



AMERICA'S TOP TEN MOST ENDANGERED BIRDS



 Audubon



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THE NATIONAL AUDUBON SOCIETY

For over 100 years, the National Audubon Society has been working to conserve and restore natural ecosystems, focusing on birds, other wildlife, and their habitats for the benefit of humanity and the earth's biological diversity.

Audubon's approach to the conservation of birds is multi-faceted:

- Our ornithologists and other scientists work to increase understanding of what birds require to thrive, what conditions undermine their well-being, and how conservation programs can be designed to protect birds without unduly interfering with human enterprise.
- Our education specialists enhance Americans' understanding and appreciation of birds. The 46 million adult bird-watchers in the United States, as well as millions of students, benefit from our publications, the educational programs at our nature centers, and a wealth of information organized on our Website.
- Our public policy specialists work to ensure that federal, state, and local policies that affect the well-being of birds are informed by the best available science.



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Endangering the Endangered Species Act

The strongest federal safeguard against the extinction of bird species in the United States is the Endangered Species Act (ESA). Enacted in 1973, the ESA permits the U.S. Fish and Wildlife Service (USFWS) to list bird species clearly heading toward extinction as endangered. Such a listing requires the Secretary of the Interior to designate critical habitat for the survival and recovery of the species and obligates federal agencies to avoid “adverse modification” of critical habitat, through their own actions and through activities that are federally approved or funded.

Although controversy has sometimes surrounded the listing of species and the conservation of their habitats, the Endangered Species Act has been a clear success story: Conservation has kept fully 99 percent of species listed in the past three decades from becoming extinct.

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Many private interests with strong political connections find the ESA to be inconvenient, however, and attempts to undermine the strength of the Act arise periodically. Such efforts have made significant progress in the 109th Congress, and the Endangered Species Act is itself now endangered.

In September 2005, the House of Representatives passed HR 3824, euphemistically called “The Threatened and Endangered Species Act.” This bill takes the determination of the “best available scientific data” out of the hands of scientists and gives it instead to a political appointee; replaces the protection of critical habitat with a recovery planning process that is binding on no one; allows projects that would kill or harm endangered species to go ahead if the USFWS does not act within 180 days on a request to determine that the project complies with the ESA’s prohibition on “takes”; and requires the Secretary to compensate developers for alleged foregone profits if the USFWS determines within 180 days of a request that a project will not comply with the ESA’s prohibition on “takes.”

Currently moving through the Senate is the “Collaboration and Recovery of Endangered Species Act” (S 2110), sponsored by Senator Mike Crapo. This bill would allow application for listing under ESA to languish unacted on for as long as three years, allow developers to destroy critical habitat of a listed species in return for preserving habitat for another species, create a recovery planning process that would allow industry to rewrite and overrule the decisions of wildlife experts, and require USFWS to provide a “provisional permit” for any project on private property (except for “ground clearing”) unless a recovery plan is already in place.

Should the Senate bill pass, a conference committee would be appointed to reconcile the House and Senate versions of ESA “reform.” Both the House-passed bill and the bill introduced by Senator Crapo represent significant steps back for the protection of America’s most vulnerable birds and wildlife.

AMERICA'S TEN MOST ENDANGERED BIRDS

Birds across the United States are facing more – and more severe – threats to their survival today than ever before.

Development pressures, invasive species, avian diseases, and a variety of other threats are together having a devastating effect on America's bird species. The U.S. Fish and Wildlife Service now lists 90 birds as endangered, but many more could qualify for listing.

This report focuses on critically endangered bird species to identify and explore the nature of the conditions that imperil birds in the United States, as well as to fashion remedies for these conditions. Bird species were selected for inclusion based on population size*, population trends, range size, and the severity of threats to each. For each bird, the report describes the population size and trends, current threats, and

conservation measures needed to ensure survival of the species. Due to the severe threats faced by many birds in Hawaii, a separate list of the ten most endangered Hawaiian birds is treated in a section at the end of the report.

This list of endangered birds includes seabirds, migratory songbirds, and ground birds living in areas from Texas to Alaska and from Hawaii to Maine. This ornithological and geographic breadth reflects the ubiquity of stresses on the biosphere of the United States. Birds are the collective canary in the human coal mine: Declines in the health and resilience of bird populations often signal threats to our own health and well being. The loss of wetland habitat, not

only leaves birds and wildlife in jeopardy, it also threatens systems of water purification and increases the risk of flooding in many communities.

The Endangered Species Act: An Essential Safety Net

The Endangered Species Act (ESA) has for over three decades been the ultimate safety net for birds species catapulting toward extinction in the United States. Congress is now acting on proposals that would weaken the fundamental protections of this law. In weighing the claims of both sides in the ESA debate, Congress should keep in mind that by providing legal protections to save birds and other wildlife species from extinction, we are acting for the well-being of our own species as well.

* Population estimates come from BirdLife International (<http://www.birdlife.org/datazone/species>), from species accounts in the Birds of North America series (<http://bna.birds.cornell.edu/BNA>), from the U.S. Fish and Wildlife Service biologists, and from state wildlife agencies. The birds are presented in order of increasing population size, with the rarest bird or the bird with the smallest population first.



The Ivory-billed Woodpecker

The Ivory-billed Woodpecker once ranged widely across the southeastern United States, including Texas, Arkansas, Louisiana, Mississippi, Tennessee, Alabama, Florida, Georgia, South and North Carolina, as well as in Cuba. As logging reduced the hardwood and pine forests that constitute its habitat, however, the bird became increasingly rare. Indeed, having not been seen in the United States since 1944 or in Cuba since 1987, the species was believed to be extinct.

In 2004, however, ornithologists working in the Cache River and White River national wildlife refuges in Arkansas caught sight of the ivory-bill and later recorded its distinctive knocking cadence. Understandably, both excited and apprehensive about going public with their discovery, they waited until the bird had been spotted by a half dozen people and its image captured on videotape before announcing their find in April 2005.

Population and Trends

Only a single bird was seen in each of the 2004 and 2005 sightings. Recent efforts to confirm the existence of the Ivory-billed Woodpecker have brought neither sightings nor sound recordings that can be definitively attributed to the ivory-bill, but the search continues.

Conservation

Since the 2004 sighting, a federal recovery team has been working to prevent the extinction of the Ivory-billed Woodpecker. Audubon is working with the U.S. Fish and Wildlife Service, the Arkansas Game and Fish Commission, the Nature Conservancy, Cornell University Laboratory of Ornithology, and other conservation groups on a comprehensive plan to save the species. Enabled by \$10 million in federal funds and donations from many conservation groups and private citizens, the plan includes conserving and enhancing the bird's habitat; continuing to search for additional birds and active nest cavities; educating the public, bird watchers, and hunters about what is required for the bird's survival, and better enforcement of the Endangered Species Act.



▲ Photo courtesy J. J. Audubon Birds of North America

THREATS

The primary threat to the Ivory-billed Woodpecker is habitat loss due to clear-cutting of its bottomland forest habitat for agriculture and forest products. The bird is also threatened by water diversion and channelization projects that affect bottomland forests.

The California Condor

A huge bird with a small range and a tiny population, the California Condor is one of the most endangered birds in the United States.

The California Condor is the largest bird in North America, weighing over 18 pounds and with a wingspan of more than nine feet. A scavenger that feeds on large mammal carcasses, it once flourished in Arizona, Utah, Colorado, Wyoming, Idaho, Montana, Oregon, and California.

The California Condor became extinct in the wild in 1987, when the last six wild birds known were captured and placed in a captive-breeding recovery program. Now the condor exists only where it has been reintroduced, in open rangelands, coniferous forest, oak savanna, and rocky open-country scrubland areas of southern and Baja California and Arizona.

Population and Trends

With about 125 birds having been cumulatively reintroduced into the wild, the California Condor population has slowly risen. In November 2005, the California Department of Fish and Game, Habitat Conservation and Planning Branch estimated that the population had reached about 270 individuals, including 145 in captivity.

Conservation

The survival of the California Condor is almost entirely attributable to its listing as an endangered species. The U.S. Fish and Wildlife Service maintains captive-breeding and reintroduction programs, engages in research to enhance management of the species, and continues to monitor birds released into the wild. The Arizona Game and Fish Department encourages hunters to voluntarily use lead-free ammunition in the areas frequented by condors.

The payoff for this work is an apparently somewhat reduced mortality rate for the California Condor in the wild in recent years.



Photo courtesy U.S. Fish & Wildlife Service ▲



THREATS

The California Condor has very few natural predators. It is threatened solely by human activity, including shooting, collisions with power lines, and incidental poisoning from coyote control programs. In recent years, the primary threat appears to be lead poisoning from ingesting carcasses that have been shot with bullets containing lead. Curious by nature, condors have also been seen tearing apart discarded auto batteries in dumps, which exposes them to lead and other toxic materials. The condor's lack of fear around humans may put it at additional risk.



■ THREATS

The survival of Whooping Cranes is most threatened by the loss of wetland habitat in their wintering grounds and on their migration routes. Due to the bird's limited range and small population, damage caused by any local disaster – e.g., an oil spill or a hurricane – in its wintering or breeding range could destroy the entire wild population. In addition, the major river in the Aransas National Wildlife Refuge can dry up during droughts, threatening the blue crabs on which the wintering Whooping Cranes primarily feed. Some cranes have died by colliding with human-made objects, such as power lines.

The Whooping Crane

The poignant irony of human engagement with endangered birds is captured in the image of a delicate open-cockpit ultralight aircraft that looks like one of Leonardo da Vinci's flying machines guiding a flock of large, elegant white-and-black Whooping Cranes on their annual migration.

Whooping Cranes once bred easily in the central prairies of the northern United States and Canada, wintering in the highlands of northern Mexico, the Texas Gulf Coast, and portions of the Atlantic Coast. Beginning in the late 1800s, however, the species declined rapidly due to collecting, shooting, and loss of habitat. By 1941, only about 20 Whooping Cranes could be found in the wild. They remain among the most endangered birds in the United States.

Population and Trends

In 1945, Audubon and the U.S. Fish and Wildlife Service began a project to learn more about the needs of Whooping Cranes in captivity. This work led to captive breeding after the crane was included on the Endangered Species List in 1967, which has rebuilt the population. The Whooping Crane Recovery Team, which reports to both the U.S. Fish and Wildlife Service and the Canadian Wildlife Service, estimates that in early 2006 there were 340 Whooping Cranes in the wild and 135 in captivity. The remaining wild population breeds in Canada and winters in the Aransas National Wildlife Refuge in Texas. There is also a small reintroduced non-migratory flock in central Florida. To reintroduce the Whooping Crane to its eastern range in the United States, dozens of cranes bred in captivity have been released in Necedah National Wildlife Refuge in Wisconsin and are led by ultralight aircraft to winter in Chassahowitzka National Wildlife Refuge in Florida.

Conservation

Additional funding is needed to support recovery and breeding programs and to preserve migratory stopover habitat. Stronger water and wetlands management policies are required to protect the rivers and wetlands upon which the Whooping Crane depends.



▲ Photo courtesy U.S. Fish & Wildlife Service

The Gunnison Sage-Grouse

The Gunnison Sage-Grouse, a chicken-sized ground bird, depends on sagebrush habitat for cover throughout the year and feeds exclusively on sagebrush during the winter. During the spring, summer, and fall, the grouse also browses on other plants and insects.

Once native to New Mexico, northeastern Arizona, Colorado, and Utah, Gunnison Sage-Grouse populations have declined precipitously as sagebrush habitat has been lost and degraded due to development, extraction activities, and agriculture. Today the birds are limited to seven populations in isolated areas of southwestern Colorado and southeastern Utah.

Population and Trends

Gunnison Sage-Grouse population estimates range from 2,000 to 6,000 during the spring breeding season, with only one population – in the Gunnison Basin of Colorado – estimated to have more than 500 breeding birds. The Colorado Department of Natural Resources currently estimates the total population at 3,500. Unless effective conservation measures are undertaken, the numbers of grouse are likely to continue to shrink.

Conservation

The Gunnison Sage-Grouse is not yet listed as an endangered species, although the U.S. Fish and Wildlife Service has the listing of the bird under consideration. Effective conservation will entail preserving and restoring sagebrush habitat, moderating grazing, limiting disturbance from recreational activities and oil and gas extraction, and ensuring that development is planned with an eye to conserving critical grouse habitat. Audubon supports listing of this species under the Endangered Species Act.



THREATS

The Gunnison Sage-Grouse's limited population and small range have left it extremely vulnerable to threats such as drought and outbreaks of disease. A range of human activities – including development, road-building, oil and gas activities, increased recreational activities, and poorly managed grazing – continue to encroach on habitat. In addition, the quality of remaining habitat is deteriorating due to livestock grazing, land treatments, increased elk and deer populations, and herbicide use.

Photo by Louis Swift ▲



Kirtland's Warbler

Kirtland's Warbler is a small – they weigh only half-ounce each – migratory songbird that nests exclusively under trees in young jack pine forests in Michigan and sometimes Wisconsin and Ontario. Historically, this habitat is renewed when naturally occurring fires renew forests, with the heat from the fire forcing open the jack pine cone to release the seeds so that new trees may grow. Fire suppression by humans has dramatically decreased this habitat and, with it, the population of Kirtland's Warbler.

Logging and agriculture near the warbler's breeding habitat has also attracted Brown-headed Cowbirds, which lay eggs in other species' nests, including those of Kirtland's Warblers. The cowbird eggs hatch before those of the warblers and the aggressive cowbird chicks out-compete the warbler chicks for food. Studies indicate that a single cowbird egg in a Kirtland's nest may allow one to three warbler chicks to survive, whereas none of the warbler chicks tends to survive when two cowbird eggs are laid in the nest.

The net effect is that, despite federal and state attention devoted to ensuring its survival, the Kirtland's Warbler remains seriously endangered and is listed under the Endangered Species Act.

Population and Trends

In 1989, the total Kirtland's Warbler population in Michigan was believed to be around 200. Since then, intensive programs to promote suitable habitat and trap cowbirds have paid off. In 2005, the Michigan Department of Natural Resources's annual survey of male Kirtland's Warblers counted 1,415 singing males. Assuming that all these males have mates, the total population is believed to be around 2,800.

Conservation

The breeding and wintering habitat for the Kirtland's Warbler must be protected. Cowbird control, which has tripled the rate of this warbler's reproductive success, must continue. Controlled burns and appropriate land management are also needed to renew breeding habitat.



▲ Photo courtesy U.S. Fish & Wildlife Service

The Piping Plover

The Piping Plover is a small shorebird that nests on beaches and sandflats along the Atlantic Coast, the Great Lakes, and large rivers and lakes in the Great Plains on the United States and Canada. Piping Plover nests are inconspicuous in the sand, and newly hatched chicks look like small sand-colored balls of cotton. This camouflage is useful for evading predators, but it makes the nests vulnerable to being crushed by human feet, pets, and vehicles. As development has spread and become more dense in coastal areas, the presence of humans has taken a huge toll on nests, eggs, and chicks. The Piping Plover is listed by both the U.S. and Canadian governments and considered extremely endangered.

Population and Trends

Although the geographic breeding range of the Piping Plover remains large, BirdLife International estimates that the total Piping Plover population in all three of the major breeding areas is only about 6,100. However alarming this number, it represents an increase of more than 9 percent from 1991 census numbers, with the improvement attributable to intensive management programs in both the United States and Canada.

Conservation

The U.S. Fish and Wildlife Service lists the entire species of Piping Plover as either endangered or threatened. Programs at the federal and state level that are working in specific locales include predator fences, restrictions on motorized vehicles in the vicinity of flightless chicks, and stewards to control and monitor nesting sites on public and some privately held land. Education of the public also seems to help, as do more environmentally-sensitive coastal management and water management practices.

For the Piping Plover to move more definitively back from the brink of extinction, however, such programs need to be replicated throughout the plover's breeding areas.



Photo courtesy U.S. Fish & Wildlife Service ▲



THREATS

Disturbance and destruction of Piping Plover habitat remain the primary threats to the survival of this species. Destruction of nests and chicks during breeding season via human activity or predators continues in many areas. In addition, in many areas coastal erosion controls and water management practices in river systems greatly reduce and endanger nesting sites.



The Florida Scrub-Jay

The Florida Scrub-Jay lives only in Florida, in rare areas of oak scrub that must be renewed periodically by lightning-ignited fires. Seemingly inexorable development in the state has fragmented much of the scrub-jay's habitat, minimizing the occurrence of fire. Unburnt, the oak scrub tends to become overgrown and evolve into sand pine forest or oak hummocks, neither of which is suitable habitat for the bird. Extremely vulnerable, the Florida Scrub-Jay faces possible extinction.

Population and Trends

Although the Florida Scrub-Jay is protected by Florida conservation law and has been federally listed as endangered since 1987, neither status has halted its decline. In 1991, the total population was estimated at around 10,000. According to BirdLife International estimates, the population had dropped to about 8,000 by 2005. No statewide population studies of the species have been published in the past decade.

Conservation

More land preservation could protect current habitat, but management of protected habitat is equally important. Ornithologists have a good understanding of how controlled burning can be undertaken so as to optimize habitat function without harming human interests. Audubon of Florida is helping private and public entities develop management plans for scrub restoration and management.



■ THREATS

Oak scrub is one of the rarest habitats in the Florida peninsula, diminished by perhaps 90 percent from the pre-settlement era. Indeed, most remaining Florida Scrub-Jay habitat is now on either public land or privately held land allocated to some purpose other than real estate development. Although the uses of such land are not inherently incompatible with the preservation of scrub-jay habitat, many remaining oak scrub areas have become so overgrown that they verge on being unsuitable for habitat.



The Ashy Storm-Petrel

The Ashy Storm-Petrel is a seabird that nests in small rock cavities on islands off the coast of California. From 50 to 70 percent of the breeding population is located on Southeast Farallon Island in the Farallon National Wildlife Refuge and on California's Channel Islands. With its already small population having declined by perhaps half in the last 50 years, the Ashy Storm-Petrel should be listed as endangered, although the U. S. Fish and Wildlife Service lists it instead as a "declining species of management concern." Given its limited range, the species could be decimated by an oil spill or other local event.

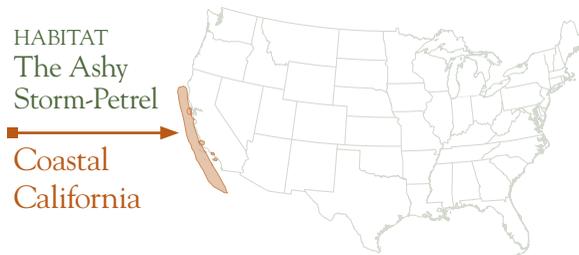
Population and Trends

Because the Ashy Storm-Petrel is nocturnal and nests in places largely inaccessible to humans, monitoring its population trends is difficult. BirdLife International's best estimate for 2005 was a population of five to ten thousand, based on the 1995 Birds of North America account by David Ainley, which is itself based on surveys by H.R. Carter et al., published in 1992 and subsequently updated to BirdLife.

Conservation

Stronger efforts to control invasive mammals on islands where the Ashy Storm-Petrel breeds would enhance the population's viability, as would strict enforcement of anti-pollution regulations for coastal waters. Audubon supports listing of this species under the Endangered Species Act.

HABITAT
The Ashy
Storm-Petrel
Coastal
California



THREATS

The greatest threat to the Ashy Storm-Petrel is nest predation by non-native species, such as house mice, rats, and cats, that have been introduced onto and are taking over California's coastal islands. The storm-petrels also fall prey to an expanding population of Western Gulls. There is also evidence that pollution of foraging areas is putting this species under stress.

Photo courtesy Point Reyes Bird Observatory ▲



THREATS

Habitat loss and fragmentation represent the clearest threats to the Golden-cheeked Warbler. Suburban sprawl remains the primary danger, but grazing, logging of the Ashe juniper, and mineral extraction activities are also encroaching on habitat. Nearby agriculture has also brought the Brown-headed Cowbird, which lay eggs in warbler nests that reduce the survival rates of warbler chicks.

The Golden-cheeked Warbler

The Golden-cheeked Warbler is a migratory songbird that breeds only in Ashe juniper woodlands. Between 1960 and 1980, the area of this habitat was reduced by development pressures in central Texas by about a quarter. In addition, anticipation that the warbler would be federally listed as an endangered species prompted landowners to deliberately destroy more habitat in 1990. Breeding habitat is now fragmented and limited to the Edwards Plateau in central Texas, and it remains under severe pressure from human activity.

Population and Trends

Based on a 1990 survey cited in a 1999 Birds of North America account by Clifton Ladd and Leila Gass, BirdLife International estimates the 2005 population of the Golden-cheeked Warbler to be as few as 9,600 individuals or as many as 32,000. This bird's population is declining rapidly due to habitat loss.

Conservation

The U.S. Fish and Wildlife Service lists the Golden-cheeked Warbler as endangered. Preserving the little remaining habitat of this bird is essential. Funding for suitable habitat research on its wintering range is needed. More cowbird control projects could also help increase Golden-cheeked Warbler reproduction.



Kittlitz's Murrelet

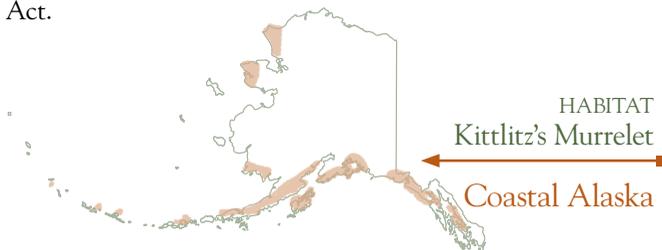
Kittlitz's Murrelet is a small seabird found in the coastal regions of Alaska, where it feeds on fish and macro-zooplankton in areas where glaciers meet saltwater. It nests a few miles inland in the mountains and on cliff faces. Over recent decades, its local populations are estimated to have undergone precipitous decline, including a drop of almost 85 percent in Prince William Sound, as much as 75 percent in the Malaspina Forelands, and more than 80 percent in the Kenai Fjords area. Ornithologists consider it critically endangered but, because much about the ecology of this species remains unknown, the U.S. Fish and Wildlife Service has not listed it.

Population and Trends

Based on estimates by U.S. Fish and Wildlife Service biologists, BirdLife estimated the population of Kittlitz's Murrelet at 13,000 to 35,000 in 2005. The bird is difficult to count at either breeding sites or foraging areas, so designing a repeatable census technique is an important first step in conservation planning.

Conservation

Because it is not federally listed as endangered, little is being done to protect the Kittlitz's Murrelet. That said, guidelines for avoiding the disturbance of nesting birds have been established. Audubon supports listing of this species under the Endangered Species Act.



THREATS

The major threat to this bird appears to be rapid changes in its tidewater glacial habitat due to global warming. The species is also negatively affected by the growth in local oil tanker and cruise ship traffic, and by oil drilling, as well as by devastating spills such as that of the Exxon Valdez in 1989.



A SPECIAL CASE

The Most Endangered Birds of Hawaii

THREATS

Threats to all these birds as they breed in the wild include nest predation by cats, rodents, and mongooses. Introduced ungulates, including goats, pigs, cows, and sheep, are degrading vegetation and nesting areas. Invasive plant species are eliminating habitat. Mosquitoes that carry diseases such as avian pox and avian malaria have been introduced, and these diseases have decimated bird populations. Some ornithologists are also concerned that increased temperatures on the Hawaiian Islands are allowing mosquitoes to survive at higher elevations, leaving no retreat for the birds on several islands.

The island birds of Hawaii are among the most endangered birds in not only the United States but also the world. Indeed, in a list of the ten most endangered birds in the combined fifty states, seven would come from Hawaii.

Because of the importance of conserving birds in Hawaii, we are reporting on them in their own separate section. Each of these species is under stress from non-native species, including nest predators, grazing mammals that destroy vegetation and nesting areas, plants that are out-competing native species critical to specific habitats, and insects that spread avian diseases.

Population and Trends

The birds are presented in order of increasing population size, with the rarest bird first. The sources of the population estimates are listed below.

The populations of all of these birds are declining, and the U.S. Fish and Wildlife Service lists all as endangered, except the 'Akikiki, which is an official candidate for the list. The Hawaiian Crow has been decimated to the point that there are none in the wild. As each of these birds lives in a small area, the problems that are affecting Hawaiian birds overall are having a devastating effect on these species.

1. Hawaiian Crow (Alala)	Extinct in the wild; 50 in captivity
2. Millerbird	30 to 730 (155 existed in 1996)
3. Puaiohi (Small Kaua'i Thrush)	200 to 300
4. Laysan Duck	375 to 500
5. Maui Parrotbill	500
6. 'Akiapola'au	1,163
7. 'Akikiki	1,472
8. Nihoa Finch	1,500 to 3,200
9. Koloa (Hawaiian Duck)	2,200 to 2,525
10. 'Akohekohe (Crested Honeycreeper)	3,750 to 3,800

Conservation

Captive breeding programs must be managed and expanded to give these birds a chance to be reintroduced into the wild. Mosquitoes, ungulates and other non-native species must be better controlled. Habitat preservation, restoration and monitoring are needed.

▲ Photos by Thomas Dove

Please note that all the estimates of Hawaiian bird population sizes come from:

- BirdLife International (see <http://www.birdlife.org/datazone/species>).
- Marjorie Ziegler, "State of the Region" North American Birds Vol. 58, no. 4, p.616-617.
- Relevant accounts on various dates from the subscription Web site Birds of North America online (see <http://bna.birds.cornell.edu/BNA/>).
- These estimates in turn are based on surveys by biologists of the U.S. Fish and Wildlife Service, U.S. Geological Survey, the USDA Forest Service, the Hawaii Department of Fish and Wildlife, and their partners.