World Briefs

Shorebird Conservation Plan

The Western Hemisphere Shorebird Reserve Network is developing a National Shorebird Conservation Plan, reports Conservation Sciences Quarterly. The plan will complement Partners in Flight and the North American Waterfowl Management Plan, which are aimed at protecting habitats important to neotropical migrant landbirds and ducks and geese, respectively. Working with state and federal agencies, nongovernmental organizations, and academic and research institutions, the plan will identify the most important wetland habitats and the most sensitive shorebird species. The two-year project is funded by the United States Fish and Wildlife Service Office of Federal Aid, using money riased through fishing and hunting fees.

Horseshoe Crab Decline in Delaware Bay

A serious decline in horseshoe crab populations in New Jersey has led to a 60-day ban on commercial harvest of horseshoe crabs in Delaware Bay, effective June 1, 1997. Governor Christine Todd Whitman instituted the ban after reviewing data showing a 90 percent decrease in the number of horseshoe crab eggs on the surface of New Jersey beaches since 1990. The eggs provide critical nourishment for migrating shorebirds—including a significant portion of the Red Knot population in the New World, as well as Ruddy Turnstones, Sanderlings, and Semipalmated Sandpipers.

"It takes time to detect long-term trends," says Joan Walsh of the Cape May Bird Observatory, who has studied the horseshoe crab population. "But if you take away an animal's food, you can assume what will happen. They'll look elsewhere or they won't find enough to eat. Given the condition of the birds when they arrive at Delaware Bay, both of these alternatives are unacceptable."

Last spring's count of Red Knots on Delaware Bay was the lowest since aerial surveys began in 1986, says Kathleen Clark, principle zoologist with endangered species in the New Jersey Division of Fish, Game, and Wildlife. This yearover two-thirds of all shorebirds present were found on the Delaware shore of the Bay, including 91 percent of the Red Knots. Usually the distribution has been relatively even.

New regulations for the taking of horseshoe crabs in New Jersey were adopted last year, closing the beach front to harvest during May. But Walsh notes that the back bays actually harbor some sites where "huge" numbers of crabs occur, and the catch there has been significant. Delaware has more restrictive regulations than New Jersey, and the take is estimated to be one-third less than in New Jersey.

Horseshoe crabs do not become sexually mature until they are between nine and eleven years old. They live 20–25 years, and females have multiple spawns each year between April and July. Tagging returns on horseshoe crabs seem to indicate that crabs may return to the same shore each season.

"If we have reduced the population to where we are affecting reproduction, then it will take a very long time to recover," says Clark. Reproduction appeared to be good up to 1990, but crabs hatched then are being taken now, just as they are ready to spawn. "If the breeding population has been reduced, then the horseshoe crab population has not yet bottomed."

What will happen when the ban is up? Clark says that the regulations will be revisited by the New Jersey Marine Fisheries Council, which sets the harvest season. She also notes that the Atlantic States Marine Fisheries Commission is developing an eel and horseshoe crab management plan, which would set controls on catches consistent with the animals' capcity of survive and thrive. Citizens are encouraged to comment on future regulations and management plans. For more information, contact Joan Walsh at the New Jersey Audubon Society at 609-861-0700, or email: cmbo@compuserve.com.

Texas Coastal Birding Trail

The Great Texas Coastal Birding Trail is now plotted on a detailed highway map. This plan of the central Texas coast locates 95 birding sites with specific directions to each spot. The map is available at Texas Travel Information Centers throughout the state and at many local visitor bureaus. It is also available through the Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, TX, 78744.

Important Bird Area Projects Gain Momentum in North America

With habitat loss and fragmentation leading causes of population declines in many bird species, protecting and maintaining the best habitat areas is one of the highest priorities in bird conservation. Many such places, known as Important Bird Areas, are familiar to us all: places like Delaware Bay, staging area for over one-million shorebirds in spring migration, including up to 90

percent of the world population of Red Knots. Other sites are less well known: For example, Butterbredt Springs, in Southern California, is a phenomenal migratory pathway for songbirds, with thousands of birds passing through every hour. Either way, the impact of development, pollution, human disturbance, or other problems on these Important Bird Areas could have significant repercussions for whole populations, if not species, of birds.

In 1995, the National Audubon Society and the American Bird Conservancy together launched the Important Bird Areas (IBA) Program in the United States, an ambitious project to inventory, document, and conserve the most important sites for birds in the country. The IBA Program is modeled on a project of the same name begun in Europe in the late 1980s, which has been responsible for protecting and improving management on millions of acres. Similar programs have been initiated on nearly every continent, including North America, where both Canada (led by Bird Studies Canada and the Canadian Nature Federation) and Mexico (CIPA-MEX) have launched programs.

Today, at least 500 sites in the three countries have been identified as Important Bird Areas, with several hundred in the United States. Some of the work in identifying IBAs has been supported by the NAFTA-created Commission on Environmental Cooperation (CEC), which at the end of this year will produce a directory of 200 or so exceptional sites recognized as IBAs. It is hoped that this publication will spur efforts to protect and conserve many key areas.

Meanwhile, National Audubon has been spearheading efforts to identify and conserve IBAs in each state, with programs in California, Idaho, New York, Pennsylvania, South Carolina, and elsewhere. IBA designation of the Montezuma National Wildlife Refuge in New York—a site for half a million waterfowl and impressive concentrations of songbirds, swallows, and shorebirds—helped free up state and federal funds to acquire buffer lands around the refuge. In Pennsylvania, Audubon intervened to help modify plans by a hydropower company that threatened to inundate one of the state's best shorebird habitats, Conejohela Flats

The response of state and federal agencies to the program has been very positive. For instance, the Pennsylvania Bureau of Forestry has asked Audubon

to help incorporate IBA data into resource management plans for the state forests. And the United States Fish and Wildlife Service has created a special fund to support small restoration projects specifically on IBA lands.

For more information, contact Fred Baumgarten, IBA Program Coordinator, National Audubon Society, 700 Broadway, NYC 10003. Or email queries to: fbaumgarten@audubon.org.

Seychelles

The Seychelles Warbler, a species endemic to the islands off the eastern coast of Africa, appears to be able to produce either male or female offspring according to prevailing needs, reports a paper in *Nature*.

Jan Komdeur of the University of Melbourne in Australia and colleagues studied the warbler on 70-acre Cousin Island, where there is not always enough territory for every bird to mate and successfully nest. So offspring, usually females, will stay on with their parents as helpers-building nests, defending territory, and even incubating and feeding newborn chicks. But when there is enough food on territory or there are more than two helpers, the assistants become liabilities, competing with parents and hatchlings for food. Thus, producing females when helpers are needed and males when they are not would make sense.

In fact, the birds produce young as this theory suggests, according to the research, which used DNA testing to determine the sex of newly hatched chicks. To further test the hypothesis, researchers moved pairs of warblers from territories without much food, where they were producing mostly males, to neighboring islands without a Seychelle Warbler population. These pairs began producing mostly females in the more bountiful new territories.

Phillipines

Lina's Sunbird, a species that had been collected but misidentified from the island of Mindanao in the southern Phillipines over 30 years ago, was recently determined to be a new species, according to a report in *The Auk*. An expedition to the island in 1993 led to the "rediscovery" of the bird, which was thought to be an unknown species. It was only after a review of specimens—which had been identified as another sunbird species when sent to the Smithsonian Institution in Washington and the Field Museum in Chicago in

the mid-1960s—that they were recognized as the new species. There are now 126 sunbird species from Africa to Southeast Asia. Lina's Sunbird lives in the eastern mountains of Mindanao in a limited range that, unlike many oldgrowth forests in the Phillipines, seems safe from logging.

Antarctica

A significant decline in the population of Adelie Penguins in the Antarctic is one result of a warming climate there, say scientists from the United States Palmer Station research facility on Anvers Island. The mean temperature on the Antarctic Peninsula has risen by nearly two degrees since 1950, which has meant a declining frequency of "seasonal" pack ice. The decreasing numbers of Adelie Penguins, which depends on pack ice for habitat, contrast with healthy populations of species that do not rely on pack ice, such as elephant and fur seals. Though there is dispute about the reasons for the penguin's decline, it is obvious, says chief Palmer scientist Bill Fraser of Montana State University, that the Antarctic is "melting."

This column is devoted to conservation notes concerning birds and birding. The format will vary—some issues will include briefs of interest, others will focus on one single issue of importance. We want it to be your forum, also. We invite our readers to contribute bird conservation news from your communities, essays on issues of controversy, and summaries of conservation victories. Please send any contributions to Susan Roney Drennan, Editor-in-Chief, National Audubon Society Field Notes, 700 Broadway, NYC, NY 10003.

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