# ZUUL: BIRDS THAT WON'T BE WITH US

THOUGH A BIRDER wandering our southern swamplands might—just mightbarely glimpse its large black-and-white form, its existence is history. There are no recent United States photographs or recordings, and the last documented "population" is fast disappearing Cuba.

"There may be a couple of birds still out there in the swamps, but the

species is a lost cause," says the National Audubon Society's Sandy Sprunt.

The process whereby the Ivorybilled Woodpecker will be declared extinct could begin within a couple of years. Once its "death certificate" is issued by the United States Fish and Wildlife Service, anyone spotting an Ivory-billed would be seeing an official phantom.

The Ivory-billed Woodpecker drifted past the point of no return before anyone could summon the will to save it—almost before anyone saw what was happening. Its demise is a national tragedy: considered in the context of reports on many other American birds, it could point toward a flurry of extinctions.

Or, perhaps, mark a turning point: it could be a catalyst for immediate, vigorous intervention in similar cases.

Its death might help save some of the many rapidly vanishing species whose plight is outlined in these pages.

The situation is urgent. Some species that only a few years ago were common in the landscape have suddenly declined dramatically. Others whose numbers have never been high now seem newly vulnerable. Consultation with a nationwide network of ornithologists reveals a general sense of crisis:

"A whole complex of grassland species is on the way out," says Sam Droege of the Fish and Wildlife Service's Office of Migratory Bird

Management.

"There are a number of shorebirds whose world populations are really uncomfortably small when you begin to take a close look at them," says Stanley Senner, Chairman of the United States Section of the International Council for Bird Preservation. "We've put so little energy into monitoring their habitats and needs that some may be in an irreversible decline before we know it."

"If Florida doesn't make some hard choices about water in the next few years, several populations of wading birds will be gone," warns George Powell, a research ornithologist with the National Audubon Society. "Right now the state seems to be making the decision by letting its human population grow without restrictions. So we're going to see a world with a lot fewer birds."

Spotted Owls, **Čalifornia** Condors and Whooping Cranes capture the imagination but there are many more species that won't make it into the next millennium unless we act now.

By Frank Graham, Jr.





The Wood Thrush is suffering a long-term collapse. Photograph/Rob Curtis.

Generalizations based partly on speculation?

Perhaps. Yet every worried field worker can point to specifics, individual species whose imperilment underlines a single, grim conclusion: America is losing a significant part of its bird life.

There are problem species in every region. And while the reasons for a bird's decline are sometimes obvious and sometimes obscure, loss of habitat generally plays a vital role.

# **LOSS OF HABITAT**

"Our annual Breeding Bird surveys are beginning to show some startling declines," reports the Office of Migratory Bird Management's Droege. "Most of the grassland birds, like sparrows, are down. Both Eastern and Western meadowlarks continue to show drastic declines. Yellow-shafted Flickers—but not Red-shafted—are way down across the board, perhaps because they feed on the ground and pick up pesticide residues in big agricultural fields.

"Wood Thrush? A long term collapse, very bad."

National Audubon's George Powell, who has had extensive experience in the American tropics, supports Droege's mournful evaluation of the plight of the Wood Thrush.

"The Wood Thrush will become rare," he says. "The birds that stop in the deep forest anywhere from mid-elevation on down along the Caribbean Slope, especially in Nicaragua and Guatemala, are going to be in trouble. The Wood Thrush winters in those areas, while many individuals from other thrush species go farther south."

National Audubon's Sprunt also points to several species with critical habitat problems.

The Whooping Crane, long a focus of Audubon concern, has recovered slowly over half a century from a low of 21 individuals to more than 200 in wild and captive flocks. But Sprunt points out that the failure of the Fish and Wildlife Service to build a second viable wild flock leaves all the migratory Whoopers wintering in an area of Texas coast that is both threatened by oil and chemical spills and too small to support much further flock increase.

"Reddish Egret?" he continues. "Not very firm, and if the Texas coast gets developed like the other coastlines, that bird could be gone.

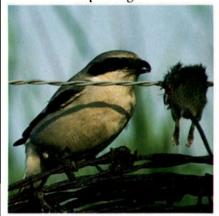
"Common Loons have a double whammy, with acidic lakes and increased predators like raccoons around their breeding areas and big die-offs from mercury poisoning in winter."

The following birds also came up constantly in talks with observers:

The Spotted Owl, whose well-publicized endangerment by loggers in old-growth Northwestern forests is compounded by the expansion into its range of the closely related Barred Owl.

The Marbled Murrelet, which breeds in the same kinds of ancient Pacific Coast forests that have proved such an insecure haven for the Spotted Owl.

The Loggerhead Shrike, whose alarming, largely unexplained decline in almost all parts of its range has led biologists to cite causes ranging all the way from pesticides to a tendency to nest and hunt along roadways, where they are known to fall victim to speeding cars.



There is an alarming, unexplained decline in the population of Loggerhead Shrikes. Photograph/Tom J. Ulrich.

# THE IVORY-BILLED WOODPECKER'S END

It has been a long time since the experts agreed on just when a given American species had become extinct. It last happened in 1914 (Passenger Pigeon) and 1918 (Carolina Parakeet). In both these cases the last apparent survivor expired in the Cincinnati Zoo. The end of the Ivory-billed Woodpecker will be more typical—not nearly so tidy.

The bird was done in by a combination of ignorance, indifference and hostility on the part of those whose tree-harvesting and shooting—even scientific collecting—would have been curtailed by an all-out conservation effort.

Though those who might have saved it were paralyzed by a sense of futility, the Fish and Wildlife Service did fund a last effort to try to document the existence of any survivors. The search through the tattered remains of bottomland forests in the southeastern states was led by Jerome Jackson of Mississippi State University.

"I spent three years looking, and now the money is about gone and I found nothing," Jackson said last fall. "Now I'm assembling reports of sightings from other people. A few of them certainly sound reasonable, but there isn't any real documentation. There are no recent photographs or sound recordings."

As J.V. Remsen of Louisiana State University has pointed out, proving the existence of Ivory-billed survivors serves no useful purpose anyway.

"I have never seen an Ivory-billed, but even if I had, I wouldn't tell you," he said frankly. "Nothing is to be gained by seeing one. In the present climate of skepticism, no one would believe the report. And if birders even *suspected* the location of an Ivory-billed, they would rush into the area by the hundreds, and the bird would be gone anyway."

In the opinion of Jay Sheppard of the Endangered Species Office, there has not been a "really tantalizing" U.S. report of the bird since about 1980. "My estimate is that an Ivory-billed could live 35 to 40 years, but the last reasonable date for any successful breeding would have been in the late 1940s or 50s," he says. "So the chances of a bird still hanging on are pretty remote."

The last Ivory-billed Woodpecker, if such there be, stares at the world through eyes that already have taken on the glassiness of a museum specimen.

### **BACHMAN'S WARBLER**

There is a tad more hope for the tiny Bachman's Warbler, a former denizen of our Southern canebrakes. The last reasonably good photographs of one were taken in southern Florida in 1977, and the last sightings by numbers of birders were in the early 1960s. Citing habitat destruction on its breeding grounds and modern hurricanes on Cuba, its sole wintering ground, many ornithologists have therefore written off the species.



There is still faint hope that the Bachman's Warbler exists in Cuba. Photograph/J.H. Dick/VIREO.

But Paul Hamel, author of the definitive monograph on the Bachman's, is not so sure. "It's not time to give up on the species, though some of my colleagues think the bird exists only in my mind," he said recently. "There were occasional reports of sightings by good birders during the 1980s. I've been to Cuba three times in the last few years looking for it. I haven't found it, but a forest guard who is a good observer claims to have seen one in 1989. And there have been other reports."

Insisting that there is still plenty of Cuban habitat for the wintering birds and that, ironically, Hurricane Hugo "created some beautiful habitat" among the forest giants it tumbled in our Southeastern states, he said: "My experience is that professionals just don't want to take all the time that's needed to get into the awfully rugged places where Bachman's Warblers spend most of *their* time. I think the habitat's still there, and we should be able to manage a landscape in which the bird can persist."

### OTHER ENDANGERED WARBLERS

Several other species of warbler also may be edging toward the brink. Most warblers are long-distance migrants, and their wintering grounds in the American tropics are falling with truly frightening speed. Nor do the birds have much to look forward to when they fly north in the spring.

"Millions of small migrants make the long flight from the tropics over water," says Jesse Grantham of the National Audubon Society. "But when they land, perhaps exhausted, on our Gulf Coast, they find only a greatly-altered forest, with the understory all cut out, and, beyond that, cultivated fields or suburbs. There's no real cover, and house cats and other predators zero in on the singing birds. The losses there must be tremendous."

As they proceed northward up the continent the migrants' problems only continue: seldom do they encounter the habitats to which they have adapted over thousands of years.

"We go into an area that used to be cow pasture and say to ourselves, this is great: it's coming back as woodland!" Grantham says. "But then we notice how quiet it is. Those are not the same kinds of wooded areas that existed years ago. Exotic plants are taking over and not providing the kind of ecosystems in which the birds once thrived."

### **SWAINSON'S WARBLER**

Several observers single out the Swainson's Warbler as a bird that

ought to be closely monitored. Like the Bachman's, it forages in canebrakes and winters in Cuba, and during the nineteenth century, it probably was much the rarer of the two species.

But important differences between it and the Bachman's have so far allowed the Swainson's to survive. It is not restricted to the canebrakes: a second population breeds in the dense rhododendron understory of the southern Appalachians. Furthermore, many birds winter not on Cuba but on Jamaica or in the Yucatán.

There has been, however, a recent change in the bird's status. Though not enough is known about the present population, a scarcity of reports is taken as a warning sign.



If ever there were a species marked for extinction, it is the Kirtland's Warbler. Photograph/Chip Pretzman.

# **KIRTLAND'S WARBLER**

If there were a species marked for extinction, it is the Kirtland's Warbler, a bird with a penchant for putting all its eggs in one basket. It winters only in the Bahamas, and its nesting grounds are restricted to a few jack-pines in the northern part of Michigan's lower peninsula.

When the first thorough census was made in 1951, researchers

counted fewer than 500 breeding pairs. For years ornithologists fretted that this tiny population could be all but destroyed in a single natural disaster: an epidemic disease, prolonged Bahamian drought, hurricanes on migration, or widespread fire in the breeding grounds.

Twenty years after the first census only 200 pairs remained. The single calamity had struck. The source, completely unanticipated, was the incursion of a brood parasite, the Brown-headed Cowbird.

The Brown-headed Cowbird's original stronghold was the Great Plains. It thrived on the insects stirred up by the passage of the area's huge bison herds. But as European settlers cleared the land and brought in cattle, vast new areas became hospitable to the species and it gradually spread and increased into forested regions where it was virtually unknown before.

For some years aggressive action on the part of state and federal workers has allowed the Kirtland's Warbler to cling, barely, to existence. Parasitism has been reduced dramatically; while cowbirds once struck about 75 percent of the nests, they now get only about six percent. Workers also have used fire to manipulate the jack pine stands to the warblers' advantage. Last year's census turned up 265 singing males, indicating a population of well over 500 birds.

"That's the highest since 1961," says Jerry Weinrich of Michigan's Department of Natural Resources. "There was good reproduction, too. On the downside, we trapped 8000 cowbirds, *twice* the total trapped in previous years."

It is a sad fact that the Kirtland's Warbler, like an increasing number of species, can now be saved only by perpetual human intervention.

### **GOLDEN-CHEEKED WARBLER**

To the south and west, the Golden-cheeked Warbler's dependence on a shrinking habitat prompted the Fish and Wildlife Service to grant it an emergency "endangered" listing in 1990.

Like the Spotted Owl, this small bird is chained to old growth: needing older trees because it builds its nests of peeling bark, it breeds only in forests of Ashe Juniper (locally called cedar brakes) on and around the Edwards Plateau in central Texas. In winter it retreats to the forests of Central America, spreading out over an area larger than its breeding grounds but, as National Audubon's



The Golden-cheeked Warbler was granted emergency "endangered" listing in 1990. Photograph/Greg Lasley.

Jane Lyons recently noted, "always into areas of good forest that everybody wants."

Austin, San Antonio and Waco, all expanding rapidly, are gobbling up critical habitat on the Edwards Plateau's eastern edge. Recently, too, 3M and other corporations have bought property in prime Goldencheeked Warbler habitat.

The 80,000 acres that conservationists would like to see set aside as a Golden-cheeked Warbler preserve would cost \$10 million. Where would the money come from? How would the preserves be managed?

While these questions are being examined, the Golden-cheeked's

population, estimated at 7500 pairs in the 1970s, has fallen to between 1100 and 2300 pairs.

Summing up the politics involved, Jane Lyons of National Audubon's Southwest Regional Office recently said: "It's like walking through a mine field. The planning process hasn't ever been done in this area. The research hasn't been done. We don't think planning will destroy the local economy, but there are those who do."

# **BLACK-CAPPED VIREO**

Subject, like the Golden-cheeked Warbler, to pressure from the increasing urbanization of the Edward's Plateau, the Black-capped Vireo is also plagued by a variety of predators.

Once ranging through scrub oak stands from Texas and Oklahoma to Kansas, the Black-capped is now gone from Kansas, and recent studies suggest that its entire population may hover between 250 to 500 birds and that Oklahoma's entire adult population amounts to fewer than 110 birds.

These studies, by Joseph Grzybowski of Oklahoma's Central State University and Fish and Wildlife Service biologists, further found that, while there was more than enough remaining habitat to support the few remaining birds, the Brown-headed Cowbird is a prime threat to the species.

"Parasitism is nearing 100% of vireo nests in Oklahoma," they concluded. "The production observed was enhanced by observer interference and cowbird removal. Given the dangerously low numbers of vireos found in Oklahoma, cowbird control will be necessary to begin to increase vireo production."

Furthermore, the Black-capped is plagued over all its remaining range by a complex of efficient predators. Fire ants and Scrub Jays attack the nests, and birds living in populated areas are a target for house cats.



Plagued by a variety of predators and increasing urbanization, the Black-capped Vireo is gone from Kansas and may disappear altogether. Photograph/S. Holt/VIREO.

Listed as endangered in 1987, the Black-capped Vireo is another of those species that will be able to survive only with constant habitat manipulation and vigilant protection from its host of enemies.

# **GOLDEN-WINGED WARBLER**

The Golden-winged Warbler, too, is giving ground, though the danger that threatens it is, at least in part, from assimilation rather than violence.

For many years it has been known that this species will sometimes hybridize with its very close relative, the Blue-winged Warbler, thereby producing the Brewster's Warbler and the Lawrence's Warbler, two of the most delectable items on the checklist of Eastern birders. And, though these hybrids find mates and backcross successfully, they do not do so often enough to jeopardize their parents' populations.

Still, the once familiar Golden-

winged had been replaced in many areas by its Blue-winged congener. When, at the end of the last century, the Blue-wingeds originally resident west of the Appalachians, began moving into southern Connecticut, the previously common Goldenwingeds disappeared as breeding birds. A similar displacement took place in the 1950s, when Bluewingeds spread up the Kanawha River from the Ohio River Valley to Charleston, West Virginia; by 1978, Golden-wingeds had completely disappeared.

Though relations between the two species are still unclear, Frank Gill of the Academy of Natural Sciences of Philadelphia says that the Golden-winged appears to be less adaptive than the Blue-winged to habitat changes. According to him, though both species nest at the edges of old fields or in small clearings, the Golden-winged moves on when the clearings begin to fill up

with larger shrubs and trees, while the Blue-winged, which can tolerate various stages of plant succession, stays.

Besides that, the dominant Bluewinged genes apparently continue to "siphon off" an indeterminate portion of the Golden-winged population.

"I've constructed," Gill says, "three scenarios for the relationship:

- 1. If the pattern continues, the Golden-winged will become extinct in the next century.
- 2. The two species may reach a balance. We've found something like that in the Poconos, where, along the Delaware River Gap, the Bluewingeds thrive in the valley, but the Golden-wingeds do very well higher up. There may be an altitudinal refuge for Golden-wingeds.
- 3. Call it my mystical speculation. If Golden-wingeds are absorbed, we can console ourselves with the happy thought that their genes may be persisting in the Blue-winged Warblers."

Meanwhile, Gill has concluded that, where clear-cutting occurs in forests at higher levels—as in warbler habitat in Minnesota—the Golden-winged thrives.

Perhaps the issue is ultimately one of habitat.

### **CALIFORNIA GNATCATCHER**

One of California's liveliest conservation issues is what to do about the California Gnatcatcher, a bird that until recently was considered merely a subspecies of the Blacktailed Gnatcatcher.

"This is the Spotted Owl of the southern California coastal strip," says Jonathan Atwood, who works at the Manomet Bird Observatory and wrote his dissertation on the species. "Ten years ago it was estimated that there were 2000 to 3000 pairs left.



The California Gnatcatcher is the Spotted Owl of the Southern California coastal strip. Photograph/Herbert Clarke.

But that figure was just taken out of a hat, and most recent work has been done by consultants for developers, who are playing the figures close to the vest."

The California Gnatcatcher inhabits "soft chaparral," areas that have passed the grassland stage and are on their way to becoming chaparral. As in the case with most debates focused on a single species, a victory for the bird would mean the preservation of its habitat and all the other organisms in the ecosystem. In this case, many species, including kangaroo rats and a coastal population of Cactus Wrens that may constitute a distinct subspecies, would benefit.

"We're trying to get the species listed by both the state and federal governments," Atwood says. "Some developers say they will come up with their own recovery plan—so there's no need to list the species officially. This bird is in far too much trouble from habitat fragmentation and the penetration of those small plots by cowbirds. A serious drought in the region has brought on fires, and that, combined with the cowbirds, has lowered the gnat-catcher's breeding success."

### **FLORIDA SCRUB JAY**

If the California Gnatcatcher has enjoyed but a brief tenure as a full species, a much different bird found a continent away may experience one still briefer. The Florida Scrub Jay until now has been considered a subspecies of the Scrub Jay that ranges widely over the West. But John Fitzpatrick of the Archbold Biological Station, who has documented significant differences in plumage, behavior, and reproductive patterns between the two forms, soon will propose to the American Ornithologists' Union that the Florida form be raised to the status of a full species.

Fitzpatrick estimates that there are about 10,000 individual Scrub Jays scattered over the peninsula. "The jay is very specialized and confined to early postfire successional scrub on what were ancient sand dunes," he says. "The habitat



As the Florida Scrub Jay's numbers dwindle, it may be raised to the status of a full species. Photograph/ C. Heidecker/VIREO.

was patchy and rare even before humans got to Florida. The problem is that key areas of this scrub, as on the Lake Wales Ridge, are easily drained and so have been largely taken over by builders and citrus growers. Only ten percent of the ridge remains un-

developed."

As people have flooded into Florida, conservationists have focused on protecting the wetlands and their big showy birds, but the state's largest concentrations of endangered organisms (lizards and plants, for instance) are actually found in the uplands. Local governments have rejected previous opportunities to buy such land, and conservationists charge that developers now are clearing scrub habitat on the chance that land-use restrictions eventually will be applied to it.

"I don't think we'll lose the Florida Scrub Jay, but we're at a critical point," Fitzpatrick says. "The only way to save the bird is to buy land. There have been some encouraging developments. Water management districts are looking for upland recharge areas, and some major acquisitions may be made under the Florida Conservation and Recreational Lands Program. The Fish and Wildlife Service wants to preserve endangered plants, and the Lake Wales Ridge provides a good selection of them. The next ten years will tell which way the jay goes."

# OTHER ENDANGERED FLORIDA BIRDS

Until recently, much of Florida conservationists' attention has been focused on two endangered species, the Snail Kite and the Wood Stork.

The fate of the former, it turns out, is partly outside of man's control. The dramatic fluctuations in the species' annual counts—which range from 250 to 650—depend on how weather and water levels affect the apple snails on which it feeds almost exclusively. As for the latter, its population seems to have stabilized at 5000 to 6000 pairs in Florida and a few more in Georgia and South Carolina.

But the survival of an array of other Florida birds, seems to depend, like the upland Scrub Jay's, on what happens during the next decade.



The fate of the "endangered" Snail Kite depends on how weather and water affect apple snails on which the bird feeds almost exclusively. Photograph/H. Cruickshank/VIREO.

"The Tampa area is growing as fast as a Third World country," Richard Paul, who manages National Audubon's Florida Bay sanctuaries, has said. "We've got small birds like the Black-whiskered Vireo and the Grasshopper Sparrow that could be gone before we know it. We've had development pressure for a long time, but now we suddenly have a cowbird problem, too.

"They've invaded Florida from all directions—Brown-headed, Bronzed, and Shiny cowbirds—and not long ago we had all three species on one bird feeder! In 1985 Sandy Sprunt found the first Shiny Cowbird in Florida after it had moved up through the Caribbean from South America. Shiny Cowbirds decimated the Yellow-shouldered Blackbird population in Puerto Rico."

Paul is also concerned about wetland birds. "If we continue to use up wetlands in this state, the prognosis is not good," he said. "The Snowy Plover is a bird that may be in for more serious trouble because it nests on beaches—and you know what's happening to beaches down here! State biologists conducted a survey of Snowy Plovers along the Gulf Coast from Florida to Alabama and Mississippi. They found fewer than 200 pairs. In fact, there's a whole suite of species, including Piping Plovers and Least Terns, that are becoming more difficult to find in most parts of their former ranges."

## **MIGRATORY SHOREBIRDS**

Moving from the country's south-Continued on page 1194



Cowbirds and urbanization threaten to wipe out the Black-whiskered Vireo in Florida. Photograph/Rob Curtis.