8 ALKALI BRUSHLANDS

Many areas of the refuge have salty or alkali soils. Only vegetation tolerant of saline soils will flourish in these areas. To your left is an alkali area in Sheppard Bottom. Greasewood brush, saltcedar, and saltgrass dominate the plant life. Although not ideal for waterfowl, ducks such as cinnamon teal commonly nest in saltgrass if it is near water. This area, due to its poor nesting cover and considerable distance to water, is of low value to waterfowl, but it is important to mule deer as winter cover.

To continue the tour route, turn right on the main road ahead and proceed to the next stop on the Green River overlook road (distance to stop, 1.2 miles). Turning left will take you back to the headquarters area.

9 PRAIRIE DOG COLONY

White-tailed prairie dogs are common upland residents on the refuge with colonies scattered through the desert in Leota Bottom and on the overlook bench. At this stop, a colony resides on both sides of the road. White-tailed prairie dogs are a high desert and mountain species. They differ from the plain's black-tailed prairie dogs by being smaller, less colonial, and of course, having a white-tipped versus a black-tipped tail.

Prairie dogs hibernate from October to March. The young are born in May and number from three to five. Because of the summer heat, prairie dogs go into a pseudo-hibernation or estivation in July. Look carefully, western burrowing owls are often observed standing on prairie dog colonies. They commonly nest in prairie dog burrows. The next stop is 1.3 miles.

10 DESERT GRASSLANDS

Here, desert grasslands receive only six to seven inches of annual rainfall which disappears quickly in the sandy soils. Deep rooted bunch grasses, such as needle and thread grass and the feathery headed Indian rice grass before you, are the primary grass species. The low shrubs with scale-like leaves are called shadscale and the abundant slender leaved, greener shrubs are rabbitbrush. Prickly-pear cactus abound, and along with other desert wildflowers, are quite beautiful in May and June. This habitat is extremely fragile, and recovers very slowly if damaged. Mule deer frequent this area during winter to eat the tips of shrubs. Other wildlife reside here, such as black and white-tailed jackrabbits, western meadowlark, sage sparrow, and many reptiles, including the short-horned lizard pictured above. These are just a few of the animals that live in desert grasslands. The next stop is 0.8 of a mile.

11 GREEN RIVER GEOLOGY

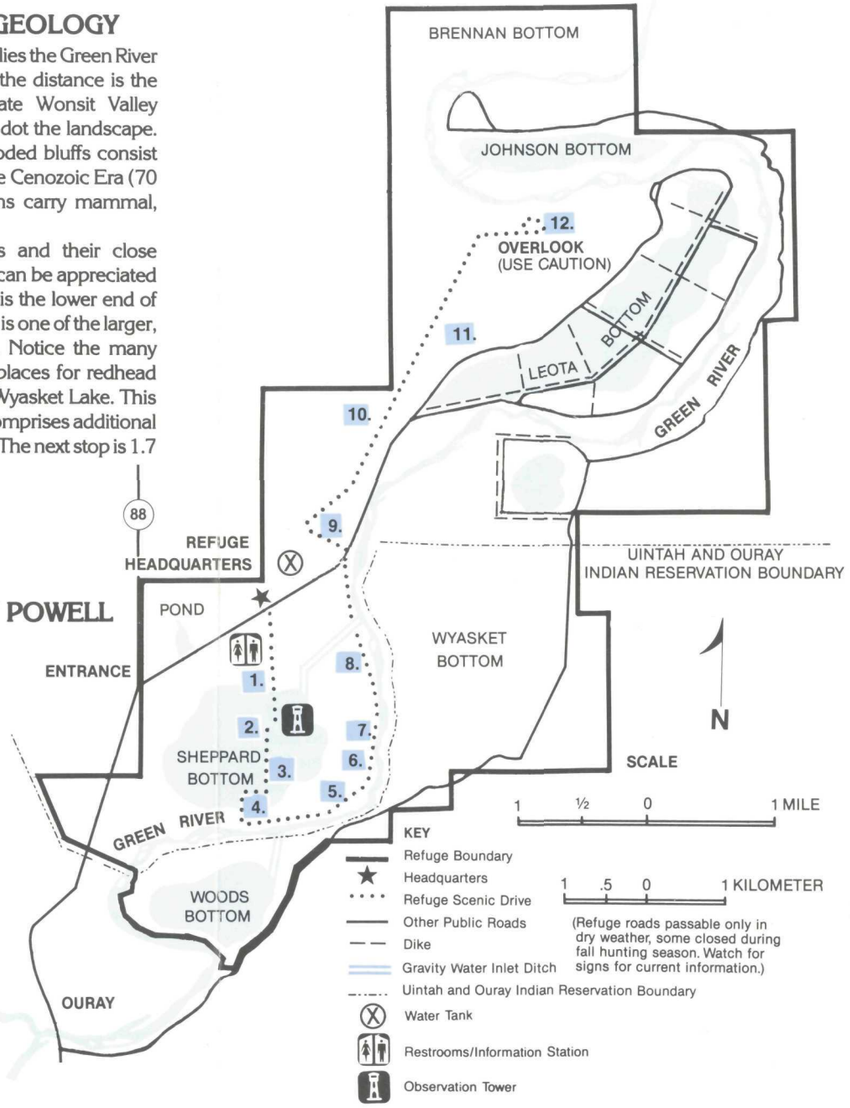
Before you, to the east, lies the Green River and its flood plain. In the distance is the expansive and desolate Wonsit Valley where oil and gas rigs dot the landscape. Geologically, these eroded bluffs consist of sandstones and shales formed during the Cenozoic Era (70 million years to present). These formations carry mammal, turtle, and fish fossils.

The true form of the bottomland areas and their close association and dependence on the Green can be appreciated from this elevated view. Directly below you is the lower end of the Leota Bottom Pond complex. This pond is one of the larger, more productive units for nesting ducks. Notice the many stands of bulrush providing good nesting places for redhead ducks. Across the river and to the right is Wyasket Lake. This whole area is called Wyasket Bottom and comprises additional nesting and migration habitat for waterfowl. The next stop is 1.7 miles.

12 GREEN RIVER OVERLOOK—JOHN WESLEY POWELL EXPEDITION

You are at the highest point on the refuge, Leota Butte (5,072 feet). This overlook provides an exceptional view of Leota Bottom to the east and Johnson Bottom across the river to the north. The northern boundary of the refuge lies just beyond Johnson Bottom.

The display in front of you tells the story of the Powell river expedition of 1869. This is the end of the auto tour route. As you leave the overlook, Pelican Lake will lie directly in front of you (westerly).



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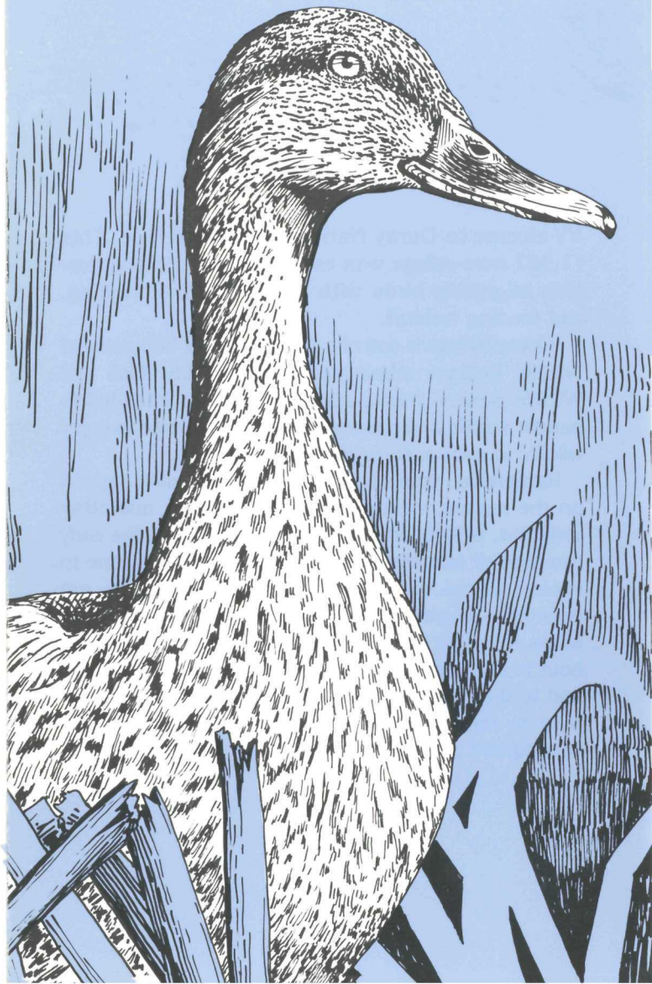
OURAY

NATIONAL WILDLIFE REFUGE

AUTO TOUR GUIDE



Welcome to Ouray National Wildlife Refuge. This 11,987 acre refuge was established in 1960 to furnish migrating birds with choice nesting, resting, and feeding habitat.

Ouray Refuge is one of a system of over 500 national Wildlife Refuges administered by the U.S. Fish and Wildlife Service. Management at Ouray is intended to benefit wildlife and provide people with a place to enjoy wildlife in natural surroundings.

Remember, your chances of seeing wildlife depend on the season, weather, time of day, wind, and other variables. Wildlife are most often seen during the early morning or late afternoon hours. You are welcome to explore places of interest on foot, but please do not drive off the graveled roads. There are 12 numbered stops along the nine mile route, which takes about one hour to complete. The first stop is 0.3 of a mile ahead and to the right of the information station. Check the map in this leaflet for the location of the first and subsequent stops.

FARMING FOR WILDLIFE

To your left lies 200 acres of fertile bottomlands cleared for farming purposes. Approximately 100 acres of milo, barley, winter wheat, and sweet clover are grown in a rotation system designed to minimize the use of pesticides and fertilizers. In the fall, strips are mowed into the crops to make the foods more accessible to ducks and geese. Waterfowl require high energy foods such as these for their migration flights. Deer, raccoon, and ring-necked pheasant also benefit from the food and cover provided by the crops. Refuge crops are irrigated via a system of wheelline sprinklers fed by an underground pipeline from Pelican Lake. The next stop is 0.7 of a mile.

MARSHLANDS, THE HEART OF OURAY REFUGE

The Sheppard Bottom pond area is one of five bottomland marsh complexes on the refuge. All units are diked for water control and use pipe inlet structures to distribute water from unit to unit. As Green River flows increases during the spring, water is directed into the ponds through gravity flow inlet structures and by pumps. By this process, water can be put into the ponds at the optimum time for breeding waterfowl. Ideally, the filling of the ponds should occur in early February, before waterfowl and waterbirds begin their Spring migration and start nesting.

WATERFOWL SUPERMARKET

Marshlands such as these yield abundant food, water, and shelter for migrating waterfowl. For those ducks that stay to nest, beds of aquatic plants provide nourishment. Their offspring—ducklings—prefer more concentrated, nutritious food. Minute animals, called invertebrates, fulfill this need and marsh waters often teem with these small food parcels. Scan the marsh carefully and you may see ducklings scurrying about in search of invertebrates.

Observe the growths of cattail and bulrush—good escape cover for a harried gosling. Frequently, these plants also provide over-water nesting places for redhead and ruddy ducks. Marshlands are actively managed by manipulating water levels to create good growing conditions for aquatic foods and cover. Bottom feeding fish, like carp, are controlled to prevent disturbance and subsequent muddying of pond waters. This helps maintain cleaner waters enabling good growths of aquatic plants and invertebrates to occur. The next stop is 0.6 of a mile.

SALTCEDAR—A BRUSH INVADER

The tall, slender, clumps of brush to your left are called saltcedar. This troublesome plant was brought into the United States about 100 years ago from the Mediterranean region. Below the 5,000 foot level saltcedar flourished and has invaded most of the drainages in the southwest, displacing natural willow. Saltcedar, or tamerisk, has slender foliage with small scale-like leaves and pink flower clusters. The name saltcedar refers to the tolerance of this plant to alkali type soil. This shrub does provide some cover and food for wildlife, but its usefulness is diminished by its tendency to take over an area. Control of saltcedar is done by mowing, prescribed burns with a follow-up spraying and/or flooding. It is a tough plant to control, once it moves into an area. The next stop is 0.9 of a mile.

COTTONWOODS

Cottonwoods grow in very thick stands along the Green River. Although of marginal value to waterfowl, cottonwoods provide cover, food and nesting sites for a wide variety of animals. Mule deer, raccoons, porcupines, Lewis woodpeckers, red-tailed hawks, great horned owls, yellow-rumped warblers, and other wildlife frequent the cottonwood groves. Great blue herons and double-crested cormorants nest in rookeries high up in cottonwoods on the refuge in Woods and Johnson Bottoms. Cottonwoods give the refuge a lot of its wildlife diversity and are a welcome feature providing shade to wildlife and visitor alike. The next stop is 0.5 of a mile.

THE GREEN RIVER—LIFEBLOOD OF OURAY REFUGE

The Green River meanders for some 12 miles through the refuge and is its primary source of water. River waters are directed to the ponds via canals cut through the river banks and by pumping. Flooding by the Green has caused damage to refuge dikes and control structures. This bulkhead is a reminder of what the river can do and depicts the problems faced in managing an area next to and dependent upon the mighty Green. The primary game fish of the Green is the channel catfish, although a sprinkling of other game fish are present. Endangered fishes also inhabit the Green, such as the Colorado pikeminnow and the humpbacked chub. The next stop is 0.3 of a mile.

UPLAND NESTING HABITAT

At stop 3, you observed growths of cattails and bulrush, nesting habitat for redhead and ruddy ducks. Most ducks, however, do not locate nests in such wet places, preferring drier sites. What you see before you is upland nesting habitat for mallard, pintail, gadwall, and cinnamon teal ducks. After selection of the nesting place, a hen lays about six to twelve eggs. Incubation takes 22 to 25 days. Upon hatching, the hen quickly leads the brood to water. In about two months, the fast growing ducklings will be airborne. The next stop is 0.6 of a mile.