Crescent Lake
National Wildlife Refuge

Auto Tour Stop 1

Carp and other "rough fish" can be a serious problem when managing for waterfowl. If their numbers are excessive, their bottom feeding habitats will roil the water, causing turbid water conditions. Turbidity blocks sunlight, which in turn diminishes production of plant and animal life eaten by waterfowl. For this reason, carp were removed from Island Lake and game fish stocked in their place. This lake is open to fishing and you're invited to catch your limit of bass, bluegill, and perch.

Auto Tour Stop 2

Fire is a tool used by managers to alter habitat to benefit wildlife. Normally, some areas around Island Lake are burned each year to provide a foraging area for Canada geese. Unlike most waterfowl, geese utilize grass as a major food source and can be seen foraging succulent new grass. The island is also burned to provide a loafing area for birds.

Auto Tour Stop 3

The fire towers are two of many structures built on the refuge in the early 1930s by the Civilian Conservation Corps. Although the towers are no longer used for fire observation, they are serving wildlife. Several years ago, a barn owl gained access to this tower through a broken window, nested and produced several young. After the owlets reached flight stage, the window was repaired and an artificial nest box was attached near the top of the structure. For the past several years, barn owls have been produced from nest boxes on both towers.

Auto Tour Stop 4

Crescent Lake NWR is home to a pair of threatened bald eagles. The pair of bald eagles have been seen at Hackberry Lake in the spring for several years. In 1995, they produced two eaglets in their nest on the south end of the lake and have returned annually since then. Note the nest is in an area of the refuge closed to public access.

Auto Tour Stop 5

Sharp-tailed grouse have at least 45 known dancing grounds (or leks) on the refuge where males gather in mid-April to dance and display in hopes of attracting a female. One such lek is found to the east of here. On spring mornings you may be able to hear their low song. Or, you may make reservations to use a blind at the dancing ground to see them up close.

Auto Tour Stop 6

Canada geese are opportunistic in selecting nest sites. Muskrat houses, islands, dense marsh vegetation, even manmade nesting baskets are chosen as nesting places. Baskets (or tubs) filled with hay are comfortable and relatively safe from predators. The Canada goose is the first waterfowl to nest here each spring. Approximately 250 goslings will be produced on the refuge this year from 110 refuge-maintained goose tubs.

Auto Tour Stop 7

Refuge marshlands provide living creatures with everything needed for survival: food, water, and cover. Stems, leaves, seeds, and roots of many marsh plants are relished by ducks and other wildlife. Aquatic insects, high in protein, furnish nesting ducks and ducklings with essential building blocks for reproduction and growth. With plentiful food and water only a bill's length away, the needs of marsh wildlife for shelter are comfortably met by heavy growths of cattail and bulrush. Muskrats play an important role in keeping such heavy vegetation from choking a marsh by creating openings for their houses and food stockpiles. These structures are often used by waterfowl as nesting sites.

Auto Tour Stop 8

During the early part of the century, the wood duck population plummeted due to wetland drainage, timber harvesting and excessive hunting. Their numbers are being aided by the construction of manmade nesting structures. These structures replace the natural nesting cavities lost to timber harvest.

Auto Tour Stop 9

In the spring, a low-lying fence can be seen paralleling the road. This is part of a research project being conducted to study the ecology of the yellow mud turtle. As spring gets underway, the turtles, after spending the winter buried in the hillside, will begin migrating to Gimlet Lake. The fence will interrupt this journey just long enough for the researcher to collect data and mark the individual turtles. The turtles are then released unharmed.

This research project is deriving basic life history information of the yellow mud turtle. This information is valuable because the yellow mud turtle is on the endangered species candidate list. The candidate list consists of species whose numbers are low enough to be considered for listing as either "threatened" or "endangered".

Auto Tour Stop 10

Because trees are scarce in the Sandhills, the groves that have been planted on the refuge attract many small passerine birds, especially during the migration. Some common visitors include the western and eastern kingbirds, yellow-rumped warbler, robin, and white-crowned sparrow.

Another species that you may encounter is the loggerhead shrike. The shrike is another species which is on the candidate species list. Shrikes are perching birds, but are tenacious hunters, much like raptors. "Butcher-bird" is a commonly-used nickname of the shrike because of its unusual practice of impaling its prey (insects, small birds, and small mammals) on thorns and barbed-wire.

Auto Tour Stop 11

Goose Lake is one of several large lakes used by migrating waterfowl in the spring and fall. Open water and the two islands offer ducks and geese a place to feed and rest away from predators and human disturbance. At any time during the migrations, 10,000- 35,000 waterfowl can be found on the refuge. These lakes yield heavy growths of submerged aquatic plants eagerly sought and fed upon by migratory waterfowl.

Auto Tour Stop 12

While you are sitting here, underwater plants in the open water of this marsh are slowly killing it! As plants die, they decay. This material forms a mat on the marsh floor called "humus". Humus provides larger plants, such as bulrush and cattails, with a place to become anchored. As the larger plants die, they add to the humus layer and slowly they are able to move inward, covering more of the surface area of the marsh.

Grass and other plants along the shore will gradually occupy the fertile, drying humus left behind. This process is called plant succession. As a result of succession, the shorelines of a marsh eventually meet in the center. After hundreds of years, this marsh will disappear.

Auto Tour Stop 13

The grass-covered dunes of the Nebraska Sandhills are characterized by low rolling hills and steep-sided "choppies". Upland sandpipers, meadowlarks, and lark buntings are among the prairie birds that share the Sandhills with cattle, antelope, and deer.

Sandhill soils are extremely susceptible to wind erosion, overgrazing and vehicle abuse. Any of these actions which disturb the fragile grass cover can quickly result in "blowouts". Blowouts do serve some good. They are the home of the only endangered plant on the refuge, the blowout penstemon. Blowout penstemon is a wild flower which is found only in or immediately adjacent to active blowouts.

Auto Tour Stop 14

Duck numbers were in a serious decline in the late 1970s and 1980s. Much of this decline was attributed to the lack of suitable nesting habitat. Managers and researchers looked to the success of artificial structures used for geese and wood ducks. This led to the nesting structure you see attached below the goose tub. These structures have shown success elsewhere and were used for the first time on Crescent Lake NWR in 1995.

Auto Tour Stop 15

Small ponds such as these are valuable habitat for ducks. Ducks are somewhat territorial in the spring and the male has to defend his female from other males. These small ponds provide the privacy duck pairs need during courtship and breeding.

Auto Tour Stop 16

Blue-winged teal are the most common upland nesting duck at Crescent Lake NWR, followed by mallards, gadwalls, shovelers, and pintails. As we found out earlier, nesting habitat loss, in part, caused a decline in duck numbers.

A primary task on the refuge is to develop and maintain dense, tall, grassy habitat - the kind of nesting cover usually preferred by ducks. An incubating female duck or pheasant needs a secure place where she can sit on her clutch of eggs in relative safety from predators. Techniques used to improve nesting cover include grazing, haying, prescribed burning, and reseeding of native grasses.

Auto Tour Stop 17

The Moore Valley, which extends from Martin Lake (north) through Lower Harrison (south), provides a unique opportunity for managers, because it is a natural drainage system. By installing a system of earthen dikes and ditches, managers are able to control water levels.

You've learned about plant succession and the need for privacy by nesting pairs. By lowering water levels, burning the vegetation, and then flooding it again, plant succession can be slowed down. This allows for small openings to remain in the cattails and rushes. These openings provide the same privacy that the small ponds provide.

Auto Tour Stop 18

Smith Lake is home to the black-crowned night heron and the uncommon white-faced ibis. These are two of the six colonial nesters found on the refuge. Eared grebes, double-crested cormorants, black terns, and great blue herons are the other four.

Two theories suggest the reason for nesting in colonies. Detection of predators is the first. The second is the "information-center" hypothesis. It is believed that by following successful mothers foraging for food, inexperienced females can locate good hunting areas.

Auto Tour Stop 19

Border Lake is a good place to view shorebirds. Two species common to the lake are the American avocet and Wilson's phalarope. The avocet can be distinguished by the pale orange and black markings on its white body. Avocets feed by moving their bills through the water surface to strain out food. The phalarope is a smaller shorebird which feeds by sitting on the water, spinning in circles to kick up its food. It can then pick the food items up from the water surface.

Auto Tour Stop 20

As you come to the end of the tour, recall the Indians, trappers, pioneers and early duck hunters who sought abundant game here. We are indeed fortunate that many bird and animal species so familiar to those early Americans still thrive here today. This has not happened by accident, but by the foresight of those who established the refuge and by the care given to managing wildlife today. Truly, an American heritage has been passed on.

This auto tour and photos are credited to the Crescent Lake National Wildlife Refuge.