

**ADAPTIVE MANAGEMENT AT GRAYS LAKE NATIONAL WILDLIFE
REFUGE, IDAHO^{TWS}**

Bill Pyle

U.S. Fish and Wildlife Service, Grays Lake National Wildlife Refuge,
74 Grays Lake Rd., ID 83285

Jane Austin

U.S.G.S. Northern Prairie Wildlife Research Center, 8711 37th St. SE,
Jamestown, ND 58401

Douglas Johnson and Janet Keough

U.S.G.S. Patuxent Wildlife Research Center, 11510 American Holly Dr.,
Laurel, MD 20708.

Management tools currently in operational use by wildlife refuges of the Intermountain Region will be assessed for their efficacy in maintaining habitat for breeding waterbirds and other biotic resources. Twelve units, 32-70 ha each with a total of 600 ha (1483 ac.) of Grays Lake National Wildlife Refuge, were devoted to a multi-year, replicated field experiment to test four management regimes: continuous idle, fall burning/idle, fall cattle grazing, and summer cattle grazing/idle. Each treatment will be applied to three randomly-selected units during 1997-2000. Each unit will receive standardized and repeated monitoring for breeding bird use; nest success by waterbirds and sandhill cranes; small mammal abundance; predator community composition; and composition and production of vegetation. Preliminary results from 1997-98, pre-treatment years, are discussed. The Service expects to base its long-term management of Grays Lake meadows upon study results.