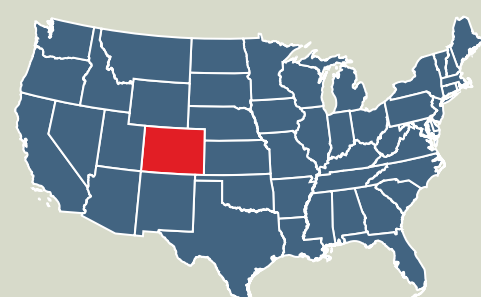


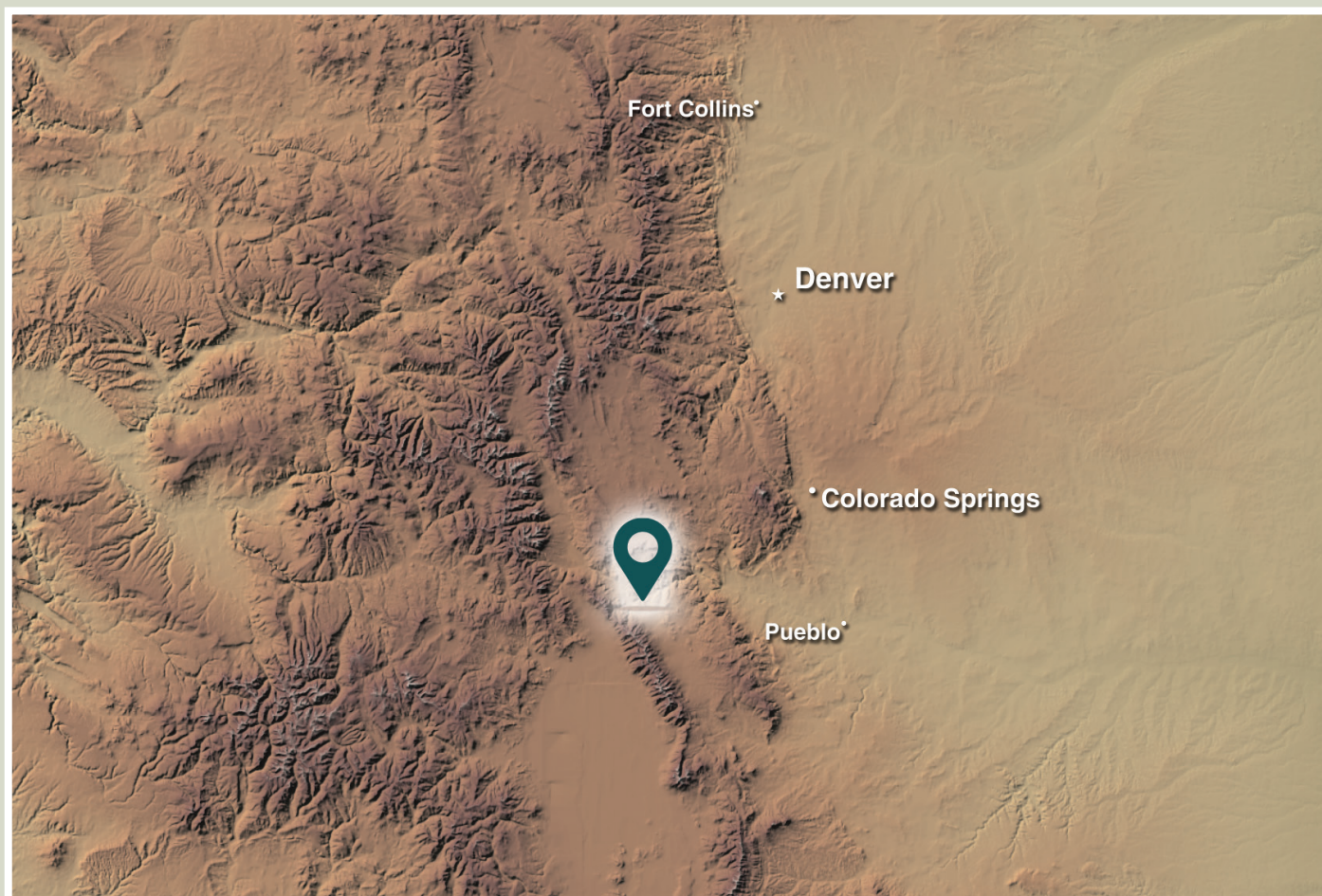
# RANCHING IN SYNC WITH NATURE

## Oswald Cattle Company



### Cotopaxi, Colorado

We are located at the north end of the Sangre de Cristo Mountains in south-central Colorado. Our ranch is divided into two distinct units—summer and winter. The summer range lies below and along two 13,000+ foot peaks and extends down to our irrigated meadows that lie next to our headquarters. The summer pastures are where most of the action happens on the ranch. Our cows have their calves here.



### Grassfed Beef

It's also where we develop and finish our grass fed animals utilizing the high quality forages that grow on our irrigated and sub-irrigated meadows—sedges, alfalfa, clovers, timothy, orchard grass, meadow brome and other forages. In late summer we use the upper reaches of the ranch where the next year's cycle begins with the introduction of carefully selected bulls to our cow herd. We use a combination of temporary and permanent electric fencing to control the timing and duration of grazing—dividing the upper unit into as many as 100 pastures.



OswaldGrassfedBeef.com

The winter pastures lie to the north and at a much lower elevation. The landscape flows down through many ridges and folds in the craggy outcrops reaching to the Arkansas River—our northern boundary. On the lower range, we rotate through a 10-pasture system which is a mix of federal and private lands. Mountain mahogany, wild plums, gooseberry bushes, prickly pear cactus, cholla, and many forbs along with grasses such as blue grama, sand dropseed, western wheatgrass, and Indian ricegrass make up a smorgasbord of nutrition for our cows to eat. Since we calve in the summer, we can run our calves with their mommas during the winter months. The mother cows teach the calves what plants to eat, where the water holes are, and where to hide out during a snowstorm.

### Harvesting Solar Energy

We tell folks that we're not really in the cow business but in the solar energy business. Our goal is to capture as much solar energy as possible through optimum plant growth and health. Adequate rest periods between grazings, ground cover to capture any snow/rainfall and plant diversity are just some of the many things we measure yearly at 11 different monitoring sites using the LandEKG™ system. For much of the year, we run all animals in one herd to maximize animal impact, moving to a fresh pasture at least once daily—a process which gives the animals the freshest, most nutritious plants while allowing the just grazed plant the beginning of its rest and recovery period.

### Conserving the Land and Grass

Conserving the land and the grass our animals eat is of primary importance to us. In fact, we are grass farmers as much as we are beef growers. We think of the grass we grow as millions of little solar collectors doing the job of turning the sun's energy into food for people. We harvest the sun, so it is of the utmost importance to keep our grass healthy and thriving from the soil up.

Why do we care about healthy grass, you might ask? Well, we are what our animals eat. Eating nutrient-dense meat from animals who have been raised on vibrant plants and soils pass those healthy benefits on to the humans who consume it. Healthy grass and soils create a diet rich in higher levels of Omega-3s and conjugated linoleic acid—both of which contribute to human health.

### From the Soil Up

Healthy grass begins with the soil. In the same way grass holds millions of little solar collectors, the soil holds trillions of microbes that create a balanced ecosystem where plants thrive. Healthy soil captures and stores carbon and the higher the carbon content (soil organic matter), the more moisture is retained. By using a system of rotational grazing, we balance grazing with periods of rest to allow the grass to adequately recover. By leaving a stand of grass in the pasture, we can insure the plants will have plenty of leaf left for collecting more sunlight, putting down healthy roots, and regenerating healthy soils. Healthy soil is like a sponge with small pores for collecting and holding moisture, so the benefits of a healthy grass and soil ecosystem go beyond the immediate goal of producing food. According to the CeeWeb for Biodiversity, there is a positive correlation between organic matter in soil and the retention of both water and carbon.

For us, it all fits together into the whole of what we are trying to accomplish with our ranch business, conservation practices in hopes that future generations will inherit a healthier earth.

Our cows support the ranch —not the ranch supporting the cows. Our ideal cow is one that not only survives but thrives on our ranch.

### Weaning Nature's Way

- » Run calves on their mommas through the winter
- » Social aspect
  - > What kinds of plants to eat
  - > How to lick snow
  - >Where to hang out during storms
- » Much lower labor costs
- » No sickness
- » “Weaning” is a non-issue

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Steve and Nancy Oswald  
Cotopaxi, Colorado

### Our Story

Our ranch has been in the family more than 70 years. But our history goes back even farther when Nancy's great-grandparents ranched along Texas Creek about 10 miles away in the late 1800s.

In 1991, we went into business for ourselves with the purchase of 24 bred heifers and ran Dad's cattle on shares, eventually buying his interest in the operation.

### Our Mission

Be ecologically sustainable and economically profitable

Grow nutrient dense healthy foods

Connect people to where their food is raised

Have fun

### Ranch Enterprises

- |           |                  |
|-----------|------------------|
| Cow/calf  | Direct marketing |
| Yearlings | Hunting          |
| Finishers | Trail rides      |

“All of this would be for nothing if the Oswald's grazing management and planning were not at the forefront of their operation. The grazing, the precipitation records, the land monitoring—it all influences their planning and decision making. It is the informed use of a holistic decision model that I believe fosters their success.”

—Joshua Tashiro, Range  
Management Specialist, NRCS

### Rangeland Monitoring



Our monitoring is showing trends that we are concerned about compared to our 1999 benchmarks :

- Bare ground remains too high although slightly reduced — *negative trend*
- Litter cover has not increased — *undesirable trend*
- Species diversity is unchanged — *undesirable trend*
- Vegetation basal density has increased — *positive trend*

We have adjusted on the things we can control. But we believe drought since 1999 tells the story.

- » LandEKG by Charlie Orchard, Montana rancher
- » Ecosystem health is assessed
- » 11 permanent monitoring sites on the ranch
- » 200 ft long transect line
- » Photo points every 50 ft plus landscape shots
- » Soil surface cover measurements
  - > Litter
  - > Vegetation basal area
  - > cryptograms
  - > Rock
  - > Bare ground
- » Four ecosystem process are evaluated:
  - > Mineral cycle
  - > Water cycle
  - > Energy flow
  - > Biotic community

### Pivotal Moments—Ranching for Profit School

Not long after our return to the ranch, Steve attended the Ranching for Profit School which became pivotal in ranch changes, including adding cross-fencing to improve land and pastures and shifting the breeding season to allow for summer calving. The Ranching for Profit School training emphasizes:

- » Economics and finance — *increase profit to improve quality of life*
- » Ecological aspects — *optimize natural resource functions*
- » Shifting paradigms — *work with nature, not against it*
- » Work **on** managing the business vs. working **in** the daily business

### Major Changes

Major shifts in our operation to improve profitability:

- » Sold all haying equipment
- » Shifted calving season
- » Eliminated unnecessary inputs that were masking ineffecient genetics
- » Changed genetic selection criteria
- » Enhanced grazing practices

### Strategies to Increase Ranch Profit

- » Focus on improving pounds of beef raised per acre—not individual animal performance
- » Increase gross margins per unit
- » Lower overheads
- » Increase turnover

Today our business includes marketing of natural grass fed beef to consumers and promoting sustainable, profitable agriculture. We are committed to carrying on the heritage of the ranch in a world of change. We are connected to both the land and our past with the hopes of passing on a legacy of ranching, agriculture, and land stewardship to future generations.



High-density, managed grazing

### Tactics to Achieve Goals

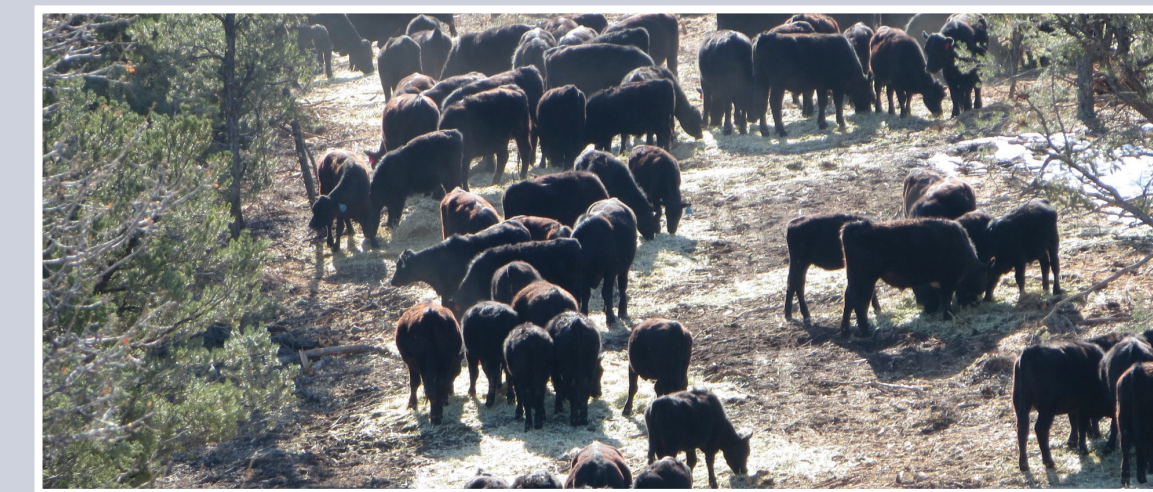
We have a multi-tiered approach to making the ranch profitable.

- » **Correct size of our cows to match our environment**
  - > Mature cows weigh on average 1,050 to 1,100 pounds
  - > Most efficient size of cows on our ranch
- » **Calve in sync with nature**
  - > Calve from June 10 through July 25
  - > Match highest forage quality with highest animal nutrition requirements
  - > No stress on the calves
- » **Prescribed grazing management**
  - > Holistically planned grazing to achieve:
    - ☑Shortest grazing periods
    - ☑Longest possible recovery periods
    - ☑Highest practical stock density
  - > Riding/herding using low-stress handling to place cows where grazing is needed

### Brush Management

We have started removing encroaching stands of pinyon and one-seed junipers. The goals are:

- » Increase herbaceous plant diversity
- » Regenerate soil health
- » Add to forage production
- » Restore hydrologic cycle
- » Improve wildlife habitat



Animal impact following brush mitigation

### Drought Management Plan

We have been dealing with drought conditions on the ranch since the turn of the millennium. Below average precipitation has become the new norm for us. We de-stocked heavily in the early 2000s and continue to run with reduced numbers of livestock. Ranching with such wide fluctuations in growing season precipitation presents us with more of a challenge than does the fact that our environment is semi-arid with an average annual precipitation of 16 inches. We take drought planning very seriously as part of our holistic grazing strategy.

- » Focus **on** managing the business, **not** the daily chores
- » Drought proof the ranch as much as possible **before** it quits raining
- » Prepare the soil for maximum moisture retention for when it does rain
- » Never assume, or hope, it will rain and delay decisions
- » Follow the drought plan
- » Don't hesitate—**act**