

**FISH AND WILDLIFE SERVICE
ORGANIZATION AND HISTORY**

1.1 What is the purpose of this chapter? This chapter provides an historical overview of the beginnings and development of the U.S. Fish and Wildlife Service. It informs employees and others of the cultural forces, political developments, and legislative actions that led to the establishment and growth of the Service.

1.2 What is the scope of this chapter? This chapter traces the evolution of the Service from the Federal efforts to protect fishery stocks and set aside lands for wildlife to the development of the diverse mission that exists today. Following is a table of contents for the chapter.

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Origins: A Tale of Two Bureaus (1871-1933). Since 1871 the U.S. Fish and Wildlife Service and its predecessor agencies have been at the forefront of American wildlife conservation. The Service began in an era of drastic fish and wildlife declines and, in the course of its history, succeeded in expanding and strengthening our nation’s wildlife resources. Lacking any comprehensive organic legislation, the Service has gone through many organizational changes and seen its duties evolve to meet the changing needs of wildlife and the American public. The Service traces its lineage back to two predecessor bureaus—the Bureau of Fisheries and the Bureau of Biological Survey.

A. The Bureau of Fisheries.

(1) The U.S. Commission on Fish and Fisheries was established on February 9, 1871. Its first Director was Spencer Fullerton Baird, an energetic naturalist who helped shape the Smithsonian Institution’s research programs and designed a Federal role for scientific fisheries management. The Commission:

- Responded to the dramatic decline in the nation’s fishery stocks by supporting fisheries research at sites like the Marine Biological Laboratory at Woods Hole, MA.
- Commissioned the ocean-going *Albatross* in 1882, one of many fisheries research vessels.
- Established the Fairport Biological Laboratory, in Fairport, IA, which completed research to successfully propagate threatened mussels on the Mississippi River.

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- In 1872, pioneered early fish restoration by creating the first National Fish Hatchery (NFH) in partnership with the McCloud Wintu tribe of Indians at the Baird Station on the McCloud River in California. As the National Fish Hatchery System grew, fish were transported and stocked across North America using fish cars—specially modified rail cars designed for fisheries transport.

(2) The Commission was renamed the Bureau of Fisheries in 1903 and placed under the Department of Commerce and Labor.

- In 1905 the Bureau became responsible for the administration and enforcement of laws governing Alaskan salmon fisheries.
- Enforcement of sponge taking regulations in the Gulf of Mexico and the Straits of Florida was added in 1906.
- Management of take limits for fur seals and foxes of the Pribilof Islands was added in 1908.
- When the Department of Commerce and Labor was split in 1913, Fisheries remained with Commerce. Supervision of conservation of aquatic mammals in Alaska, such as sea otters and walruses, was added 7 years later.
- In 1922 Congress added the authority to rescue fishes from flooded areas throughout the Mississippi Valley and to propagate mussels. Throughout this period the Bureau continued to add new fish hatcheries and maintained a strong stocking and research program.
- The Fish and Wildlife Coordination Act of 1934 legislated fish migration, mitigation, and fisheries restocking along waters that Federal agencies (e.g., the Army Corps of Engineers) modified.
- By 1939 the Bureau of Fisheries had made significant progress in restoring the nation's fisheries, ameliorating damage to fish habitat caused by Federal water projects, and expanding fisheries science domestically and internationally.
- During this time, the Bureau of Biological Survey was making similar progress in wildlife management.

B. *The Bureau of Biological Survey.* The Office of Economic Ornithology and Mammalogy was established in 1885 under the U.S. Department of Agriculture. A year later the Office changed its name to the Division of Economic Ornithology and Mammalogy. Its mission was to promote birds and other wildlife “helpful” to farmers and sportsmen while reducing “injurious” pests and wildlife. Its first Director, Clinton Hart Merriam, was more interested in carrying out scientific studies than doing extension work. In 1896 the Department renamed it the Division of Biological Survey to recognize its expanded mandate to study and map the nation's faunal resources. In 1905 it was renamed again the Bureau of Biological Survey. The Biological Survey produced a striking series of “life-zone” maps of the United States, Canada, and Mexico. These maps of wildlife and plant species across the continent were an important early ecological tool and a precursor to later biome and ecosystem studies in North America.

(1) *Animal Damage Control.* The U.S. Department of Agriculture was always under pressure to decrease predation on crops and livestock.

- As part of its mandate to help American agriculture and to increase game species, in 1888 the agency began its Animal Damage Control program. The program created research and test sites to study the killing of rodents and predators.
- Early success led Congress to approve appropriations to expand the program in 1914.
- In 1929 a Division of Predator and Rodent Control was created that quickly became one of the most important parts of the agency's mission. The Division conducted large-scale exterminations of wolves, coyotes, mountain lions, rodents, and other “injurious” wildlife.
- By the 1930s and 1940s these types of animal damage control activities were garnering criticism within the agency. Questions were raised within and outside the agency as to the efficiency of the methods and the ethics of exterminating some wildlife to enhance game and agriculture.

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- Animal Damage Control became less important to the agency in the post-World War II era and the program was transferred out of the agency in 1986.

(2) Law Enforcement. The Biological Survey's efforts to enhance wildlife in these early decades focused on regulatory and habitat protection for threatened species.

- In the late 19th century market hunting and the trade in feathers for ladies fashion helped decimate many game and bird species. Sportsmen's groups (like the Boone and Crockett Club) and bird protection groups (like the Audubon Society) began to call for Federal legislation to protect wildlife.
- In 1900 the Lacey Act banned interstate commerce in illegally obtained wildlife. "Lacey Agents" were assigned to the Biological Survey to enforce the new law. They were some of the first Federal law enforcement agents to engage in undercover operations.
- The Migratory Bird Treaty Act of 1918 gave the Biological Survey expanded control over the management of migratory species and further expanded the law enforcement role of the agency.

(3) Habitat Protection. Habitat protection was the other focus of the Biological Survey in the early 20th century.

- Nineteenth century Alaskan efforts attempted to protect northern fur seals at the Pribiloff Islands and fish, sea lions, and sea otters at Afognak Island.
- A more systematic protection of wildlife habitat began during Theodore Roosevelt's Presidency. As a keen ornithologist and an ardent conservationist, Roosevelt was easily persuaded of the need to create a series of public lands to protect and enhance our nation's wildlife.
- On March 14, 1903 Roosevelt established Pelican Island as the first Federal Bird Reservation. The first warden of the refuge was Paul Kroegel, a German immigrant and energetic defender of the rookery on this small island on the Atlantic side of Florida.
- By the end of his Presidency in 1909, Roosevelt had created 55 bird and game reservations, which became the foundation of the National Wildlife Refuge System.
- Over the next two decades the refuge system continued to expand, slowly adding new refuges for migratory waterfowl and other wildlife species. The Biological Survey maintained oversight of these preserves and game ranges, but staff remained low and habitat protection chronically underfunded. It would take a combined economic and ecological disaster to redirect the Biological Survey to a more wildlife-directed approach.

A New Deal for Conservation: The Creation of the Fish and Wildlife Service (1934-1960).

A. The Dirty Thirties. Waterfowl habitat had been in drastic decline since World War I, when the Government urged farmers to "plow to the fences." The 1920s saw a continuation of drainage, clearing, and other habitat destruction, which, combined with large bag limits, began to decimate waterfowl populations. Waterfowl numbers plummeted to new depths in the 1930s with the arrival of catastrophic dust storms, the resulting habitat loss, and a new found mobility for hunters to reach those places that still had birds. This problem did not go unnoticed by President Franklin Roosevelt.

- In 1934 a number of sportsmen's groups encouraged Roosevelt to convene the "President's Committee on Wild Life Restoration" (popularly known as the "Duck Committee") consisting of Thomas Beck, Aldo Leopold, and Jay "Ding" Darling.
- Darling became the new Chief of the Biological Survey and, working with Chief of Refuges J. Clark Salyer II, began to greatly expand the refuge system.

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B. Bucks for Ducks. To get the money his program would need, Darling worked with allies in the Senate and through his personal correspondence with President Roosevelt, he obtained emergency funds for his beloved ducks.

(1) *The Migratory Bird Hunting and Conservation Stamp Act.* Six days after Darling took office, Congress passed a bill he had long championed—the Migratory Bird Hunting and Conservation Stamp Act (popularly known as the Duck Stamp Act). The Act provides funds for acquiring migratory bird habitat. Funded by duck hunters, this Act created the Federal Duck Stamp Program, which almost immediately provided substantial funding for the purchase and protection of wetlands across the country. The focus lay on developing a coherent system for waterfowl that followed three areas of interest:

- Nesting marsh restoration in the North and Northwest;
- Resting, feeding, and staging areas along the length of each of four major flyways (Atlantic, Mississippi, Central, and Pacific); and
- Wintering marshes from the Chesapeake Bay to the Mississippi delta to California's Central Valley.

In less than 2 years, Salyer and his staff were able to create 45 new refuges and protect more than 1.5 million acres of land across the continent.

(2) *The Civilian Conservation Corps (CCC).* Other important initiatives in the 1930s included the posting of a large number of CCC enrollees to National Wildlife Refuges and National Fish Hatcheries. By 1939 there were 35 CCC camps on refuges providing valuable labor, infrastructure, and habitat improvement services.

C. *From Game to Wildlife Management.* The 1930s witnessed a move from a purely game management outlook to a more inclusive program of wildlife protection. To support this growth in wildlife management, the Biological Survey built the Patuxent Research Refuge in Laurel, Maryland in 1939. This was the first Federal wildlife research center and it later became a pioneer in long-term wildlife studies and early contaminants research, including new work on DDT and captive breeding.

(1) *Fish and Wildlife Coordination Act.* As the realm of wildlife protection expanded, Federal oversight of habitat also grew in this era. The Fish and Wildlife Coordination Act of 1934 required Federal agencies to consult with the Bureau of Fisheries before constructing or licensing new dams. An amendment to the Act in 1946 expanded Biological Survey oversight to any body of water that a federally sponsored project would modify. This led to the creation of the Division of River Basin Studies, which was renamed the Division of Ecological Studies in 1974.

(2) *Federal Aid in Wildlife Restoration Act.* The 1937 Federal Aid in Wildlife Restoration Act (popularly known as the Pittman-Robertson Act) initiated a modest excise tax on firearms and ammunition to support State wildlife management programs. States used funds from this program for wildlife habitat acquisition, scientific studies, and wildlife restoration in the field. This program solidified the partnership with sportsmen that had marked some of the earliest conservation efforts.

D. *War and Peace.* As part of Franklin Roosevelt's "New Deal" for conservation, in 1939 the Bureau of Fisheries was moved from the Department of Commerce to the Department of the Interior, and the Bureau of Biological Survey was moved from the Department of Agriculture to the Department of the Interior.

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(1) On June 30, 1940, the Department of the Interior merged the Bureau of Biological Survey and the Bureau of Fisheries to create the Fish and Wildlife Service. This expanded agency finally brought fish and wildlife resources under one Federal manager. However, World War II presented new challenges to the Service. By 1942 the Government closed all the CCC camps and drafted many employees into the military, which exacerbated labor shortages within the Service. The Department transferred Service headquarters from Washington to Chicago, causing many of the staff to resign rather than relocate. The headquarters did not return to Washington until 1947, extending the period of exile 2 years beyond the end of World War II.

(2) As veterans returned from WWII, pressure was put on fish and wildlife resources to increase hunting and fishing opportunities.

- In 1950 the Federal Aid in Sport Fish Restoration Act (popularly known as the Dingell-Johnson Act) imposed a Federal excise tax on fishing equipment to support State projects to restore or manage marine or freshwater fish resources.
- In 1956 the Fish and Wildlife Act renamed the agency the U.S. Fish and Wildlife Service and divided it into two bureaus: the Bureau of Commercial Fisheries and the Bureau of Sport Fisheries and Wildlife. The Fish and Wildlife Act was designed to expand the commercial fishing industry, increase public recreational use of fish and wildlife resources, and allow greater expansion of the National Wildlife Refuge System.
- An amendment to the Duck Stamp Act in 1958 created the Small Wetlands Program, which expanded tremendously beginning in the 1960s.
- The mid-twentieth century saw the agency expand outward in its partnerships, wildlife work, and management of habitat under its protection.

The Expanding Ark: Endangered Species, Wilderness, and International Conservation (1960 to 2009).

A. From Silent Spring to Endangered Species. The number of species and their habitat that the Service needed to protect expanded even more in the 1960s. Rachel Carson, a Service employee from 1936-1952, helped usher in the modern environmental movement with the publication of her book *Silent Spring* (1962). Carson built on nearly 20 years of research at Patuxent Research Refuge to identify the deleterious effects of DDT on birds, fish, and mammals and to make a strong case for better protection of wildlife against this and similar, new threats. The modern environmental movement expanded these protections exponentially.

(1) In the 1960s Congress clarified the National Wildlife Refuge System mission.

- The 1962 Refuge Recreation Act continued trends from the 1950s by allowing increased recreational uses on refuges as long as they did not interfere with the refuge's primary mission.
- The National Wildlife Refuge System Administration Act of 1966 systematized the diverse units of wildlife protection (e.g., game ranges, waterfowl production areas, wildlife ranges) under the refuge system and allowed for multiple uses on refuges as long as they were compatible with the establishing legislation. Debates quickly emerged about what compatible use was at various refuges.

(2) In 1966 the Endangered Species Preservation Act directed the Service to begin creating a list of endangered species and to acquire refuges for these species. In 1969 Mason Neck National Wildlife Refuge (renamed Elizabeth Hartwell Mason Neck National Wildlife Refuge) in Virginia was the first refuge established under this act for the protection of bald eagles. The Endangered Species Conservation Act of 1969 made it illegal to trade in any listed species.

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(3) Congress took a more comprehensive approach in 1973 by passing the Endangered Species Act (ESA). The ESA is designed to prevent future wildlife extinctions. It protects both endangered and threatened plants and animals and the critical habitat necessary for their survival. A truly pioneering piece of legislation, the ESA was the most comprehensive wildlife protection anywhere in the world.

(4) In 1970 the Bureau of Commercial Fisheries was moved back to the Department of Commerce and renamed the National Marine Fisheries Service. This removed most marine fisheries management from the Service and split enforcement of the ESA and the Marine Mammal Protection Act (1972) between the two agencies.

(5) In 1975 endangered species protection took an important global step when the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) entered into force after the tenth signatory nation ratified it (the United States was the first nation to sign the agreement). CITES mandates sustainable use and management of wild and captive populations of threatened and endangered wildlife. Currently more than 160 countries have signed the CITES treaty. The ESA and CITES have led to an increase in the role of Service Law Enforcement and the creation of its International Affairs division. CITES also:

- Greatly expanded international cooperation in species protection, and
- Was the culmination of a century of cross-border protection originally extending beyond State borders and now extending internationally.

B. Wilderness and a New Refuge System. Refuges also experienced new growth in this environmental era.

(1) The 1964 Wilderness Act added a new designation to many of our nation's refuge lands. Howard Zahniser, a former Service employee, contributed to writing the Act. It defined wilderness as "an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain." In 1968 Great Swamp National Wildlife Refuge in New Jersey became the first refuge that Congress designated as wilderness. Since 1968 Congress has designated over 20 million acres of refuge lands as wilderness, including parts of the oldest refuge, Pelican Island.

(2) The Alaska Native Claims Settlement Act (ANCSA) of 1971 added acreage to Alaska refuges. The Alaska National Interest Lands Conservation Act (ANILCA) of 1980 was the greatest expansion in refuge history. ANILCA added nine new refuges, expanded seven refuges, and added 53.7 million acres to the refuge system, nearly tripling the acreage of refuge lands. With ANILCA certain large-scale ecosystems were suddenly within refuge boundaries. The expanded refuges included the nation's largest refuge, the 19.6 million acre Arctic National Wildlife Refuge.

(3) The refuge system had existed for 94 years without an "organic act" or comprehensive legislation outlining how it should be managed and used. On October 9, 1997 the National Wildlife Refuge System Improvement Act gave guidance for management of the entire system. The Act defined the refuge system's mission as "the conservation, management, and where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

(4) In 2009, President George Bush created three Marine National Monuments in the Pacific Ocean—adding approximately 53 million acres to the National Wildlife Refuge System. These remote coral reef ecosystems are the largest fully protected area in the world, providing important habitat for birds and marine fisheries.

(5) Currently there are more than 545 refuges managing more than 150 million acres of habitat, the largest and most effective wildlife habitat program in the world. The refuge system is a great ongoing

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scientific experiment to protect at least a small percentage of the planet where wildlife can survive and thrive.

C. *Tomorrow's Conservation.* The U.S. Fish and Wildlife Service has seen its role and mission grow tremendously since 1871. When wildlife has faced new and unexpected challenges, the Service expanded and evolved to meet these needs, always at the forefront of conservation. Although it has undergone many reorganizations and name changes, its mission has remained remarkably consistent—to protect the nation's fish and wildlife resources for today and tomorrow.

/sgd/ Jerome Ford
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