

Meamber Wildlife Fencing Project



Grant Agreement # 11333-0-J020
Project ID# 2000-PARNTERS-01

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Abstract

The purpose of this habitat restoration project was to build and maintain approximately 4,400 ft of livestock exclusion fencing to allow aquatic and riparian vegetation to grow around two ponds. Approximately 10 acres of wetland and grassland were protected. The vegetation will provide habitat for migratory and resident birds, amphibians, and rodents, and increase the prey base for raptors and mammalian predators. One quarter acre by one of the ponds was also planted with trees.

Introduction

The Meamber Ranch is located in the Shasta Valley, on the Oregon Slough, a tributary to the Shasta River in the Klamath Watershed. The ranch is valley grassland, and has been grazed for approximately 150 years. The ranch includes two ponds to collect and store irrigation water running off a neighboring property. The water is reused for irrigating pastures on the Meamber Ranch, thus conserving water. The ponds function to protect the water quality of the Oregon Slough and Shasta River by preventing much of this warm, nutrient-rich water from entering those waterways, although some water does overflow from the ponds.

The landowner, Don Meamber, was concerned that hoof and grazing impacts of cattle were preventing the growth of native wetland vegetation on the shores of the ponds. He came to the Fish and Wildlife Service for assistance, and the Service provided funds for materials to fence the cattle away from the ponds, and allow the vegetation to recover.

Methods and Materials

The fencing was installed by the landowner. The fence consisted of wooden posts every 100 feet, with 2/3 in. fiberglass rods in between, and 24 in. woven wire, with 2 strands of electrified smooth wire above the woven wire attached to the posts. Three hanging steel gates were installed to provide access to the irrigation pump on the north end of the lake and to the two irrigation outlet valves along the dam at the south end.

Three "Portugee gates" were installed at locations that were expected to be used rarely. One is used occasionally for stockwater access. Two stockwater troughs were used in the field west of the lake by Mr. Meamber, fed by water from valves near his shop. "Portugee Gate" is the local term used by ranchers to describe a gate that is constructed with wood poles or boards on each end connected by barbed or woven wire.

Mr. Meamber also planted trees by the southern pond before the fence was installed, and protected them from grazing by a hot wire. After rodents girdled a number of the trees, he placed plastic tubes around the trunks of the surviving trees to protect them.

Results and Discussion of Accomplishments during the Project

Approximately 2,375 ft of cattle exclusion fencing was constructed around the northern pond, and fenceposts were installed around the southern pond before the agreement expired. The wire for completing the fence on the southern pond has been purchased, and the landowner will finish the fence as soon as he is able. The completed fence will be approximately 2,175 ft., for a total of 4,400 ft. of fencing in the project. Approximately 10 acres of grassland and wetland vegetation have been protected within the fences.

Originally the plans for this project included the construction of off-pond watering troughs, but there was not enough money in the budget to do that. In fact, there were not enough funds in the agreement to buy all the needed fencing materials, so Mr. Meamber had to purchase some of them with an unanticipated cash contribution.

Trees were planted on approximately one quarter acre around the southern pond. The electric fence that was erected to protect the trees from grazing also had the effect of allowing lush growth of grass that provided good rodent cover. An unintended consequence of this was that the rodents chewed on the trees and caused some mortality. The landowner also intends to plant more bulrushes around the ponds.

Mr. Meamber is pleased with the results of this project. The nutrient filtering capacity of these ponds was improved by increasing healthy emergent aquatic vegetation, especially bulrushes (aka tules, (*Schoenoplectus acutus* var. *occidentalis*)). This nutrient removal from the water will benefit anadromous fish species in the Shasta River, including the listed Southern Oregon/Northern California coho salmon (*Oncorhynchus kisutch*) and Federal trust species such as fall Chinook (*Oncorhynchus tshawytscha*) and steelhead (*Onchorynchus mykiss*). The improvement in vegetation both in and around the ponds will provide more habitat for migratory and nesting song birds, ducks, geese, swans, mice, muskrats, turtles, frogs, toads, and those predators dependent on them, including hawks, owls, eagles, foxes, skunks, mink, weasels and coyotes. Species of concern that will directly benefit from this improvement include the Northwestern Pond Turtle (*Clemmys marmorata marmorata*), and Tricolor Blackbird (*Agelaius tricolor*). The Shasta Valley is particularly important for migratory waterfowl during very cold winters when lakes in the Klamath Falls and Tule Lake area freeze over, and large numbers of ducks and geese temporarily migrate to lower elevation wetland areas such as the state Shasta Valley Wildlife Area, (approximately 3 miles from the Meamber Ranch).

With the exclusion of cattle, the landowner expects it may be necessary to control Himalayan blackberries or other invasive non-native weeds.

Summary of Expenditures

All equipment and labor to complete project was supplied by Mr. Meamber. In addition, he made a cash contribution of \$747.00 for fencing materials.

Final Budget

USFWS	
Materials and supplies	\$6,600.00
Landowner	
Cash	\$747.00
In-kind	\$15,000.00
Total project cost	\$22,347.00

Pre-Project Photos

Southern Pond – looking southeast



Northern Pond – west shore looking north



Northern Pond - east shore looking northeast



Post-Project Photos

Northern Pond – outflow on west side, looking east



Northern Pond – east side looking south



Northern Pond – east side looking southwest



Northern Pond – west side looking south



Northern Pond – dam on south end looking west



Map

