with flash grazing management
- Invasive species management
  - Ranchers are the first line for resource managers- When grazing is inappropriate- communication-tool chest
  - Black Mustard-Management
  - Star thistle- Management

Rangeland Improvements

- Rangeland improvements used to help achieve goals
- Examples: fencing, water infrastructure, habitat enhancement
  - Water is largest factor in livestock distribution

Rangeland Improvements

- Fencing
  - Used for rotational purposes designed around field production/capacity and water sources
  - Exclusionary fencing: Ponds, riparian areas designed with species or management goals in line
- Water infrastructure
  - Pond restoration: Critical to species of concern and cattle operation
  - Water systems and fields to have multiple sources of water including trough systems and pond water. The pond water enables a source of water if case a water system malfunctions.
  - Examples- San Antonio Lease: Pond Repairs and restorations-Court House Ponds etc

Rangeland Improvements

- Habitat Restoration
  - Oak woodland enhancement
  - Riparian area plantings- Willow cuttings to help with bank stabilization

Rangeland Improvements

Rangeland Improvements

SFPUC San Antonio Reservoir Lease

- Large grazing lease- 5,806 acres
- Cow calf and stockers
  - Allows for control of some non-native invasive plants
  - Economics and sustainability of purchasing hay or selling herd
- Stocking rates
  - Normal year: 225 cows and 350-400 stockers
  - 2016, after 4 years of drought: 142 cow/calves and 372 stockers
- Lease is actively managed to protect the habitat and watershed.

SFPUC San Antonio Reservoir Lease

- Operation
  - Vertical integration
  - The ranches in Gazelle, Ca have a multitude of operations including fall calving cows, spring calving cows, hay production, and organic hay production.
  - The Spring calving cows calves are weaned and transported to San Antonio in between October and December
  - Sometimes purchase outside stockers to compliment the operation

San Antonio Reservoir Lease

- Stockers allows for flexibility
  - Example- 2014 stocker herd of 300 shipped from Gazelle to San Antonio
  - Only on lease 1.5 month, then removed due to environmental pressures and predictions on rangeland production for the year.
  - Cattle sent to a growing yard and then to a feed lot (Does not always work and has high risk)
  - Enabled remaining cows to spread out and utilize the feed without falling below an acceptable RDM
  - Helped avoid the purchase excessive amounts of hay to maintain herd health through the year.

San Antonio Reservoir Operations

- Benefits of Resident Herd
  - Enables the cows to learn and understand the ground
  - Ease of handling
  - Low stress levels
  - Healthier Cows and calves (fat and happy!)
  - Tools for management

San Antonio Reservoir Operations

- Communication
- Closing- Thanks for the opportunity to speak and share.
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