



DOUBLE-CRESTED CORMORANT COLONY

OTHER WILDLIFE

Although waterfowl concentrations of spring, summer and fall are spectacular, the attention of bird observers is also directed to other birdlife making use of the vast and varied habitat. Salyer Refuge is in the geographical zone which separates eastern and western species and, therefore, hosts birds from both areas.

Many species of shorebirds and grebes, the white pelican, sandhill crane, lark bunting, longspurs, and the sparrows—including Baird's and LeConte's, are among the list that take summer residence on the refuge. A double-crested cormorant colony is located in the southern portion of the refuge.

The management of upland areas for waterfowl nesting habitat and food production also has benefitted upland game birds. The sharptailed grouse, which has been declining in many areas outside the refuge, has responded favorably. Ring-necked pheasants are able



FUR HARVEST

to cope with the rigorous North Dakota winters and produce young in the upland management areas. Gray partridge, ruffed grouse, and wild turkey are also occupants of the uplands.

Many interesting mammals can be found on the refuge. Beaver are plentiful along parts of the river. Other native fur animals such as the mink, raccoon, weasel, and skunk can be found at home in the marshes. The higher ground, which includes the sandhills area in the southern third of the refuge, harbors such animals as the white-tailed deer, coyote, red fox, badger, porcupine and rabbit.

ECONOMIC USE

The refuge is involved with many aspects of land management. Neighboring farmers grow crops on nearly 1,000 acres. Refuge share of the crop is either left standing or harvested for wildlife feeding programs. Haying is permitted on 2,500 acres after the waterfowl nesting season. Grazing is used as a management tool on about 4,000 acres annually.

Oil wells were first drilled on refuge lands in 1965 and today several wells are in operation along the boundary. Fur trapping is carried out on a limited basis with mink, muskrat, red fox and raccoon being taken. Other small scale uses include wood harvest for firewood and bee colony operations.

ADMINISTRATION

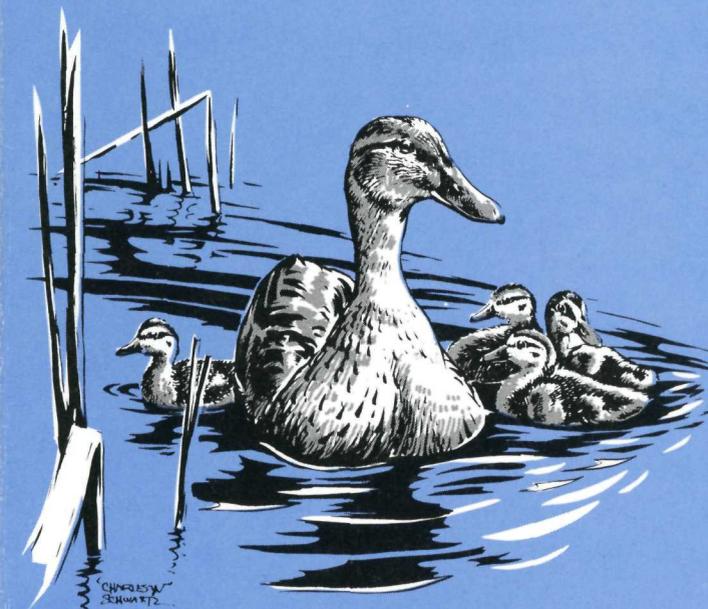
J. Clark Salyer National Wildlife Refuge is administered by the Fish and Wildlife Service, U.S. Department of the Interior. Headquarters is three miles north of Upham and can be reached by turning off U.S. Highway 2 at Towner, North Dakota and proceeding 26 miles north on State Highway 14.

Inquiries should be mailed to the Refuge Manager, J. Clark Salyer National Wildlife Refuge, P.O. Box 66, Upham, North Dakota 58789.

OUR NATIONS'S WILDLIFE

The National Wildlife Refuge System is a collection of lands and waters which was begun in 1903 when Theodore Roosevelt established tiny Pelican Island refuge in Florida. Now almost 400 National Wildlife Refuges enable you to catch a glimpse of a unique wildlife heritage, and provide you a yardstick against which you can contrast the quality of your own environment. Over 45 million acres of land and water afford opportunities conditioned only by your care and discretion for experiencing wildlife habitat of unequalled variety.

J. CLARK SALYER



UNITED STATES DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE



RF6-62620-1

GPO 854-427

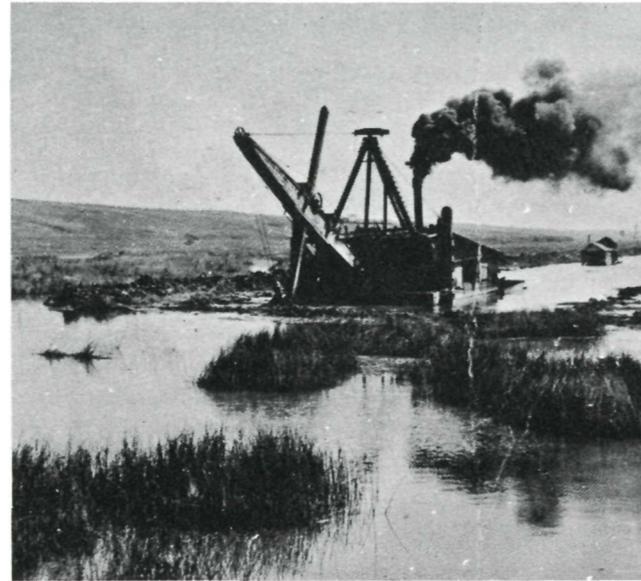


Revised 1987

NATIONAL WILDLIFE REFUGE
NORTH DAKOTA

J. Clark Salyer II (1902-1966) was chief of the Division of Wildlife Refuges, U.S. Fish and Wildlife Service from 1934 until 1961. His vision and hopes of a national wildlife refuge system are reflected here.

This refuge, containing 58,700 acres, was established in 1935 along the lower reaches of the Souris River in the United States. It serves as an important feeding and resting area for hundreds of thousands of waterfowl which annually migrate through the Central Flyway. The refuge also has been developed into one of the important duck production areas in the United States.



EARLY DREDGE—SOURIS MARSHES

A HISTORY OF MISUSE . . .

Prior to 1900 the prairies of North Dakota abounded with buffalo, waterfowl and vast expanses of grasslands that will never be known again. Shortly after 1900 man began breaking the sod and draining valuable lowlands with expectations of fabulous crop production. The marsh areas, however, did not lend themselves to complete agricultural use and many crop failures occurred.

Finally, most farming efforts were abandoned and the land was allowed to endure Nature's whim. The drought period of the 1930's added its devastating effect, and desolation of wildlife habitat was the ultimate result. Thus, man had once again initiated and aided complete destruction of valuable waterfowl habitat with an ill-conceived plan to produce cash crops on land entirely unsuited for this purpose.

During these critical times the Federal Government stepped in to establish refuge areas for the preservation, propagation and protection of waterfowl.

. . . THEN MARSH RESTORATION

To accomplish restoration of the marshes, a series of five low dikes were erected to create pools along the 75 miles of river included within the refuge boundary. Prior to flooding, nesting islands were constructed. Then, as the waters of the Souris River slowly inundated the valley once again, tons of aquatic plant seeds, stems, tubers, and roots were gathered from still-existing water areas many miles away and planted in these new marsh areas. Improved water conditions finally returned and large flocks of waterfowl responded to this haven for marsh-loving wildlife.

The refuge has now become a favorite spot for birds of all descriptions to stop on their migrations north and south. More than 250 species of birds have been observed since the refuge was established. Nearly 125 species have been found nesting.



DUCKS IN SOURIS MARSH TODAY
ED BRY

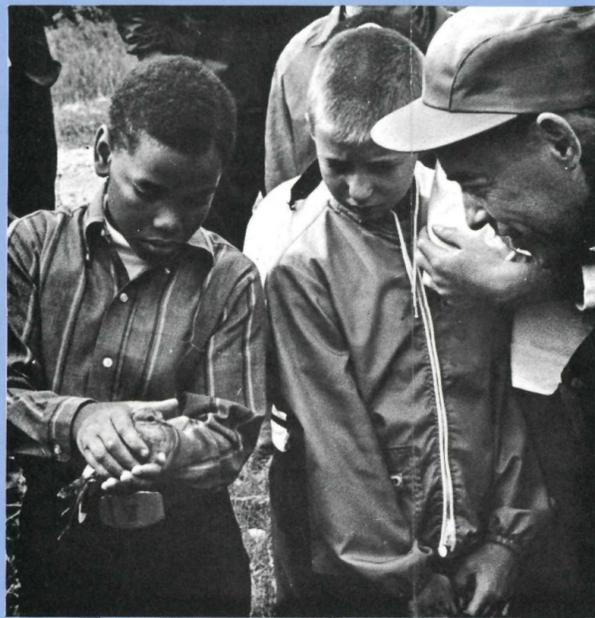
WATERFOWL TODAY

Peak waterfowl numbers of more than 200,000 birds have occurred during the spring and fall migrations, with more than 100,000 being the normal influx. During the summer, breeding waterfowl and their young are joined by thousands of moulting adult ducks from smaller water areas as far as 100 miles away, seeking the protection of the sheltered bays during their moult. They are flightless for several weeks during this period.

Refuge marshes contain 50 natural and man-made islands which provide excellent nesting habitat for waterfowl. Recent studies show up to 80 nests per acre may be found on some islands, and overall nesting success is much greater than on upland habitat adjacent to the marshes. While their total area is only about 75 acres, these islands may account for up to 30 percent of the

total refuge duck production in some years. Relatively high security from predation by mammals is the major factor in the hatching success of waterfowl nests on the islands. Gadwall, blue-winged teal, mallard and Canada goose are the most numerous island nesters.

A good example of the response of wildlife to a well planned management program is the re-establishment of the Canada goose as a breeding summer resident. History indicates that these magnificent birds were once nesters in this area but probably were eliminated during the homesteading era by overshooting. A small flock of captive birds was transferred here in 1937. Goslings which hatched from these few pairs have survived subsequent hunting seasons to return and raise young of their own. The nesting flock of wild "honkers" has gradually increased so that now from several hundred goslings are produced each year.



LEARNING ABOUT OUR ENVIRONMENT

FOR YOUR OUTDOOR ENJOYMENT

Scenic Trail A 22-mile auto trail beginning at headquarters and winding through the southern portion of the refuge before ending at State Highway 14 helps explain wildlife management programs and describes the marshland, wooded river bottoms and sandhills along the route. Trail is in generally good condition from early May through September.

Grassland Trail A five-mile auto trail leading north from the Newberg Road is open to the public. The trail goes through prairie grasslands and travels along the river marsh. Usually the trail is open from May 1 to September 15 — Travel not advised during wet weather.

Canoe Trail A unique 13-mile stretch of natural river bottoms rich in beauty, woodlands and wildlife. Floaters have the choice of traversing the entire length or a 5½-mile portion. An interpretive refuge leaflet is available for your use. (This trail is a designated National Recreation Trail.)

Photography and Birdwatching Many opportunities exist for interested amateur and professional people. Observation towers at headquarters and in the sandhills are open. The varied habitat attracts more than 250 species of birds and wildlife photography often is rewarding. Refuge bird lists and information on specific species are available at headquarters.

Hunting Upland game, big game and waterfowl hunting are provided in accordance with State seasons and regulations. Contact Refuge Manager for information on specific areas, yearly dates and regulations pertaining to hunting on a National Wildlife Refuge.

Fishing in Summer Fishing and boating shall be in accordance with all State laws and federal regulations. Fishing is permitted on 900 acres of refuge waters. Contact the Refuge Manager for information on the 13 open areas.

Winter Ice Fishing Ice fishing is permitted on all refuge waters between the dates of December 15 and the end of the State fishing season.

Picnicking Three picnic areas are located on the refuge.

Fires Open fires are prohibited.

Hours Refuge areas are open between 5:00 am to 10:00 pm daily.

* Contact Refuge Manager or check state proclamation for yearly dates and regulations pertaining to hunting and fishing. State license is required.



WOODED-MEANDERING RIVER BOTTOM

As the Nation's principal conservation agency, the Department of the Interior has basic responsibilities for water, fish, wildlife, mineral, land, park, and recreational resources. Indian and Territorial affairs are other major concerns of America's "Department of Natural Resources." The Department works to assure the wisest choice in Managing all our resources so each will make its full contribution to a better United States—now and in the future.

J. CLARK SALYER NATIONAL WILDLIFE REFUGE

UPHAM, NORTH DAKOTA

	SCENIC TRAIL		VILLAGE OR CITY
	GRASSLAND TRAIL		WATER AREA
	CANOE TRAIL		MARSH
	PAVED HIGHWAY		OBSERVATION TOWER
	IMPROVED PUBLIC ROAD		

