Winter Grass Pasture For Low Desert Valleys In Arizona

Michael Ottman
Agronomy Specialist

David Kopec
Turf and Pasture Grass Specialist

Crops that can be used for winter grass pasture are barley, oats, wheat and common or tetraploid ryegrass. They may be planted alone or in combinations. Winter pastures will not produce as much forage nor require as much irrigation water as do summer pastures. By overseeding Bermuda grass pastures, the grazing season may be extended through the winter months. If properly grazed, irrigated, and fertilized, Bermuda pasture production will not be reduced during the following summer months.

Planting Time
Oats or ryegrass — October; wheat or barley — mid-September to mid-October. Winter grasses do not grow well in temperatures above 85° F.

Seeding Rate
For barley, oats and wheat in clean, tilled soil, seed 150 pounds per acre broadcast; 120 pounds per acre drilled. Reduce this to 100 pounds per acre when overseeding Bermuda grass by drill. Heavy stands retard Bermuda grass recovery the following spring and summer. Ryegrass overseeding rates for Bermuda grass are 20 pounds per acre by drill; 30 pounds per acre if broadcast.

Planting Methods
Divide acreage into three or four pastures and plant at intervals of 10 to 14 days. This aids pasture management options. Drag or harrow lightly after broadcasting. Set the drill at 1 to 1.5 inches if planting in dry soil, then irrigate, or at 1.5 to 2 inches if planting in moist soil. For ryegrass, set drill at 0.5 inch.

Fertilizing
Preplant nitrogen and phosphorus applications should be made using soil test information. See Extension Bulletin #8366, Fertilizing Small Grains in Arizona, for guidelines. The required preplant fertilizer application will not exceed 50 to 100 pounds N per acre and 50 to 100 pounds P₂O₅ per acre. Apply 30 to 50 pounds N per acre after each harvest. Excess fertilization may result in nitrate poisoning.

Irrigating
Apply enough water near planting time to wet the soil to approximately a 3-foot depth whether preirrigating or irrigating up. Irrigation will be necessary before the first harvest when 50 percent to 75 percent of the plant-available water in the active root zone is depleted, which usually occurs when the plants are four to six inches tall. Irrigation usually will be necessary after each harvest if another harvest is to follow. The amount of water applied with each irrigation should return the soil to field capacity to at least an 18-inch depth with ryegrass and three to five foot depth with small grains.

Harvesting and Management
Pasture will be ready to harvest six to seven weeks after planting, at the beginning of the jointing stage of growth. Under normal weather conditions, harvest intervals will be 40 days in winter and 20 days in spring. A pasture planted in early October should be ready to harvest November 15, January 1, February 15, March 15, April 5, and possibly, (oats) May 1. Oats or barley will provide pasture for about two animals (1,000 pounds) per acre. Ryegrass may be
harvested for hay in the spring after pollen shed, if the stands have not been regularly grazed throughout the winter. In such a case, regrowth after harvest will provide some grazing into the late spring or early summer. For maximum production, clip or graze in strips or fields that can be grazed in five to seven days. Do not clip or graze more closely than two to three inches from the ground. Do not let plants go beyond jointing stage prior to harvest. Remember that pasture alone will not supply animals with total nutritional requirements.

**Feeding Tips**

Plan to supplement pasture with some hay, grain or both; as well as salt and minerals. Provide a good water supply. Feed some dry forage, particularly when the plants are young and very high in moisture. Feed milk cows 1 pound of grain for every three to five pounds of milk produced. Growing beef animals will need two to four pounds of grain per day for satisfactory gains. For finishing beef, feed grain for the last 60 to 90 days.

**Summer Pasture**

Winter grass pasture may be converted to summer pasture in April. Bermuda grass and Giant Bermuda grass seed is ideally planted in April. Sprigging of hybrid Bermuda grasses is best done in late April or early May. Growth of established Bermuda grass pastures will be favored when low temperatures begin regularly exceeding 60°F. Sodagrass and forage species may be planted in April.