



BENT'S OLD FORT

Wetlands

*James Gionfriddo, Denise Culver, Joe Stevens, Colorado Natural Heritage Program
Rinda Tisdale-Hein, U.S. Bureau of Reclamation*

RESOURCE BRIEF

Importance

The importance of wetlands has been widely recognized in recent decades. Wetlands provide many valuable functions, such as providing habitat for fish and wildlife; acting as natural filters to protect water quality; groundwater recharge and discharge; the storage of floodwaters; the stabilization of sediments; retention of sediment/pollutants; and nutrient removal from the water. Wetlands also provide opportunities for recreation, such as fishing, canoeing, and wildlife viewing. Many existing wetlands continue to face threats from various forms of development, water diversion, and invasion of non-native plants.

Status and Trends

There are seven wetlands located at Bent's Old Fort National Historic Site (BEOL). Four are on the north side of the Arkansas River (e.g., Arch wetland, Case Bolt wetland), and three are on the south side. Two recent projects have inventoried their plant species. A summer 2001 survey by the Colorado Natural Heritage Program set, and met, a goal of documenting at least 90% of the vascular plant species on the BEOL master list. Forty-one species were documented in the seven



NPS PHOTO

Arch Wetland

wetlands. An inventory of plant species was also conducted at the Arch Wetland in 2005-2006 by the Bureau of Reclamation. In this study, 82 plant species were documented in and around the wetland. Many of the new species were common weedy species or species planted as ornamentals. Lists of species in each wetland are available in the survey reports. Both studies, including functional assessments of Arch Wetland and Case Bolt Wetland in 2001, provide important information for future monitoring.

Arch Wetland, a 55-acre semi-permanently flooded wetland, is one of the park's key natural resources. It is dominated by cattails (*Typha latifolia*), with some bulrushes (*Schoenoplectus lacustris* spp. *acutus*, *S. pungens*). The wetland, which contains some open water, probably receives overflow from the river and irrigation water leakage from Fort Lyon Canal. Its large size provides good bird nesting habitat. A second wetland, Case Bolt Wetland, is a small, open water area that is probably permanently inundated. It also provides good habitat for birds.

Discussion

According to the second inventory, the diversity and abundance of plant species at the Arch Wetland would improve with the control of exotic plants. For example, in 2005-06 it appeared that cattails comprised >90% of the watered area and at least 70% of the wet soil area around the wetland. If natural succession of the wetland is allowed to occur, cattails may fill in all of the few open water areas of the wetland in the near future.



PHOTO: JOHN D. BYRD

Cattail

