

# A Century of Conservation

by Dan Ashe



**In honor of the 100th anniversary of the National Wildlife Refuge System, the U.S. Postal Service has issued a commemorative stamp.**

Throughout 2003, the National Wildlife Refuge System celebrates 100 years of extraordinary growth and achievement. A century has passed since President Theodore Roosevelt established the first refuge at Pelican Island, Florida, sparking the American wildlife conservation movement. For those of us who work for the U.S. Fish and Wildlife Service, there could hardly be a more significant or gratifying anniversary.

The National Wildlife Refuge System has been called America's best-kept secret. During this centennial year, we will change that and, by spreading the word, help it become recognized for what it truly is, one of America's greatest national treasures and a resounding success in wildlife conservation.

Of all the incredible things that our wildlife refuges are and do, one of the proudest is our far-reaching and historic efforts in protecting and recovering endangered and threatened species. It's easy to forget that the Endangered Species Act, which is widely regarded as the world's most powerful wildlife conservation law, gives the Fish and Wildlife Service a responsibility of almost overwhelming scope, urgency and complexity: restoring our nation's imperiled animal and plant species to a secure status and conserving the ecosystems upon which all of them, and all of us, depend.

The Service and the Refuge System have responded to this challenge by forging a variety of strategic partnerships with zoos and aquaria, private landowners, nonprofit organizations, interested individuals, and state and local governments. The results have been immensely successful and involved a great deal of

hard, behind-the-scenes work.

These partnerships have helped turn species such as the California condor (*Gymnogyps californianus*), Mexican wolf (*Canis lupus baileyi*), and black-footed ferret (*Mustela nigripes*) from almost certain extinction toward the road to recovery. They have also helped save dozens of important but less "charismatic" species, such as the southwest willow flycatcher (*Empidonax traillii extimus*) and the American burying beetle (*Nicrophorus americanus*).



**Right: Cabeza Prieta NWR provides crucial habitat for the endangered Sonoran pronghorn.**

Photo by John and Karen Hollingsworth



This centennial celebration gives us an opportunity to reflect on the power of individuals to change society. It also leads us to ask some fundamental questions: Why does America need a system of conservation lands? Why do we need federal laws to protect wildlife? How did all of this come about?

In the late 1800s, Americans began waking to the fact that our wildlife resources were in trouble. Years of unchecked exploitation saw many species we consider common today, like deer and turkey, dwindling. The bison and the passenger pigeon were nearing extinction. In Florida, populations of pelicans, egrets, spoonbills, and other water birds were suffering from pressure by commercial market hunters. Bird plumes, which were used to adorn women's hats and other items in the fashion industry, were worth more than gold. Conservationists, including hunters and anglers, became alarmed by this wholesale commercial slaughter of birds, and faced market hunters in what has become known as "The Feather Wars."

In 1901, conservationists, led by the American Ornithological Society and the

Florida Audubon Society, convinced Florida to pass legislation to protect nongame birds. Audubon also hired three wildlife wardens in Florida to stop market hunting. One was Paul Kroegel, a German immigrant and boat builder who had settled in Sebastian, Florida, in 1881. He made his home on a ridge looking out at Pelican Island, the last rookery for brown pelicans on the east coast of Florida and took an interest in protecting the birds. Kroegel is the only warden who survived the Feather Wars. The other two were murdered.

Kroegel became acquainted with Frank Chapman, a member of the American Ornithological Union and the curator at the American Museum of National History in New York, and demonstrated to Chapman the plight of the pelicans and other birds. It was Chapman who convinced President Theodore Roosevelt that the federal government needed to take action.

On March 14, 1903, without fanfare, President Roosevelt signed an executive order establishing Pelican Island as a federal bird reservation, the precursor to a designation of a National Wildlife

**Left: Pelican Island's first guardian, Paul Kroegel, with one of his charges.**  
*USFWS photo*

**Above: A team of biologists relocates Aleutian Canada geese on Buldir Island, part of the Alaska Maritime NWR. This refuge and others were instrumental in the species' recovery.**  
*USFWS photo*



***Okfenokee NWR in southern Georgia contains a vast bog with numerous islands and lakes. Among its residents are listed species such as the wood stork, red-cockaded woodpecker, and bald eagle.***

*Photo by George Gentry/USFWS*

Refuge or NWR. Kroegel was hired to become the first refuge manager and was paid the sum of \$1 a month. With a badge, a gun, and a boat, Kroegel stood watch over Pelican Island until the 1920s. President Roosevelt would go on to establish an additional 54 refuges during his two terms as President.

Tiny, mangrove-covered Pelican Island was the birthplace of an idea unique in the world: that wildlife and wild places should be protected for their own sake and for the benefit of the American people. It was a proclamation on behalf of a nation with an emerging consciousness about the value of things wild and free. From this humble start, the National Wildlife Refuge System has emerged.

Today, the system has grown to nearly 95 million acres (38 million hectares), an

area about the size of Montana. It now includes 540 refuges and more than 3,000 waterfowl production areas spread across the 50 states and several U.S. territories.

This network of strategically located habitats protects 260 endangered species, safeguards breeding and resting places for millions of migratory birds, and conserves premier fisheries and coastal habitats for marine mammals. Over the years, the habitats provided by refuges played important roles as professional wildlife managers restored once depleted populations of white-tailed deer, whooping cranes, elk, wild turkeys, crocodiles, wood ducks, prong-horn antelope, Aleutian Canada geese, Key deer, and a host of others. At the same time, the Refuge System conserves a stunning array of the nation's ecosystems, including tundra, desert, forest, great rivers, marshes, mountains, prairies, estuaries, and coral reefs. Each year, nearly 40 million people—nature lovers, birders, hikers, photographers, hunters, anglers, and others—visit our National Wildlife Refuges.

Of the 1,262 animal and plant species in the U.S. listed as threatened or endangered (as of February 1, 2003), an astonishingly high percentage occur on National Wildlife Refuges. These refuges not only protect wildlife but also provide opportunities for intensive habitat management, if needed, and for experimentation with recovery methods under controlled conditions.

Habitat management for endangered species on refuges can serve as a model for adjacent landowners. Many refuges have formed partnerships with their neighbors to conserve or even enhance wildlife habitat on their lands, using tools such as the Service's Safe Harbor Program. Under a Safe Harbor Agreement, property owners can manage their lands in ways that benefit or attract listed species while maintaining the right to change their land management in the future without penalty.

To date, 59 National Wildlife Refuges have been established primarily for the

benefit of endangered and threatened species, although many other refuges provide important habitat for listed species as well. In Nevada, for example, the Service created the Ash Meadows NWR to protect a unique system of desert springs, associated wetlands, and alkaline desert uplands that harbor 24 species of animals and plants found nowhere else in the world.

Central Florida's Lake Wales Ridge, a patchwork of remnant, sandy scrub habitats on a prehistoric shoreline, has one of the highest concentrations of endemic species in North America, including 22 listed plants and four listed animals. The Service is in the process of acquiring some of the best remaining sites to add to the Lake Wales Ridge NWR for these vulnerable species.

One of our newest refuges is the Bayou Teche NWR in Louisiana. Located at the southern extreme of the biologically rich Atchafalaya River floodplain, this is the only refuge in the country specifically established to conserve the threatened Louisiana black bear (*Ursus americanus luteolus*). It also benefits migratory birds and a variety of other wildlife and plants.

Some of our recovery stories are exciting front-page news, like the whooping crane (*Grus americana*) migration following the ultra-light aircraft between Wisconsin's Necedah and Florida's Chassahowitzka NWRs. Some are successes won from decades of hard work, such as the recovery and delisting of the Aleutian Canada goose (*Branta canadensis leucopareia*), which breeds on islands in the Alaska Maritime NWR and winters on the San Luis NWR in California. Others examples are not widely known, such as the work that goes on at the National Panther Refuge in Florida.

I could share so many stories about the passion and dedication of refuge employees in their struggle to help endangered and threatened species. One that is particularly memorable was a night on the beach at Blackbeard Island NWR on the Georgia coast. My family was able to join me, and my two kids were absolutely mesmerized as our biotech, Debbie Barnard, worked to determine the success of sea turtles that had hatched on the beach the previous evening. She worked so hard, and so long into the night, and with such



**Above top: A refuge biologist installs an artificial nesting cavity at Piedmont NWR for the endangered red-cockaded woodpecker.**

*Photo by John and Karen Hollingsworth*

**Below: Balcones Canyonlands NWR in central Texas protects vital habitat for two endangered songbirds, the golden-cheeked warbler and the black-capped vireo.**

*Photo by Chuck Sexton/USFWS*



**Left: A profusion of wildflowers blankets Merced NWR in California's Central Valley. The refuge also provides habitat for a variety of rare animals, including fairy shrimp and the San Joaquin kit fox.**

*USFWS photo*



**Top:** Also established by President Theodore Roosevelt, Three Arch Rocks on the Oregon coast is the oldest refuge west of the Mississippi. It provides an undisturbed sanctuary for tufted puffins, other seabirds, and several species of marine mammals, including the endangered Steller's sea lion.

Photo by David Pitkin/USFWS

**Right:** Not all wildlife refuges are above ground. Here, researchers survey for the threatened Ozark cavefish in a cavern within the Ozark Plateau NWR.

USFWS photo



obvious dedication that my daughter later said, "Dad, you must pay her a lot of money." A priceless moment to teach a child about the value of personal accomplishment and hard work. I must admit, though, that I told my daughter that we don't pay her nearly enough. Just recently, I visited Charles M. Russell NWR in Montana. The refuge staff and I discussed many issues concerning management of that wonderful refuge, but what impressed me the most was the deep and pervasive concern about steep and unexplained declines recently

observed in the population of reintroduced black footed ferrets. Nothing is more challenging and rewarding to a land manager than nurturing a species that is precariously perched on the brink of extinction. Nothing is more sobering than losing that battle.

Most of us tend to forget about the simple pleasures of slowing down and getting out into nature. During this year's centennial celebration, I'd like to help change that. In these fast-paced and troubled times, our wildlife refuges can be places of peace and reflection for all Americans. There is a refuge located within an hour's drive of every major U.S. city, and I'd like more Americans to take that drive and reconnect with the natural world.

Refuges are living, breathing places where the ancient rhythms of life can still be heard, where nature's colors are most vibrant, and where time is measured in seasons. They are gifts to ourselves and to generations unborn—simple gifts unwrapped each time a birder lifts binoculars, a child overturns a rock, a hunter sets a decoy, or an angler casts the waters.

There are many challenges ahead for our Refuge System and the remarkable diversity of wildlife it nurtures and protects. What price are we willing to pay to maintain our wild lands and biological heritage? What price are we willing to pay to expand and improve these precious holdings?

As we celebrate during 2003 the remarkable success of the National Wildlife Refuge System, we should heed Theodore Roosevelt's vision and warning: "Wild beasts and birds are by right not the property merely of the people who are alive today," he said, "but the property of the unknown generations, whose belongings we have no right to squander." For all of us who care about the future of wildlife in America, those words remain as much a call to action today as they were 100 years ago.

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