

Oral History Cover Sheet

**U.S. Fish and Wildlife Service
“Refuge Program” SR #1
Oral presentation with slides**

The speaker is explaining how the Bureau of Sports Fisheries and Wildlife plays an important role in conservation on a local level to a national level. He briefly explains the National Wildlife Refuge System, and gives an overview of Upper Mississippi River National Wildlife Refuge. He also discusses the following: wood ducks nesting habitat, banding with dogs, banding Canada geese using cannon traps, eagle deaths pertaining to pesticides, recreation impacts such as hunting, law enforcement, and fishing, pollution impacts, and the Clear Air Campaign, Keep America Beautiful.

US FISH AND WILDLIFE SERVICE
“REFUGE PROGRAM” SR #1
ORAL PRESENTATION WITH SLIDES

[Music opens program]

UNIDENTIFIED MALE: It is always a pleasure to appear before groups such as yours and explain how our office of the Bureau of Sports Fisheries and Wildlife of the United States Department of the Interior plays an important role, not only in the national conservation picture but also in your local community and even in your personal lives. The Upper Mississippi River National Wildlife and Fish Refuge is one of three hundred and twelve refuges in the United States. The National Wildlife Refuge System was established more than sixty years ago to protect migratory game birds as they pass through the various states on their migrations between their nesting and wintering grounds. The refuges provide adequate habitat or in other words nesting, resting and feeding areas during their migration, and wintering grounds needed to perpetuate each species. Nearly twenty-eight and a half million acres are now within the National Wildlife Refuge System, which stretches from the shores of the Arctic Ocean westward along the Aleutian Islands nearly to Asia; south to the tropical islands in Hawaii and in the central Pacific Ocean; eastward to Puerto Rico and the Florida Keys and northward to the tip of Maine. Nearly every state has at least one National Wildlife Refuge. The National Wildlife Refuge System represents the most far-reaching and comprehensive wildlife resource management program, which has ever been applied to land in the history of man.

The Bureau of Sport Fisheries and Wildlife within the Department of Interior is in charge of this enormous Wildlife Refuge System. Most of the national refuges are particularly for migratory waterfowl such as ducks and geese. But there are a few to protect endangered species of wildlife such as the rare, six-foot tall Whooping Crane pictured here. There are less than forty-five “Whoopers” left in the world. Other endangered species are the Trumpeter Swan, the Bison, and the tiny Key Deer in Florida, which are the size of a dog. Did you realize that right in your backyard you have one of the largest wildlife refuges in the continental United States? The Upper Mississippi Wildlife Refuge extends from the foot of Lake Pippin, north of Wabasha, Minnesota southward to Rock Island, Illinois. It includes the majority of the river bottomlands in the Mississippi River valley in this two hundred and eighty-five mile stretch of the river. The Headquarters office is in Winona. The primary purpose of the Upper Mississippi Refuge is to provide resting and feeding grounds for migrating ducks and geese. The refuge is also a major nesting area for the beautiful Wood Duck. Did you know that right here in your own backyard you also have one of the largest publicly owned recreational playgrounds in the world? Were it not for public ownership, the river bottoms would be a maze of “No Trespassing” signs, as each private owner did his utmost to keep the public from invading his private summer recreational area; his private hunting club, or his island summer estate. Free public use of the rivers islands, marshes and sandbars would not exist. This program is to give you a bird’s eye view of just what some of our work is,

during the year. We are looked upon as Game Wardens, while actually Law Enforcement is only a very little part of our over all program.

Now, let us return to the ducks and geese. We have learned through research that the ducks and geese do not fly from the south to the north, and back again to the south on a helter-skelter pattern. But rather, that the majority follow four definite flyways or paths, in their migration. These four paths are outlined in different colors on the slide. This is the pathway of the Mississippi Flyway, which includes our Mississippi River. This pathway begins in the Arctic and extends all of the way down to the gulf coast states and on down into Central and South America. The majority of the birds using the Mississippi Flyway nest up in Canada, and winter in the Gulf States or further south. In other words, the area around Winona is a resting area, and a feeding area for the birds while they are in route either north or south. One major exception to this is the Wood Duck, which comes up to this area and then stays and nests.

This is a view of what the pothole country in Canada looks like. It is one of the most important nesting grounds for Ducks and Geese. The key to a successful Duck crop is water. There must be sufficient snow during the winter and rain during the spring and early summer to maintain water in these potholes while the Ducks nest and until the time they hatch. If a pothole dries out from lack of water there must water within not more than a mile that the little ducks can walk to. If they cannot reach water, they perish. If the pothole country turns into a group of dried out potholes like this, the duck crop is a failure and your hunting regulations require that the harvest be restricted to a small limit and, or, a short season.

Other factors in the fight to raise Ducks are drainage projects. Here, you see a drainage project of considerable magnitude. Every pothole that is drained means loss of nesting habitat for wild Ducks and Geese. This problem has become so very serious, that in the past few years that the Fish and Wildlife Service has embarked on a program of buying or leasing all of the major potholes throughout the nesting areas of North and South Dakota and northwestern Minnesota. These represent the major nesting habitat in the United States itself.

But now, let us return to the Upper Mississippi River Wildlife and Fish Refuge. It was established in 1924 and includes two hundred thousand acres of river bottomlands between Wabasha and Rock Island. It was set aside for the perpetuation of wild birds, native wildlife and fishes. It also provides hunting, fishing and other recreational opportunities for all. Signs of this type are made in our shop and erected at various look out points over the river to acquaint the general public with our program, and with what they are looking at. As the birds come north in the spring much of the area is still locked in ice. They do however, find open water and rest and feed throughout the Upper Mississippi Refuge on their way to the Canadian breeding grounds.

Most of you are acquainted with the system of locks and dams on the river, which divide the river into pools. The primary purpose of these dams is to hold the level of the water so that navigation is possible by the barge lines. In nearly every one of these pools

from Wabasha to Rock Island, we have what we call a Sanctuary Unit. Twenty percent of the overall acreage is closed to all hunting and serves as a waterfowl sanctuary during the fall. The rest of the holdings in the pools, or approximated eighty percent, are open to hunting on the basis of public hunting grounds and recreational area. After the duck and goose season is over, the rest of the area is open to public hunting and general public recreational use.

As I told you, the Wood Duck is our major nesting duck. It plays an important part in our program. We put out houses for him to nest in to supplement the natural cavities in trees. These houses are to be made as predator-proof as possible. In doing so, the hole is just big enough for the Wood Duck to enter, but not big enough for a Raccoon to enter. We take all possible steps to keep out such animals as squirrels and also snakes, which will rob the nests.

We trap Wood Ducks for banding. Here you see a trap that we use with some Wood Ducks in it that are being taken out by one of our men to band. Through the return of these bands by hunters when the birds are later shot we are able to trace their migration routes up and down the Flyway and where they shot on the Flyway; or perhaps where they winter. Another method of getting Wood Ducks to band is by use of the dog. When the young birds are still unable to fly, we cruise through the sloughs with a canoe and dog until we spot a brood of young birds. These birds are hazed along gently until they become frightened and run for shore to hide. Once they run up on the shore, we turn the dog loose and he gathers them up and brings them to us and we band them and release them. Needless to say, it takes a very gentle dog to do this kind of work without injury to the birds. This dog belongs to Liam Bronk, of Goodview. Duke has been used for a number of years and has caught well over five thousand birds with very, very few injuries. Here you see one of our staff with a string of bands around his neck, kneeling down banding birds that are coming out of that sack right beside his legs.

The Canadian goose is not a major visitor to this refuge, but to one of our other refuges just over in Wisconsin at Horicon. The Canadian goose is a major attraction there, and also over at Silver Lake at Rochester. Here you see an old 'honker' with a brood of young. What a wheat field looks like over at Horicon in the fall, is depicted in this scene. Here are literally thousands of Canada honkers coming in on their migration from the north, stopping at Horicon to feed on the refuge fields. It is quite an unbelievable sight and stops traffic for miles around as people come on Sundays to visit this magnificent spectacle of nature. Horicon is one of the major gathering points for Canada geese. Despite the thousands that rest here, the flock does require protection. Otherwise, it would be exterminated. Therefore, hunting around the refuge is governed by a quota of approximately ten to fifteen thousand birds per year. As soon as this quota is reached by the hunters the hunting of Canada geese around this area is closed. After the geese leave Horicon they continue on down the flyway, and a great many of them winter in southern Illinois around Cairo which again, is on a quota system to protect the flock so that sufficient numbers remain for the following spring season for nesting. Here you see a group of Canadas feeding in a wheat field and also, three 'snows'. This is a

flock of 'snows' [Snow Geese] taking up out of another refuge field at Squaw Creek Refuge in Missouri.

Goose banding is another major project on many refuges. Here you see a goose banding project by use of cannon traps. A series of cannon or mortars are used to throw a net out over a baited area on which the geese have gathered to feed. This same cannon trap is used by us for Wood Duck banding on the river. The geese are taken from under the net, banded, and again, a means is provided to trace the migration routes of the geese as well as many other things such as longevity; the number of birds that are shot, compared to the number of old geese that are shot, and other research material is gathered from this work. You can plainly see the band on this old honker's leg as he takes off after being ringed by the biologist.

Another portion of our work is to post all of the areas so that the general public knows that it is a Federal Refuge, and knows that is it public hunting grounds or sanctuary. He must also know that he can do only certain things on the land. These signs are put up one eighth to one quarter mile apart along all of the refuge boundary. And on the Mississippi Refuge, it represents approximately a thousand miles or more of line that must be posted in this fashion. Here you also see an act of vandalism or thoughtlessness in the destruction of one of these informative signs. The destruction of one of these signs represents approximately three to five dollars of sportsmen's money wasted and gone down the drain because some trigger-happy individual thought it made a good target. Much of the boundary line runs through the woods, and this requires that the line be brushed out so that the general public will know where the lines are and that he is on government property, and so that he will know what he can do and what he can't do.

When the opportunity presents itself, we build small ponds through the use of dikes and control structures, which permit us to regulate the level of the water. The small pond in the background behind the dike is drained as dry as possible in the spring. The vegetation is given a chance to grow on the mud flats. In late summer, the vegetation has grown to a lush crop and is seeded out and the gate on the control structure is closed. The pond is then flooded. As a result it is the same as flooding a grain field. We set the banquet table for the Ducks and they pile in and really have a feed. This is a close up view of one of the dikes, and shows the gate by which we regulate the water levels in the pond behind the dike. These are the mud flats when the pond is drained. We can seed the mud flats with wild millet or some other particularly attractive crop to waterfowl. Here is another structure that is put into the dikes. This is a tube that permits a flow of fresh water to come through the dike into a slough, which would otherwise be stagnant. This flow of fresh water increases fish life, improves fishing and the whole general habitat of the marsh.

Much of the refuge bottomland contains timber. Therefore it is only wise to harvest the mature timber and recover the money that it can be sold for, rather than let it go to waste. Timber to be cut is marked by the refuge staff as you see here. The refuge staff must scale the timber and supervise logging operations generally; keeping in mind that wildlife habitat is our primary interest. All hollow trees are kept for nesting sites for

Wood Ducks or nest sites for Raccoons, Squirrels or other animals. Oak, Walnut and other nut bearing trees serve as food for wildlife. The Oaks and their acorns are particularly for Wood Ducks. There again, they are all preserved and no cutting is allowed.

Where additional feeding area is necessary, we clear brush and other areas. This is a rotary brush cutter in action clearing an area preparatory to placing in it grain crops, or perhaps moist soils plants which are valuable food for wildlife. We are constantly making studies of vegetation, both on land and also in the water. Here you see two of the staff going through a line of vegetation in an open field. They are determining just what kinds of vegetation are growing there. This same thing was probably done last year. After the study is complete there will be a comparison to see just what changes there have been and why these changes occurred. These same studies are made in the marsh along certain lines and also in the water. The aquatic vegetation is studied to determine what changes are taking place from year to year and also why they took place.

The Upper Mississippi Refuge is noted for its concentration of Eagles in the wintertime. The Bald Eagles gather below the dams at the open water to feed on the fish that are available. This immense nest of a Bald Eagle was located near Elma, Wisconsin. The nest unfortunately, was unsuccessful because of all of the disturbance from the public along the river. The importance of the refuge as a wintering ground for the Bald Eagle can be pointed out by the fact that only a few thousand of these birds exist and they seem to be going down in numbers from year to year. So as you go along the river, particularly during the winter, if you see a large bird with a white head remember that it is a Bald Eagle. The eagle very possibly faces extinction despite the rigid protection that is given to the eagle at all times. Pesticides are also taking their toll on the eagle in perhaps much greater numbers than are even known. We gather all of the dead eagles that we obtain any information about and send them to the laboratory in Maryland for chemical analysis and autopsy. During one year, some fifty eagles were sent in from throughout the United States to the laboratory. It was found that with the exception of one eagle, which came from Alaska, every other eagle was carrying residue of pesticides such as DDT. We cooperate with sportsmen's clubs in their various projects of raising ducks, geese, and pheasants. Here are a group of birds being released that were raised by the Badger Sportsmen's Club of La Crosse.

We are often asked how we get about. Well, quite a fleet of equipment. Here you see our big boats with large motors on them and boat trailers. We have a Service airplane, which is used continually in the fall flying the length of the river inventorying the waterfowl population. If you see an orange and black plane flying low and criss-crossing the bottoms, you can almost bet that it is one of the refuge or Service biologists taking a waterfowl census. An airboat on the ice and in the water is another means of transportation. We also have specially adapted iceboats.

During the past few years, recreational opportunities have become a very important item in the American way of life. Tremendous increases in the numbers of hunters and fisherman are occurring annually. Back in 1955 it was estimated that

seventeen million people in the United States hunted or fished. Ten years later, in 1965 thirty-three million fished and hunted, double the number of ten years ago. Four billion dollars was spent just for hunting and fishing in 1965. Truly, recreation is a tremendously big business. In 1955 hunters and fisherman ran up over ten billion miles by automobile in the pursuit of game and fish. Ten years later in 1965 fishermen ran up twenty-two billion miles and hunters ran up eight billion miles for a total of over thirty billion miles of car travel. That is three times what it was ten years ago. Think of the part that this two hundred thousand acre public playground plays in the recreation picture today. This scene was taken on opening day of waterfowl hunting season, just north of Winona. Duck hunters are setting out to the public hunting area for a days hunt. When they reach the blind, they settle down for a wonderful day of relaxation and some hunting and perhaps, some ducks to eat. Many thousands of days of recreation are provided through duck hunting, and several thousand ducks are harvested. By this time, have you spotted the fact that you are looking at a huge blind, on a point with a great flock of decoys out in front? Here is another open water, four hole blind used out in Illinois with a huge flock of decoys. Here we find two successful Winona hunters with their bags, coming back in to the dock. Meanwhile, what are our men doing? Well, they are checking the hunters to see what they are doing. And they are perhaps counting the waterfowl along the marsh through the use of a spotting scope, like you see here. Or, perhaps they are inventorying the numbers of Muskrat houses out on the marsh to learn whether there are sufficient number of a trapping season and a fur harvest. And, incidentally to all of you people who use the river for recreation, or hunting, or fishing, this spotting scope is a twenty-power scope. At a half a mile away, you hold up a package of cigarettes broadside, and a man using the scope can tell you what brand of cigarettes you are smoking. A great area can be checked in this way from one man on the bluff with a short wave radio, and another down in the boat in the marsh. The spotter on the bluff can tell him what's going on during the hunting and fishing season and if there are violations, he can direct a man right over to the violator. Litter patrols quite often use a spotting scope and radio contact. And sandbar parties are watched to be sure that they are not discarding their trash on the sandbars. If someone is seen to throw beer cans in the water, back in the woods, or leave them on the beach, low and behold what happens? On to the radio, down to the patrol boat, over to the sandbar, and another litterbug bites the dust. And of course we do law enforcement. We check hunters, fisherman, campers for littering and all sorts of work. This man is in the act of apprehending a hunter for killing a Swan, which is a protected bird and on which there is no open season. We constantly inventory furbearer populations to determine if there is a harvestable surplus. If there is, and the season is set, we in turn check the trappers to make sure they are abiding by the trapping laws. This is a typical beaver set through the ice. Here you see a beaver den in the bank and a warden examining a beaver set under the ice at the edge of the den to determine that it is legal.

Hundreds of thousands of fishing days are put in on the Upper Mississippi River Wildlife and Fish Refuge. And it again provides a major source of enjoyment for many thousands of people throughout the Midwest. This is a typical concentration of shore fishermen that is to be found all up and down the river throughout the summer. Ice fishing again, is another popular sport. And fishing derbies on the refuge are common

occurrences throughout the winter. Fish research goes on constantly. Here you see a Fisheries crew on research work, on the river.

Access is an important item in making the recreational opportunities of the river available to the general public. We have built a great many landings and parking areas with boat launching ramps so that the general public can gain access to the river and to these opportunities. All of these landings and boat launching ramps are free.

Pollution is one of the greatest killers of wildlife and one of the greatest despoilers of recreational areas. Many of you probably heard of the soybean and oil spills that occurred near the Twin Cities in 1965, and which came down into Lake Peppin. This is a scene of the oil on the water in Lake Peppin that resulted from these spills up by the Twin Cities. Note the great quantity of oil and how smooth the water is except for the wake of the motor of our boat as we pass through the oil. This is a view from the air of the concentration of oil and soybean residue that was floating on Lake Peppin in the spring after that break. All of the white stuff that you see is a sticky, gooey mixture very similar to glue, which is soybean oil. Here is the oil up against the vegetation along the shoreline. All of the white is nothing but a thick mass of soybean oil, which you could very well describe as very sticky goop. The dark brown is the petroleum oil from one spill and the white in this picture is the soybean oil right along side of it. It did not mix. High winds of Lake Peppin threw a great deal of this oily material up on the sand beaches. Here you see a pencil stuck in the beach to show that the oil penetrated down into the sand. The soybean material during this windstorm all sunk down to the bottom of the lake. Now just stop and think a minute about what this oil did to the beaches. It made many of the beaches completely untenable for swimmers, picnickers, fishermen, or for any other use. But that was only a small part of the damage. It was estimated that some ten thousand ducks died as a result of this pollution. In addition, many fur bearing animals died. Any form of wildlife that tried to swim in the water that was covered by the floating soybean oil and petroleum oil simply became incased in a great mass of glue. This bird is one that was found still alive. It is a little Green winged Teal that was all matted together in one sticky mess. We took it home and tried to wash it out with detergents. We found that it was practically impossible. Many hundreds of birds were gathered up and some were saved through washing them and taking them to a game farm to rest and recover. They were released in the fall back into the wild. This is a gull that was picked up and brought in. Attempts were made to wash it, but it also died the following day. Conservation set about to do anything possible to keep this oil from coming on down below Lake Peppin into the marshes. The National Guard turned out to help, and as a result these barriers made of burlap and chicken wire were strung across some of the mouths of the major sloughs leading into the major waterfowl areas and marshes. It was hoped that these barriers would stop the oil and divert it on down the river preventing it from entering into the mouths of the sloughs and into the marshes. Fortunately, the oil dissipated before it left Lake Peppin.

You have all heard of the President's Clean Air campaign to eliminate the pollution of the air that we breathe. This is a striking example of air pollution. Now, we come to my pet peeve, the Litterbug. This is a view of one of the river sandbars, which

has been made useless by the thoughtless individual who left all of this trash on the bar. This is another example of what man does to despoil the facilities nature has provided for his enjoyment. This is a pile of trash picked up by a Boy Scout Troop on one sandbar on the Mississippi River. Don't you be a Litterbug! Keep in mind that if you brought it, you take it home. You might find that it would be cheaper in the end. A single beer can, or other trash left on the sandbar or any other public property can very well result in a twenty-five to one hundred dollar fine. Let's all remember to Keep America Beautiful!

As we close this program, we hope that you have learned something more of our activities along the river. And we hope that you more fully understand the work of the Bureau of Sport Fisheries and Wildlife.