

July 2020 // SPRING // VOL: 1 ISSUE: 7

BEYOND 21st CENTURY AGRICULTURE INSIGHT & TIPS

CALCINE

Better Farming Through Better Soil



Calcine-Treated Water Fixes Salty, Compact Soils, & Reduces Irrigation Needs..

With heavy irrigation, soils often become high in salt, a condition that tends to require even more irrigation. On affected farms, water use increases and plant performance declines. Salty soils also negatively impact soil structure by breaking down soil aggregates, leading to soil compaction, sealing and reduced water-holding capacity. Biological activity also slows, further harming soil structure and plant growth. When added to irrigation water, Calcine mobilizes salt out of the root zone and improves soil productivity. Calcine, when used as a water treatment, has been shown to:

- **Amend salty soils.** Calcine mobilizes salt out of the root zone, reducing sodium, chloride and carbonate salt concentrations in the soil.
- **Improve soil structure.** Flushing salts from the root zone leads to a plethora of soil health benefits. These include improved water infiltration rates, less ponding and improved permeability.
- **Boost nutrient-holding capacity.** Salts eliminated through Calcine application can be replaced by higher-value nutrients such as calcium to flocculate the soil. Calcium helps open sealed soils by acting like a binding agent for other nutrients. When salts are replaced by calcium and other nutrients, soil fertility, structure and permeability further improve.
- **Reduce water dependence.** Following application in 2015, an Arizona alfalfa grower reduced water use by 37 percent after four months of treatment. Because Calcine dramatically improves soil structure, soil water-holding capacity and permeability increase. This helps farms become more resilient to weather extremes and lowers irrigation expenses. And, because irrigation water is a leading contributor to sodic soil conditions, allowing farms to apply less water helps them break the sodic soil cycle.
- **Releases nutrients.** Field studies have shown Calcine to increase soil nitrate and phosphate concentrations without increases in nutrient application. This suggests that Calcine unlocks nitrates and phosphates in the soil, making them more plantavailable.
- Increase alfalfa quality. Application of Calcine has been shown to increase important forage components. Early analysis from a farm in Arizona reported higher protein, fat and calcium. Analysis also showed a reduction of sodium and chloride content, and higher total digestible nutrients. This illustrates Calcine's ability to move salt out of the root zone, making other important nutrients more available for plant uptake

SOIL QUALITY



BEEF COW Management Monthly Checklist – July



Rancher here are a few tips for the Month of June

- **1. Nutrition:** Have adequate water and shade available.
- 2. Health: Control Flies in Herd.
- **3.** Reproduction: Remove bulls after 60-days breeding season.
- **4.** <u>Marketing:</u> Study August and September 700-800 pound feeders cattle prices.
- 5. Business Planning: compare actual year-to date cash expenditures.



CowBos™ supplementation is formulated with a complete nutritional package for year-round feeding to beef cattle. In addition to protein and energy, CowBos has concentrated vitamin and chelated trace mineral levels. By managing intake and delivering controlled, consistent nutrition—CowBos helps you reach your production targets 365 days a year.