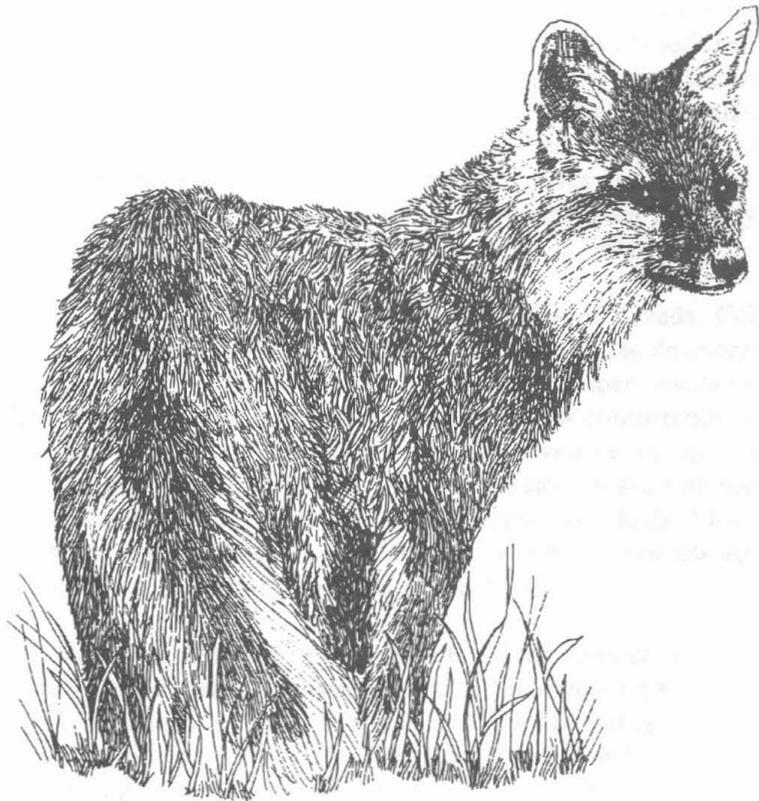

Introduction



Background

In late 1990, the Two Ponds Preservation Foundation, a nonprofit citizen's group, solicited U.S. Fish and Wildlife Service (Service) involvement in acquiring a small site in Arvada, Colorado (Figure 1). The citizen's group was concerned about a proposed residential development on 13 acres of open space. Service biologists reviewed the site and were impressed with the remnant wildlife populations and education potential of the land. The biologists recommended that the site and adjacent open space totaling over 80 acres be included in the Regional Wetland Concept Plan and be acquired under authority of the Emergency Wetland Resource Act of 1986 (P. L. 99-645).

At the time the Service was contacted, the City of Arvada, Colorado, was considering rezoning the area at the request of the developer, who was acquiring the property from a savings and loan institution. The Service conducted an acquisition planning process concurrently with the City's review of the proposed residential development. In 1991, the developer's purchase contract terminated, the savings and loan institution failed and Resolution Trust Corporation assumed title to the 13-acre tract proposed for development. By the end of 1991, Congress approved \$500,000 for the Service to begin acquisition.

The Regional Director for Region 6 of the Service approved the Environmental Assessment and Finding of No Significant Impact in April 1992. To establish Two Ponds National Wildlife Refuge (Refuge), the Service acquired the first 12.6 acres from Resolution Trust Corporation in May 1992, and acquired another 9.6 acres from the Lighter family immediately thereafter (Figure 2, Parcel 1). An additional 5.9 acres were acquired from Robert Cohen in March 1993 (Figure 2, Parcel 2). In September 1994, the Service acquired 16.5 acres of additional property adjacent to the property from the Lutheran Medical Center (Figure 2, Parcel 3).

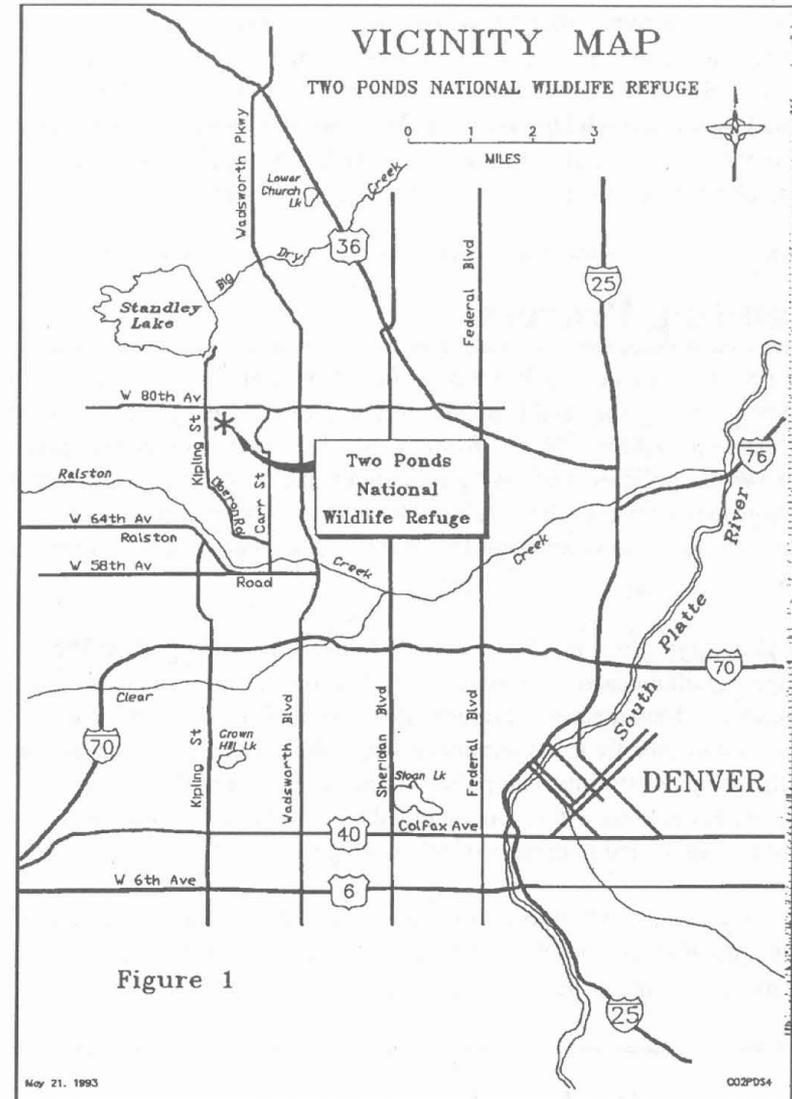


Figure 1

Lutheran will retain ownership of 20 acres of undeveloped land between the Medical Center and the north boundary of the 16.5 acres (Figure 2, Parcel 3). Six of the 20 acres comprise the Oxbow (Parcel 4) that is defined by the Church Ditch (Figure 2). This parcel will be managed by the Service as part of the Refuge for a period of 15 years, beginning in 1994. The Service has first right of refusal for the property.

Planning Process

The Two Ponds National Wildlife Refuge Comprehensive Management Plan is guided by the establishment purposes of the Refuge, the goals of the National Wildlife Refuge System, Service compatibility standards, other Service policies and plans, public input, and the laws directly related to refuge management. The Service will not actively pursue the acquisition of any additional land adjacent to the Refuge, except on a willing seller basis.

This plan establishes the objectives, guidelines, and strategies for the Refuge. It will be used to prepare detailed resource and education plans and budgets. Management or operational planning will be conducted annually and specific management actions adjusted based on monitoring results, fiscal constraints, and policy changes. The effects of major management actions will be documented to provide information to future managers and managers of other refuges.

Due to the size, its urban location, past agricultural use, and irrigation of the site, the Refuge does not meet the criteria for designation as a wilderness area under the Wilderness Act.

Community Involvement

The first public involvement in the property occurred in 1990 with the formation of the Two Ponds Preservation Foundation. It was through their effort that the Refuge was preserved. Since 1990 this group has been very active in working with the Service in acquiring adjacent properties and

reviewing and commenting on Refuge plans.

Beginning in 1990 the Service held several public meetings. These included meetings in February and September 1992 and March and September 1993. Citizens provided comment on Service plans for the Refuge. Their comments were considered in preparing this final Comprehensive Management Plan.

Between 1993 and 1995, Service personnel worked closely with Two Ponds Preservation Board members in reviewing and updating the plans for the physical development of the Refuge. Lutheran Medical Center management staff worked with Service staff to provide public parking facilities at their 80th and Kipling facility for small groups wanting to tour the Refuge. They also were active in obtaining letters of support for a grant application to the Go Colorado Foundation in 1995.

Other community support came from the City of Arvada. They furnished heavy equipment at no cost to assist with the removal of old fence at the Refuge and pledged monetary support for different grant proposals in partnership with the Service. The City also provided meeting space for public meetings concerning Refuge planning and development.

At the 1993 Annual Meeting of the Two Ponds Wildlife Preservation Foundation, a list was compiled of private citizens and organizations that have provided support for the Refuge. (See Appendix J). In addition to the organizations listed, science teachers from three different Arvada Public Schools near the Refuge have volunteered to serve on a committee with Service personnel to draft an environmental education program for use at the Refuge.

Refuge Description

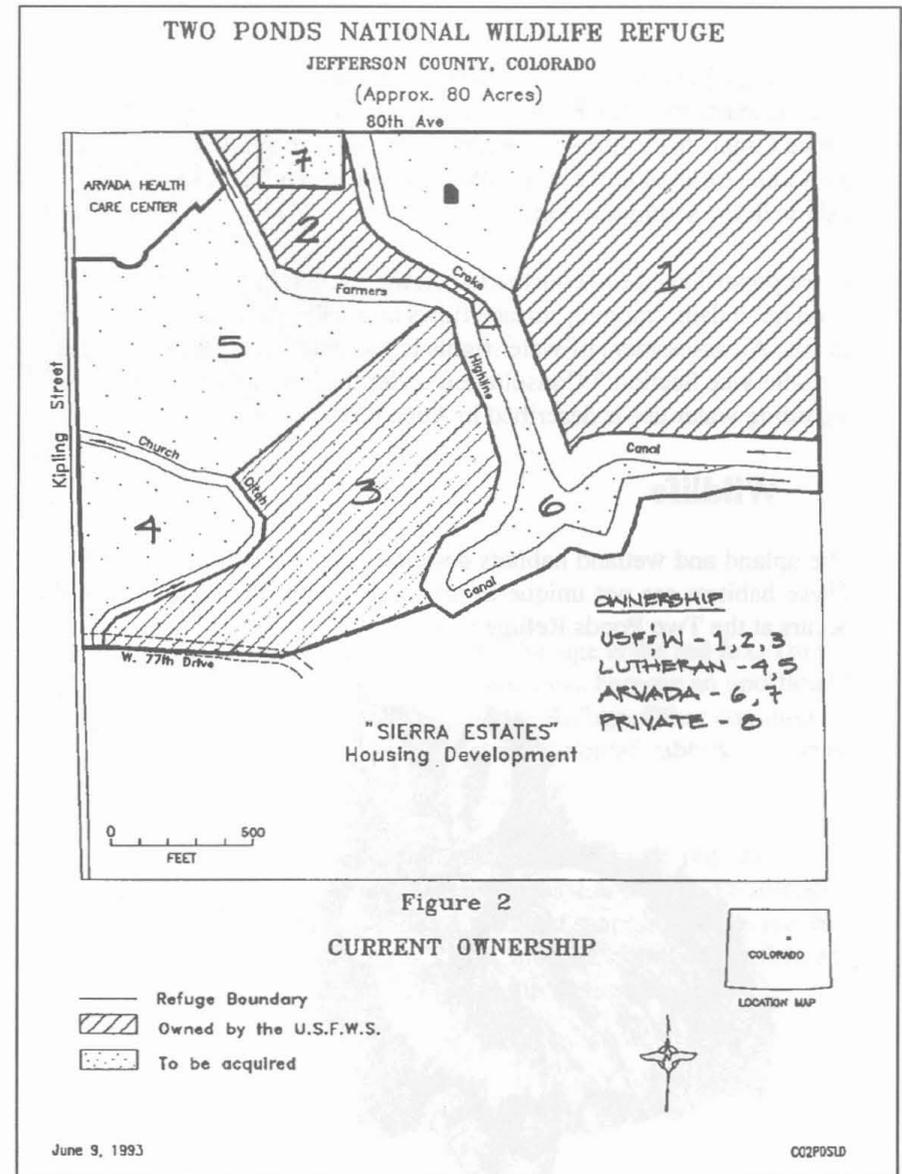
The area around Two Ponds Refuge encompasses a variety of land uses (Figure 3) within a typical suburban setting. Single family residential houses dominate land use along the south, east, and north boundaries. Retail businesses are located to the north and west on the north side of 80th Avenue.

Uplands

Grasses, predominantly brome, are the main ground cover on the Refuge uplands. Alfalfa is common within the brome. Needle-and-thread grass and other mid-grass prairie species are found in greater abundance on hilltops and knolls. Yucca and rabbitbrush are found on the drier sites. Trees, primarily plains cottonwood and Russian olive, are scattered along the canals (Figure 3 and Appendix F).

Wetlands

Two basic types of wetlands occur on the Refuge: open ponds with emergent vegetation around the fringes and moist soils or seepage areas with monotypic stands of cattails (Figure 3). Sandbar willow, Russian olive, and cottonwoods occur along the edges of the cattails.

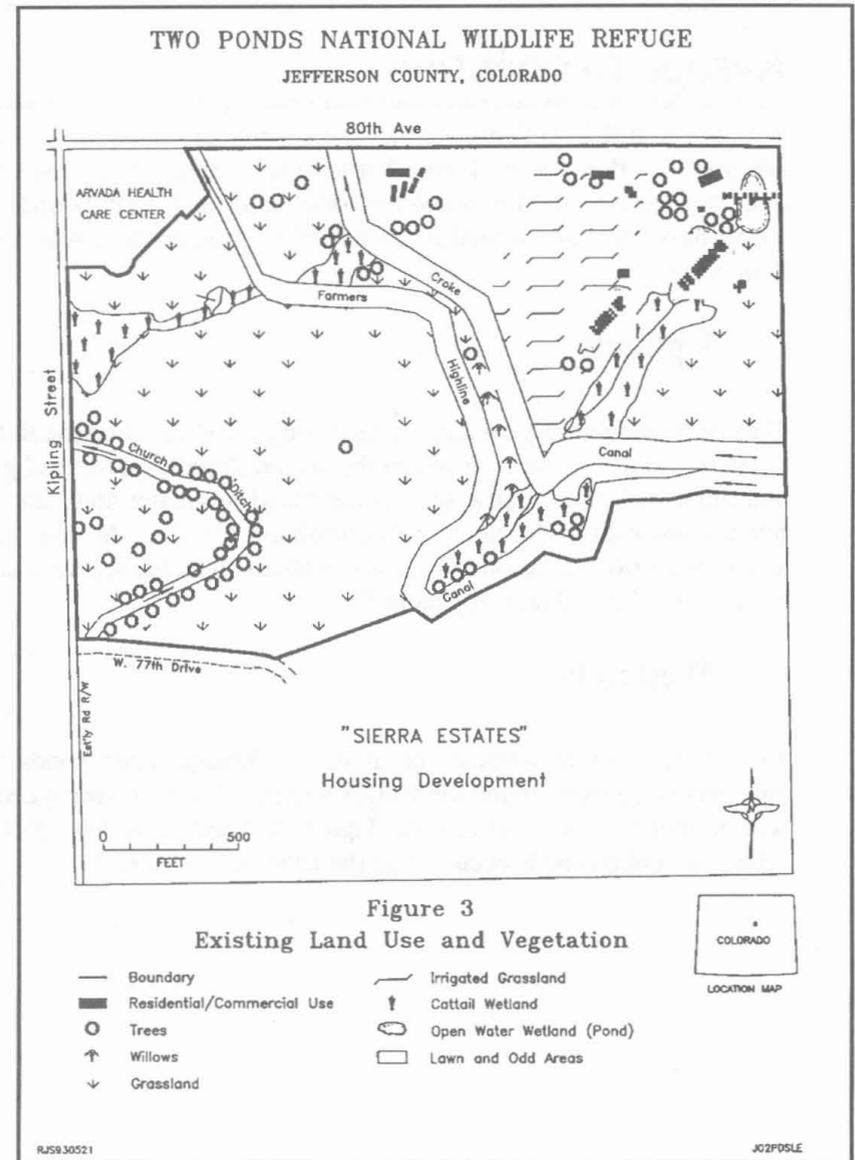


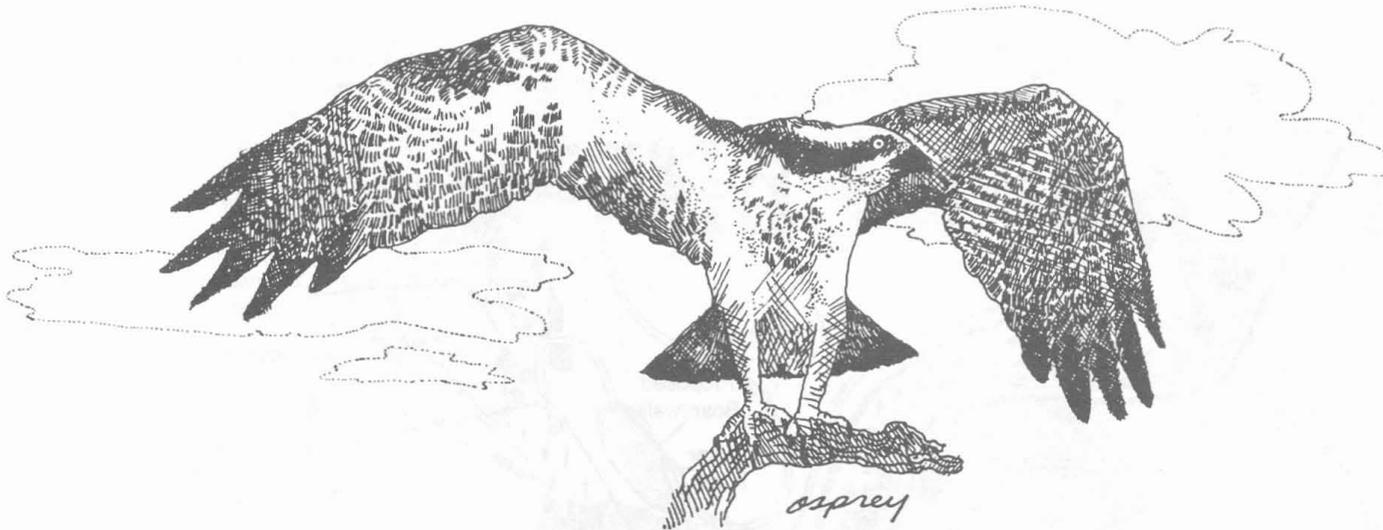
Three irrigation ditches, the Farmers High Line, Croke, and the Church Ditch Canals, cross the Refuge (Figure 3). The Farmers High Line and Croke Canals bisect the site roughly from north to south and also form the southeast boundary of the Refuge. The Church Ditch forms an oxbow in the southwest portion.

Three ponds have been constructed on the site totaling 1.5 acres. Each pond has a dam, trapping surface flows and seepage from the irrigation canals. An assessment of water rights is presented in Appendix G. An Intra-Service Section 7 Consultation under the Endangered Species Act regarding water use is described in Appendix H.

Wildlife

The upland and wetland habitats described support a variety of wildlife. These habitats are not unique to urban areas, but the combination that occurs at the Two Ponds Refuge is rare.



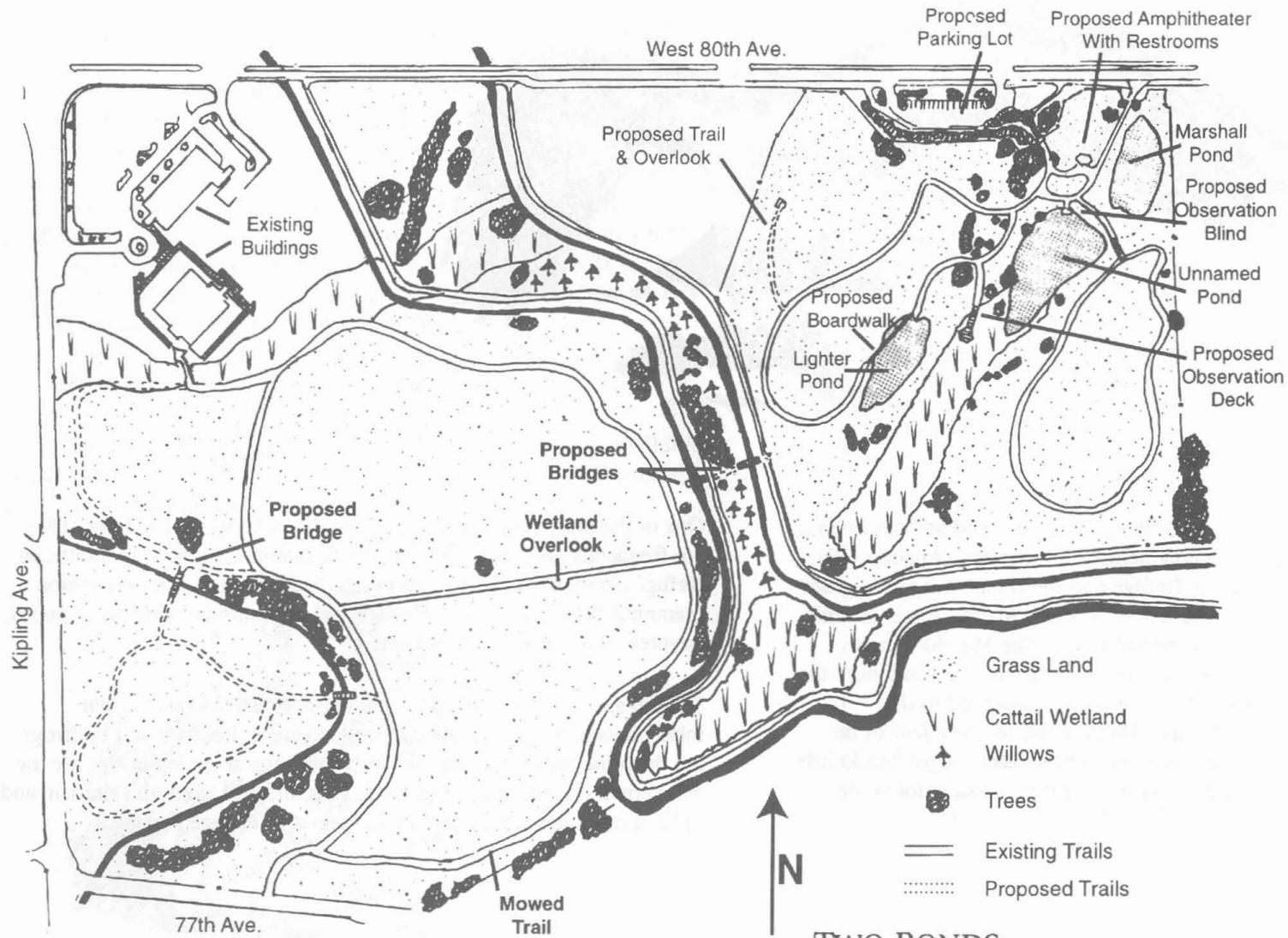


Approximately 94 species of birds have been observed at Two Ponds Refuge by Service volunteers conducting bird surveys (Appendix E). Ten of these species nest at the Refuge and the remainder are migrant species seeking food, cover, and roosting sites. Mallards nest around the ponds; ducks and geese forage and rest on the Marshall Pond (Figure 4) year-round. Hawks and owls roost in the trees and hunt the grasslands. A Swainson's hawk nest has been observed in the cottonwood trees above the Church Ditch in the western half of the Refuge. Muskrats and raccoons use the ponds. Red-winged blackbirds nest in the cattails. A black-crowned night heron roost is found on Marshall Pond.

One of the most common mammals at the Refuge is the red fox. They are frequently seen by nearby residents and have become an unofficial Refuge symbol. Red foxes build dens on the Refuge. Other common mammals at the Two Ponds Refuge include cottontail rabbits, raccoons, coyotes, muskrats, and mule deer.

Several species of amphibians, reptiles, and fish also are regular inhabitants in Refuge ponds and wetland areas. Leopard and bullfrogs are the principal amphibians while painted and snapping turtles are the most common reptiles. Largemouth bass, bluegill, common sunfish, and fathead minnows are the main fish species in Refuge ponds.

FIG. 4



TWO PONDS
NATIONAL WILDLIFE REFUGE