

Vulture Culture

It started in early January, with a spate of radio, television, and newspaper articles, including a front page piece in *The Wall Street Journal*. Vultures, it seemed, had begun to take over the 'burbs in Maryland and Virginia. The stories were shocking: Vultures attacking boats and lawn furniture, newborn livestock, and—in one outrageous report—threatening kindergarten children at a bus stop. A Virginia woman reported that 60 vultures chased her dog into its doghouse and surrounded the entrance. Another reported a cat being carried off.

Soon the Internet computer network was abuzz with miffed birders from Virginia to New Mexico, questioning the accuracy of the reporting. An interesting dialogue ensued, with



DIACK VUILUITE

far more information than most of the media's attempts. (For example, New World vultures cannot close their feet as raptors do, a characteristic used to support the theory that the vultures are more closely related to storks.) The brouhaha even drew a query from the editor of a newsletter on contemporary legends and rumors (FOAFtale News-Friend of a Friend to whom things always happen). Indeed, some birders wondered whether the articles were not promotional hype for "The Birds II," a made-for-TV movie that aired soon after.

Information Superhighway Databases of threatened species and their breeding grounds are now available through electronic computer networks, thanks to the World Conservation Monitoring Council in Cambridge, England. The WCMC spent 13 years compiling and converting data on breeding grounds, status of habitat, migration routes, and other information on thousands of plants and animals. The information will be free to non-commercial users, and the WCMC will sell the data to groups who will use them for commercial purposes. For example, a developer wanting to build in an area with endangered species will be able to get detailed information that could prevent damage to the ecosystem. The WCMC also will set up a computer bulletin board where it can review endangered species. Information gained from field work could regularly update the council's Red List.

Arrested Development?

Habitat conservation planning was added to the endangered species law in 1982, but it remained a little-used tool until the Clinton Administration embraced it as a way to intercede on behalf of a species before drastic measures were required. Now both environmentalists and critics of the Endangered Species Act are closely watching the strategy. Habitat conservation allows developers to use property inhabited by endangered species in exchange for a commitment to preserve habitat or to provide replacement property. Many environmentalists applaud the approach as a way to win concessions from developers who might otherwise ignore the law. But they concede the system is not perfect. In Florida, for example,



Florida Scrub Jay

Wal-Mart wanted to build in Sebring on acreage where two pairs of threatened Florida Scrub Jays nested. The company drafted a plan that included spending \$176,000 to purchase 40 acres, expanding the nearby Archbold Biological Station. But some local conservationists were angered that the 24 acres where the jays resided was lost, pointing out that the bird becomes disoriented when it loses its nest.

Observers say habitat conservation planning works best when it involves large tracts, rather than fragments.

Murre Mortality

Common Murres in the Pacific Northwest have suffered in recent years from a variety of natural and man-made events, including the El Niño current and several oil spills. Last



Common Murres

August a large die-off occurred, with more than 800 adult Common Murres washing onto the shores of Boundary Bay in British Columbia, and another 300 reported in other areas. Actual deaths were presumed to be much higher. A paper by Gary W. Kaiser in the *Pacific Seabird Group Bulletin* (Fall 1993) implicates gill-net fishing in United States waters off Pt. Roberts and the nearby San Juan Islands.

Kaiser writes that there were two courses of action that could reduce the bycatch of birds. Changing gill-nets from monofilament to multi-strand may possibly reduce mortalities, though the evidence is only circumstantial.

Separating gill-net fishing from areas in which birds feed would eliminate most fishing in northern Puget Sound and the Strait of Juan de Fuca. But the economic impact of such a move would be so vast that it would require a clear demonstration that the action is necessary to effectively save seabirds.

New Song, New Bird

An unusual song on a ridgetop forest in Madagascar led two birders to discover a new species. Bret Whitney and Jan Pierson were on the island in November when they heard a song in the dawn chorus that didn't match any other. After recording the song and replaying it, a small, drab warblertype bird came into the clearing. Both Whitney and Pierson, experienced in the calls of tropical birds, knew they were looking at an undescribed species.

Tom Schulenberg of the Field Museum in Chicago is studying the bird's genetic material; it is thought that the bird is in the Sylvidae (Old World Warbler) family.

Peregrine Pairs

A small, local population of Peregrine Falcons (*anatum*) in Texas is receiving help from a unique consortium of science, consumer marketing, and private ranches. Twelve known pairs live year-round in the lower Rio Grande of west Texas, but a sample showed that their eggs shells may be thinning dangerously.

The suspected culprit is DDT built up when peregrines eat small birds that winter in South and Central America, where the pesticide is still used. The population has been monitored for nine years, but there was no money for a scientific study.

Now a marketing firm is helping to raise cash through sales of falcon T-shirts. And ranchers have donated money for the first year of study.

Both the Mexican and United States governments have granted permits to trap and band the birds. Sample prey birds will be tested for pesticide levels. If sufficient funds are raised, the study will examine nesting, breeding, hunting and dispersal of the population.

Cold Hummers

Hummingbirds that come to feeders on cool spring and summer mornings are susceptible to hypothermia when they feed from perches. Filling their crop with cold nectar, approximately the same temperature as the air, the body temperature is lowered significantly. Judy Hoy, director of the Bitterroot Audubon Wildlife Rehabilitation Center in Montana, recommends removing feeder perches; the heat produced by hovering can offset the chilling effects of the cold sugar water. Her husband Bob Hoy observed hummers going hypothermic while sitting on perches; the birds either fell to the ground or hung upside down from the perch. The birds recovered when warmed. But while hypothermic, they were easy prey for dogs, cats, or other predators. Judy Hoy, a wildlife rehabilitator, reports that she has received many hummingbirds which have been chewed

provide important stops for passerines crossing the Gulf of Mexico each spring. The fallout on any given day can put 20 species of warblers and a variety of other songbirds in one locale to refuel after the grueling flight. Sometime ago, the Texas Ornithological Society had the opportunitybut not the money-to acquire Sabine Woods, a stand of live oaks on the upper Texas coast. Because of its non-profit status, the Society was able to issue bonds without lengthy and costly federal government clearance (though the bonds had to meet state and federal requirements). Over 100 members wrote checks to purchase \$56,000 of bonds, and two additional grants from an outside source helped secure the sanctuary.

Since the bonds were issued, interest payments have been met in part from the original funds raised. Additional fundraising will be sought to pay both the remaining interest



Rose-breasted Grosbeak

by dogs or cats, and in each case there was a feeder with perches nearby.

UPDATE

Bird Bonds

Texas birders found a way to take advantage of the bond market five years ago to save habitat for neotropical migrants. Coastal woodlots and principal when it comes due. The goal was achieved: The Society was able to buy the land when it was for sale, and to buy the time to pay for the land.

Situated next to the Texas Point National Wildlife Refuge, Sabine Woods will remain an important stopping point for warblers, Rosebreasted Grosbeaks, and other migrants.

BIRDER OF NOTE R.E. Turner



Age: 55

Home: Georgia, Montana, New Mexico, Florida, South Carolina, and California

Profession: Chairman and President of Turner Broadcasting System, Inc.

How long have you been birding? 45 years.

What field guide do you use? National Geographic's Field Guide to the Birds of North America.

What make and model of binoculars do you use? Nikon 9x30

Do you keep a life list? Not in any systematic fashion.

What was your most recent life bird?

Wilson's Warbler, not far from Truth or Consequences, New Mexico. When I first saw it feeding, I thought it must be a flycatcher because it was behaving like one. I was interested to learn it was a warbler. What is your favorite birding habitat? I like all of them, but some of my favorites are pinyon juniper woodlands, ponderosa aspen forests, and of course, desert grasslands and short grass prairies.

What was your most spectacular bird sighting in North America? Whooping Crane.

Do you have a favorite North American species?

It would be impossible to name a favorite. I have lots of favorites and I'm getting more all the time.

What is the most interesting place you've birded?

The Himalayas in northernmost India.

Who are your favorite birding companions? Peter and Patty Manigault.

Why do you bird? Birds fascinate me. I like their colors and behaviors.

How would you characterize yourself as a birder?

Casual to serious. I can identify most of the birds that I see in the U.S., but I have trouble with warblers, sparrows, and sandpipers. And seagulls—they all look the same to me.

Why are birds important?

I can't remember a time when I wasn't an environmentalist. Birds give a clue as to the health of the planet. The most endangered species of all in this equation is ourselves. And there's nothing wrong, my father used to tell me, with intelligent self-interest. That's really the best way to sell our programs to the rest of the people who don't think the way we do: that it is our survival that we're interested in, as well as all the other species on the planet.

Willow Flycatcher

Large-scale habitat loss and brood parasitism has taken a great toll on the Willow Flycatcher, leading the United States Fish and Wildlife Service to propose that the Southwestern subspecies be listed as Endangered. The breeding range of the songbird includes Arizona, New Mexico, southern California, and portions of Nevada, Utah, Texas, and possibly Colorado and Mexico. The Willow Flycatcher depends on dense areas of willow and structurally similar vegetation, such as cottonwood. Much of its habitat has been lost to grazing, urban and agricultural development, changes in the watershed, and invasions of non-native plant species. Brown-headed Cowbirds have also devastated flycatcher populations as its territory is fragmented. Portions of the flycatcher's remaining habitat in California, Arizona, and New Mexico have been proposed for designation as Critical Habitat, protected under the Endangered Species Act.

Condor Woes

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Fine-tuning of the California Condor release program continues. The original release area proved to be too close to civilization. Four captive-bred birds released into the wild have died in accidents, ranging from the ingestion of antifreeze to collisions with power lines. After recapture, the remaining birds were taken to a more remote area of Ventura County. But three of those birds had to be recaptured again because they continued to fly to areas with power lines and human populations. Those birds have been returned to the Los Angeles Zoo, where they will live out their lives in the captive-breeding program. Today, six captive-bred birds remain in the wild; five released last fall and

three-year-old Xewe, one of the original birds released in 1992. Captive breeding continues in Los Angeles, San Diego, and Boise, Idaho. Other releases are being planned for Arizona and New Mexico. The last wild California Condor was captured in 1987.

Behind Bars

China is a major player in the wild bird trade. Investigators in Great Britain and Holland have uncovered more evidence of a massive market between China and Europe, with China providing literally millions of birds, including some endangered species protected by international convention, according to *New Scientist*.

Most of the birds are sold to collectors or as pets. "Bird farms" in China and Hong Kong collect species not only from Asia, but from Africa and South America. In one Hong Kong shop, investigators were offered Goffin's and Moluccan cockatoos—if they ordered at least 100 birds. Both are banned on the market under the Convention on International Trade in Endangered Species.

In a bizarre twist, two million frozen Eurasian Tree Sparrows were discovered by customs agents in Rotterdam in November, *en route* to Italy. Though international trade in Eurasian Tree Sparrows is not illegal, the vast number of birds shipped, at least eight times the breeding population in Britain, could be impacting the wild population in China, according to the Royal Society for the Protection of Birds.

Rapprochement

Growing concern about government interference in research (*See* AB:Vol. 47, No. 3) recently led to a meeting between Mollie Beattie, director of the United States Fish and Wildlife Service, and scientists. Philip Humphrey and

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HOTOGRAPH: GEORGF BENNETT

Nathaniel Wheelwright detailed problems involving processing delays, overburdensome paperwork, unreasonable restrictions on activities, and overzealous enforcement of arcane regulations. Beattie acknowledged the importance of research and of modernizing regulations.

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Useful Gifts

Birders who visit Latin America often come home with a new respect for Latin American birders, many of whom have little optical equipment but much avian knowledge. As a result, organizations around North America have asked birders to donate used binoculars, spotting scopes, tripods, field guides, computers, and other equipment to help naturalists, schools, and museums. The Fairfax, VA, Audubon Society (c/o Gary Filerman, 1322 Banquo Crt., McLean, VA 22102) has focused on getting binoculars in the hands of young people. Their first project provided 55 pairs of binoculars to the Costa Rican National Museum, where they are being used for school and scouting classes. Other groups will clean and repair old equipment for new use in Latin American (See column by Paul Ehrlich, page 25).

WORLD BRIEFS

Venezuela

A 2300-square-mile reserve in Venezuela, home to resident birds and neotropical migrants, is on the verge of extinction. The Santos Luzardo National Park in the heart of the country's llanos, or grasslands, has been the subject of unrest among landholders and farmers who want greater use of the land, according to Wildlife Conservation. The state government has passed a declaration, forwarded to the national congress in Caracas, to nullify the park's existence. Pressures elsewhere in the country could lead to similar proposals for other national parks.

Norway

The Norwegian government has approved offshore oil drilling in an area crucial to breeding birds and fish, say Norwegian conservationists. The region, off Rune, is home to puffins, cormorants, guillemots, kittiwakes, and gannets. The state-owned oil company says it will not drill during the summer breeding season, but the Norwegian Ornithological Society says the area is important for feeding and nesting from January to November.

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Burrowing Owl

Canada

The Burrowing Owl is threatened in the mixed grass pastures and prairies of Saskatchewan and Alberta, historical center of its population in Canada. Biologists are recommending that its status is listed as Endangered by the Committee of the Status of Endangered Wildlife in Canada, reports Canadian Geographic. Saskatchewan's Burrowing Owl Recovery Team says the annual rate of decline exceeds 50 percent at some sites. The biggest factor appears to be fragmentation of remaining prairie. As its habitat shrinks, prey populations decline, while predators, such as foxes and skunks, increase with the absence of larger predators or trapping.

Colombia

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The Animal Rehabilitation Center in Bogotá has cared for more than 1500 animals since it opened in April 1993, including many birds. Raptors like the Tropical Screech-Owl or the American Kestrel are often brought in with clipped wings preventing them from flying. About half the animals have been confiscated from illegal traffickers or dealers. Others are brought in by owners who cannot care for them. About one-quarter die because of illnesses or injuries received prior to their arrival at the cen-



ter. Release into the wild is not always successful, and workers agree that their work will not affect the survival rate of wild populations. But the center has also launched a vigorous animal conservation campaign in the local press, hoping to educate the public that wild animals are not good pets.

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Great Britain

Regional dialects have been detected in Robins in Wales and England. Sonograms of birds from Wales and Sussex were compared by Lance Workman, an animal psychol-



Robin

ogist at the University of Glamorgan in Wales, and the songs could easily be identified by region, reports *National Geographic*. Regional variations have previously been found in finches and sparrows; for example, dialects among White-crowned Sparrows have been extensively studied in the United States.

Madagascar

A Madagascar Serpent-Eagle has been captured and photographed for the first time. The bird was released by the Malagasy field biologists who measured and banded the bird in January. Little is known about the behavior or biology of the raptor, considered one

QUOTES

"When birds die off in unnatural numbers ... what we are seeing is not just a *warning* of impending degradation, but a part of the degradation itself—a tearing of the ecological web that keeps the planet's health in balance." Howard Youth, *World Watch* magazine.

"As I come over the hill, I hear the wood thrush singing his evening lay. This is the only bird whose note affects me like music, affects the flow and tenor of my thought, my fancy and imagination. It lifts and exhilarates me."

> Henry David Thoreau, in a journal entry dated June 22, 1853.

of the rarest species in the world. A study team sponsored by the Peregrine Fund will observe the individual over the next few months in the threatened Madagascar rain forest. An initial sighting of a serpenteagle was made in November 1993 in a different area, but it was not found three weeks later, when biologists returned to find the rain forest there being destroyed by slash-andburn farming.

A partnership of government agencies, conservation groups, and private voluntary organizations are working to create a national park to protect some 745,000 acres of critical forest habitat, as well as to develop sustainable agricultural practices for the local population. Two other species close to extinction are also targeted for conservation by the Peregrine Fund on the island nation: the Madagascar Fish-Eagle, which lives in wetlands, and the Madagascar Red Owl, found in the rain forest.

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New Zealand

Rats introduced to isolated islands are responsible for devastation of native plants and animals, but such habitat can be rescued. Rowland Taylor and Bruce Thomas, working for New Zealand's Department of Scientific and Industrial Research, were able to exterminate rats from Breaksea Island off New Zealand's South Island. The rats had



South Island Saddleback

been established there for at least 150 years. Using meticulous planning and the latest rat poison, the researchers set up bait stations, placing bait inside tubes to protect birds. On the first night, rats took 80 percent of the available bait. In 21 days, only two rats were seen visiting the stations. Recently no signs of rats were seen, despite the presence of apples, one of the rats' favorite foods. Rats had been known to eat birds such as the South Island Fantail and New Zealand Pigeon. Rare South Island Robins have now been seen nesting unharmed on Breaksea. Researchers now plan to reintroduce the endangered South Island Saddleback, a forest bird extinct on the mainland.

DIRECTIONS

Fred Sheldon is associate curator of genetic resources at the Museum of Natural Science at Louisiana State University in Baton Rouge.

The 1994 Kathleen S. Anderson Award recipient is Walter G. Ellison of the State University of New York at Albany. He was honored for his paper "Genetic variation in a long-distance migrant bird, the Bicknell's Thrush (*Catharus minimus bicknelli*)." The award is given by the Manomet Observatory.

The American Birding Association has recently published the third edition of its Directory of Volunteer Opportunities for Birders, including more than 300 different volunteer projects in the United States. For a copy, send \$2 to the American Birding Association, PO Box 6599, Colorado Springs, CO 80934-6599, or call 1-800-850-2473 for more information. ABA has also launched a

ABA has also launched a newsletter by and for teen-

aged birders. *A Bird's-Eye View* will appear four times a year. Subscriptions are \$5.

Audubon scientist Stephen Kress recently received a 1994 Chevron-Times Mirror Magazines Conservation Award for his seabird restoration work. Starting in Maine 20 years ago, Kress developed techniques to successfully reestablish colonies of Atlantic Puffins, Roseate Terns, and storm-petrels on coastal islands. This spring, Kress helped launch a similar program in Hawaii to lure Laysan Albatrosses to a state wildlife sanctuary island. Though it will be several years before a breeding colony is established there, Kress reports that Laysans have been landing and courting on the island, and nuzzling and preening decoy chicks.

Obituary

Burt L. Monroe, Jr., ornithologist, author of many books and papers on birds, and a regular contributor to the Christmas Bird Count issue of American Birds, died May 14 in Louisville, Kentucky. He was 63. Monroe was chairman of the biology department at the University of Kentucky. A past president of the American Ornithologists' Union, Monroe was the chairman of the AOU's Committee of Classification and Nomenclature. He was the co-author of Distribution and Taxonomy of Birds of the World and A World Checklist of Birds.

Alfred Evans Smalley, professor *emeritus* in the biology department at Tulane University, died March 29 in New Orleans. He was 66. Smalley was a member of the American Ornithologists' Union, the Louisiana Ornithological Society, and the Colonial Waterbird Group. He was instrumental in the founding of the *Journal of Louisiana Ornithology*, and a member of its editorial board. Crawford H. Greenewalt. known for his research on hummingbird flight and the physiology of bird song, died Sept. 27, 1993. The former chairman of the board at Du Pont, he was instrumental is founding Visual Resources in Ornithology (VIREO) at the Academy of Natural Sciences in Philadelphia. His photography formed one of the original nuclei of the collection. Greenewalt was on the administrative board of the Cornell Laboratory of Ornithology from 1955-68. He was a catalyst in the founding of the Lab's Bioacoustics Research Program.

Helen Gere Cruickshank died at her home in Rockledge, Florida March 31 at the age of 92. Helen and her husband, Allan, were among the most prolific and well-known nature photographers of the century, and Helen spread the conservation ethic through photography, articles, books, and lectures.

Helen's achievements in print and on film are nearly countless, with tens of thousands of color photographs, many nature movies, hundreds of articles, and 12



Helen Gere Cruickshank

books. The Cruickshanks taught at the Audubon Camp on Hog Island in Maine for 33 years, and their enthusiasm and concern for the natural world sparked many young campers into lives bound to nature and conservation. Their slides and movies were the heart of many Audubon Screen Tour Lectures. The Cruickshank collection of photographs formed a basis for the start-up of VIREO at the Academy of Natural Sciences in Philadelphia.

Through the Cruickshanks' work with NASA in the 1950s and 1960s, the Merritt Island National Wildlife Refuge was established on land surrounding Cape Canaveral and the Kennedy Space Center.

-Geoffrey S. LeBaron

AUDUBON REPORT

Students Illustrate Endangered Species

The artwork of 17 students was featured in an Audubon poster on the Endangered Species Act in April. The poster was part of an educational kit sent to 30,000 classrooms nationwide.

"The Endangered Species Act is our best tool for restoring balance between human activities and the natural world," says Peter A.A. Berle, National Audubon Society president. "Our children's future must include the wondrous variety of plants and animals that they depict so carefully in their drawings."

Included among different endangered plants and animals were the Bald Eagle, California Condor, Burrowing Owl, Whooping Crane, and Peregrine Falcon.

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Rats!

The Alaska Board of Game recently denied the United States Fish and Wildlife Service permission to implement a plan to prevent rat infestation on Aleutian islands with critical seabird colonies. The National Audubon Society denounced the ruling and urged the Fish and Wildlife Service to proceed with the action.



Drawings by Kham Seng Phaisan (above) and Nicole Canizio (below)



Details from Audubon Adventures poster

Introduced rodents destroy bird nests and eat eggs and young birds. Twenty-two refuge islands in Alaska have already been infested. At stake now are the Pribilof Islands in the Bering Sea, an area with increasing commercial fishing activity.

The Fish and Wildlife Service's plan has been in preparation since 1990, based on "solid biological science," says David Cline, Audubon regional vice-president for Alaska and Hawaii. "It has broad public support ... and is a measured response to a serious rat infestation threat." The plan would use two chemicals which are available over the counter; the state said it rejected the plan because of concerns over the chemicals. Environmentalists answer that the rats will do far more damage to the ecosystem than the poisons, which have been used successfully in New Zealand and Hawaii.

"By this preposterous decision, Alaska's Board of Game appears to prefer rats over the protection of priceless national wildlife, including worldrenowned seabird colonies," says Cline.

"We regard the State Board of Game permit denial [for rat control] as a vindictive reprisal against the United States Fish & Wildlife Service," says Cline. He adds that the law appears to grant the federal agency the right to override the state board decision.

Plover Lovers

Audubon volunteers in California took part in a census of wintering Mountain

Plovers this January, in a trial run for a National Biological Survey project. The survey found 3436 individuals, from Imperial to Yolo counties. The species has declined by 63 percent since 1966, and many birds show a high level of pesticide contamination. Audubon chapter members, birding classes from community colleges, and volunteers from environmental consulting firms joined with researchers to inventory the wintering population.

The survey was coordinated by Bob Barnes, Regional Coordinator for the Audubon Western Regional Office, and ornithologist Fritz Knopf.

The largest populations were found in agricultural areas south of the Salton Sea, says Barnes. And 75 percent of the birds used plowed grounds for habitat, which would be consistent with the contaminants the birds are receiving.

"The turnout [of volunteers] was amazing," says Knopf, who will develop a standardized survey for next year's National Biological Survey. "That speaks well to amateur or professional birders looking for a conservation-justified mission to their activities."

LATE NEWS

Gnatcatcher Battle Redux

A Federal District judge has removed the northern subspecies of the California Gnatcatcher from protected status as a Threatened species, vacating a ruling by the United States Interior Department last year. Developers in Southern California and elsewhere cheered the decision.

Judge Stanley Sporkin in Washington, D.C., said the government had disregarded requirements of the Endangered Species Act when it declared the bird threatened. The court challenged the listing, saying that identical raw data was used to come to two different conclusions about the birds status as a species.

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NBS Alert

Attacks on the National **Biological Survey (NBS)** continue. Anti-environmental interests now argue that the Interior Department has no authority to fund the project.

Last fall the United States House of Representatives passed legislation establishing the NBS, but at the same time removing its authority to use volunteers in gathering data. The Senate did not take up the issue. In response, Secretary of the Interior Bruce Babbitt used his administrative authority to establish the NBS, permitting the use of volunteers.

Now NBS opponents argue that since Congress never authorized expenditures for the Survey, such funds should be stripped from the Interior Department's 1995 budget. The budget includes \$3.2 million for research on non-game birds and \$2.415 million for inventory and monitoring of non-game birds. The Congressional appropriations process also gives the antiscience lobby a new chance to limit the use of volunteers.

Congress is expected to hear the challenge to the NBS in June. Birders are encouraged to write their United States Representative and the chairman of the House Committee on Appropriations, asking for their support for the funding of the NBS, specifically research and monitoring of birds, and to oppose any restrictions on the use of volunteers.

BEHAVIOR WATCH

Big Appetites for Small Berries

Past observations of Cedar Waxwings feeding on blueberries had shown that the birds preferred the smallest berries available. Now experiments by Michael Avery, Kelly Goocher, and Marcia Cone have indicated that the waxwings choose such berries for the sake of efficiency. Captive waxwings were presented with six different size classes of cultivated blueberries. The smallest berries were gobbled up in under three seconds apiece, but medium-sized berries took far longer; at a diameter of about half an inch, the "handling time" averaged over thirty seconds, and more than two-thirds of the berries of this size were dropped rather than eaten (Wilson Bull. Vol. 105, No. 4). Apparently the waxwings can maximize their intake of food by eating small berries quickly rather than taking the time to deal with larger ones.

Singing Female Warblers

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Songbirds that actually sing are usually males. It is usually the male that does most of the territorial defense and advertising for a mate. There are a number of tropical species in which males and females sing duets with each other; but independent song by females is rare

among North American songbirds. During an intensive study in Manitoba, Keith Hobson and Spencer Sealy found female Yellow Warblers singing on several occasions (Condor Vol. 92, No. 1). This occurred mostly early in the nesting cycle, and usually when the birds appeared to be agitated-especially in encounters with other females.

Rash Moves by Redheads

It is not a rare thing for a female duck to lay some of her eggs in another duck's nest, even that of a different species. The Redhead does this particularly often. Redhead eggs have been found in the nests of more than ten other duck species, and even in the nest of American Bittern. However, Joseph P. Fleskes was still startled to find two Redhead eggs in the nest of a Northern Harrier in a marsh in Alberta (Canadian Field-Nat. Vol. 106, No. 2). Subsequent monitoring showed that the harrier incubated the Redhead eggs (along with five of its own eggs) for more than two weeks before the nest was destroyed by flooding. Since harriers are vigorous defenders of their nest sites, it is remarkable that an adult female Redhead was able to make two visits to the hawk's nest and linger long enough to lay an egg each time.



Yellow Warbler

TOGRAPH: JOHANN SCHUMACHER/VIREC

Long Parenthood for Geese

Geese, unlike many birds, apparently learn their migratory routes directly from their elders, rather than knowing them by instinct. So, while a warbler or thrush might set out alone on its first southWang Yong and Frank Moore captured thrushes that had just come north across the Gulf of Mexico, and monitored their activity for a few days.

Those birds that had arrived very thin tended to be less



Greater White-fronted Goose

ward flight, young geese usually travel with their parents.

The Greater White-fronted Geese that breed in Greenland and winter in Ireland have been extensively color-marked, allowing individuals to be recognized in the field, and this has revealed that young birds may remain with their parents well beyond the first winter (*Auk* Vol. 110, No. 1).

According to Stephanie Warren, A. D. Fox, Alyn Walsh, and Paddy O'Sullivan, nearly half of these young White-fronteds were still associated with at least one parent when they returned to Ireland for their third winter, and a few as late as their sixth winter. The long learning period might be important to these particular geese, since the long oversea flights to and from Greenland require precise navigation.

HOTOGRAPH, LEFT COLUMN TO RIGHT: J. HOFFMAN/VIREO: A. MORRIS/VIREO

Thrush Stops Diners

Migratory songbirds (most of which are nocturnal travelers) tend to be restless at night during spring and fall, even on nights when they're not going anywhere. Researchers have taken advantage of this trait to learn about some aspects of migration. On the Louisiana coast in spring,

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active at night (flying time) and much more active by day (feeding time); those that had arrived with good deposits of fat were more active at night, suggesting that they were ready to continue their migration immediately.

Wood Thrushes in all conditions tended to be less active during the night than Graycheeked or Swainson's thrushes or Veeries, possibly reflecting the fact that the Wood Thrush migrates a shorter distance than the other species (*Condor* Vol. 95, No. 4).

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Orange Vest at Morning, Birds Take Warning

Over the years, field-trip leaders often have suggested that birding clothes should be dark or drab to avoid scaring the birds away. However, this advice has been based mainly on gut feeling.

Now some hard evidence comes from a detailed analysis of winter bird counts by Kevin Gutzwiller and Heidi Marcum (*Wilson Bull.* Vol. 105, No. 4).

On these standardized counts, three species— Carolina Chickadee, Tufted Titmouse, and American Goldfinch—were recorded in lower numbers when the observer was wearing a bright orange vest. Experiments elsewhere had already shown the color orange to act as a repellent for some birds (Mallards, for instance). This may be a widespread phenomenon. Birders and researchers sometimes wear orange vests for safety during deer hunting season, but one side-effect may be to scare some birds away.

Dunlins in the Dark

In the productive zone where water meets land, shorebirds may seek their food either by sight or by touch. As a very general rule, the shortbilled species (like many plovers) tend to look for their prey, while the longbilled species (like dowitchers) often probe in the water and mud, feeling for things they cannot see.

But what about shorebirds with bills of intermediate length? On a mudflat in



to use visual clues even on brightly moonlit nights.

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Clash of Titans

When a Gyrfalcon, the big Arctic predator, moves south into the interior of North America in winter, what does it find to eat?

Researchers in Wyoming and Montana found that wintering Gyrs in that area seemed to be focusing on the largest prey available: the Sage Grouse, one of our biggest gallinaceous birds. Christopher Garber, Brian Mutch, and Stephen Platt saw Gyrfalcons pursuing Sage Grouse on five occasions, and successfully capturing them at least twice (*J. Raptor Research* Vol. 27, No. 3).



Dunlin

Denmark, K. N. Mouritsen studied one such species, the Dunlin, and found evidence that it was using both methods: hunting visually by day, and by touch at night (Bird Study Vol. 40, No. 3).

Dunlins apparently have better overall success at finding food by sight than by touch, but the ones in this study did not seem to be able These cases probably involved females (the larger sex in falcons) hunting females (the smaller sex in Sage Grouse); even so, the hunter and the prey would have been essentially the same size. (By contrast, a big male Sage Grouse could be literally four times the weight of a small male Gyrfalcon.)