IRRIGATED PASTURE SEEDING RECOMMENDATIONS
FOR
SAN BENITO, MONTEREY, SANTA CRUZ COUNTIES

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BACKGROUND

According to the Agriculture Crop Report there are 9,400 acres under irrigated pasture in San Benito, Monterey and Santa Cruz Counties.

Irrigated pastures are grown where soil conditions are unsuitable for higher-value crops or in conjunction with dryland range operations or urban settings in 5-10 acre Ranchets.

PLANTS IN IRRIGATED PASTURES

Irrigated pastures in the three counties are usually made up of a mix community of plants, including legumes, such as clovers, trefoils, and grasses such as ryegrass, orchard grass and tall fescue.

ADVANTAGES OF GRASSES OVER LEGUMES

- They give better livestock bloat control.
- They allow higher dry-matter intake.
- Many grasses provide earlier spring grazing and later fall grazing than do most legumes.
- Some grasses develop a thick turf, which discourages weeds and reduces damage from livestock tramping.

ADVANTAGES OF LEGUMES OVER GRASSES

- They are higher in protein and mineral content.
- They maintain or improve nitrogen fertility by symbiotic nitrogen fixation.
- They provide higher summer production than grasses.
- Grasses alone without legumes or nitrogen fertilizer, tend to be unproductive and of poor quality.

LIVESTOCK PASTURE NEEDS

The amount of pasture an animal needs is estimated in animal units months (AUM) the AUM is the quantity of feed needed, for normal growth of a mature head of cattle or (800-1,000 pound animal) for one month.

It equals 400 pounds of TDN – (Total Digestible Nutriens) or 0.4 tons of hay.

A 400 to 500 pound weaner calf equals 0.5 animal units, a 750 pound yearling equals 0.75 animal units, and feeder cattle about 0.1 animal units for each 100 pounds of weight.

IRRIGATED PASTURE YIELD

Yields per acre of irrigated pasture vary considerably from month to month and from year to year. Also yields will vary from ranch to ranch and soil, climate, management differences. Pasturage may vary from a low of 5 AUM per acre for the season, to high of 30.

Twelve AUM per acre is a good yield expectancy in the Central Coast irrigated valleys. This yield is average over a 12-month period.

A properly stocked pasture, yielding about 12 AUM per acre should produce approximately 500 pounds of gain on young feeder animals.

IRRIGATED PASTURE PLANTING

October and November is the best time of the year to establish new irrigated pastures. After the weather has cooled and before the winter frost. Irrigated pastures can also be planted in the early spring but there is greater weed competition.

HOW MUCH WATER DOES IRRIGATED PASTURE REQUIRE

Irrigated pasture requires from 2 – 2 ½ acre ft/year depending on the soil and temperature. Pasture should be irrigated enough during the winter and early spring so the root zone will never dry out. This can be supplied by using 3 inches of water every 10 days. Heavy soils may go up to 14 days between irrigations.

WEED CONTROL BEFORE PLANTING

Land grading will reduce low spots where weeds tend to establish. A common practice to reduce weeds is to grow a hay crop or grain crop prior to seeding the pasture. Weed control can also be accomplished by irrigating weeds up and disking them before they mature. Herbicide application before seeding is also a practice to reduce weed population.

SEED BED PREPARATION

When preparing for seeding, the soil should be firm enough so that the soil particles are in close contact with the seed. This is accomplished by disking, harrowing and ring rolling. After seed is broadcast soil should be ring rolled again and if seed is drill ring rolling is not necessary. Seed should be planted from ¼ to ½ inch deep in the soil.

LEGUME INOCULATION

Clover seed should be inoculated with nitrogen fexing bacteria before planting. This is important because many soils either lack root module bacteria or contain those that do not fix nitrogen. You can do your own inoculation, by mixing inoculate with seed just prior to planting.

GRAZING MANAGEMENT

Soil moisture and vegetation growth determines when grazing should start on a newly seeded pasture. Grasses should be at least four to six inches high and the top two to three inches of soil should be dry.

The irrigated pasture should be divided into a minimum of two fields by a fence. Grazing and irrigation should be rotated so that livestock are not in the field that is being irrigated.

ACRES NEEDED PER MATURE LARGE ANIMAL

A mature large animal will eat 4 ½ to 5 tons of hay or its forage equivalent on a yearly basis. This amount of forage can be supplied from one acre of well-fertilized irrigated pasture. An irrigated pasture will produce about 80 percent of its yearly production from March through October.

IRRIGATED PASTURE MIXES
FOR
SAN BENITO, MONTEREY, AND SANTA CRUZ COUNTIES

Mix #1 **Cattle**

Variety	Lbs/Acre	% Mix
Akaroa Orchardgrass	7	40
Ariki Perennial Ryegrass	3	18
Wimmera Annual Ryegrass	2	12
Salina Strawberry Clover	3	18
Narrowleaf Birdsfoot Trefoil	2	12
Total	17 lbs/acre	100%

Mix #2 **Horses**

Akaroa Orchardgrass	10	40
Ariki Perennial Ryegrass	5	20
Wimmera Annual Ryegrass	2.5	10
Kenland Red Clover	2.5	10
Salinas Strawberry Clover	2.5	10
Narrowleaf Birdsfoot Trefoil	2.5	10
Total	25 lbs/acre	100%

Mix #3 **Sheep**

Ariki Perennial Ryegrass	8	40
Wimmera Annual Ryegrass	4	20
Palistine Strawberry	5	25
Narrowleaf Birdsfoot Trefoil	3	15
Total	20 lbs/acre	100%