

OPPORTUNITIES AND GOALS OF THE NEOTROPICAL MIGRATORY BIRD CONSERVATION PROGRAM - PARTNERS IN FLIGHT

Deborah M. Finch

U.S. Forest Service

Rocky Mountain Forest and Range Experiment Station

Flagstaff, AZ

ABSTRACT

In the fall of 1990, a major program for the conservation of migratory landbirds that breed in North America and winter in Latin America and the Caribbean Basin was initiated. Numerous federal, state, and private organizations in the United States endorsed the initiative by signing an official agreement to cooperatively conserve populations of neotropical migratory birds. These include the U.S. Fish and Wildlife Service, the U.S. Forest Service, Bureau of Land Management, National Park Service, Agency for International Development, Department of Defense, National Audubon Society, The Wildlife Management Institute, The Wildlife Society, International Council for Bird Preservation, and many more. Working groups for Information and Education, Research, Monitoring, International Affairs, Legislation, and Regional Management have been established to implement the program. To expand the program internationally, participation by Canadian, Latin American, and Caribbean governmental and nongovernmental organizations is sought.

INTRODUCTION

The Neotropical Migratory Bird Conservation Program was established in the United States two years ago by numerous partners in state and federal government agencies and in the private sector. To effectively protect neotropical migratory birds and their full range of habitats, however, the program must transcend American boundaries. Neotropical migratory birds are a resource shared by Latin American and North American countries, and therefore, their conservation is dependent on cooperation and coordination among all Western Hemisphere countries in which they are found. The interest in coming to this Canadian workshop on birds in the boreal forest was to inform likely international partners like Canadian Wildlife Service and Forestry Canada about the goals and opportunities of this program.

The Neotropical Migratory Bird Conservation Program is a strategy to conserve and recover neotropical migratory birds and their habitats throughout the Western Hemisphere. The

motto for the program is "Partners in Flight - Aves de las Americas". The logo depicts a stylized neotropical migratory bird species, the American redstart. The program was initiated in the fall of 1990, in response to a proposal by the National Fish and Wildlife Foundation (a financial institution established by the United States Congress).

As of May 1992, twelve federal agencies and numerous nongovernmental organizations (NGO) have formalized their support of the Partners in Flight program by signing a Memorandum of Agreement. Federal agencies include: the U.S. Fish and Wildlife Service, U.S. Forest Service, Bureau of Land Management, National Park Service, U.S. Agency for International Development, Department of Defense (Navy, Army and Air Force), Environmental Protection Agency, Soil Conservation Service, APHIS Animal Damage Control, and U.S. Department of Agriculture Cooperative Extension Service. The NGO signatories so far include: The Wildlife Society, American Forest Resource Alliance, American

Ornithologists' Union, Conservation International, The Nature Conservancy, Cornell Laboratory of Ornithology, National Audubon Society, The Nature Conservancy, World Wildlife Fund, Institute for Bird Populations, The Wildlife Management Institute, Hawk Mountain Sanctuary Association, International Association of Fish and Wildlife Agencies, International Council for Bird Preservation, Manomet Bird Observatory, Point Reyes Bird Observatory, and National Fish and Wildlife Foundation.

The National Fish and Wildlife Foundation has used its Challenge Grants Program to jumpstart the program. Funds have also been appropriated in 1991 and 1992 from the U.S. Congress to support research and management projects of the U.S. Fish and Wildlife Service and the U.S. Forest Service. Funding needs for state game and fish agencies and for the U.S. Fish and Wildlife Service's Western Hemisphere Program were highlighted in the fiscal year 1993 Fisheries and Wildlife Assessment of the National Fish and Wildlife Foundation (1992).

WHAT IS A NEOTROPICAL MIGRATORY BIRD?

The Neotropics are defined as the region between the Tropic of Cancer and the Tropic of Capricorn. A neotropical migrant is a bird that migrates within, or to the Neotropics. North American interest in neotropical migrants is related to the fact that many neotropical migrants breed throughout North America. They migrate to Mexico, Central America, South America, and the Caribbean Basin to winter. The winter distributions of neotropical migrants that breed in eastern North America concentrate in southern Mexico, Central America and the Caribbean, and fan out into South America. Breeding birds of western North America winter primarily in western Mexico and Central America.

The Partners in Flight program encompasses neotropical migratory bird species that use forests, shrublands, and grasslands. The program excludes water fowl and most shorebirds. This enables effective focus of funds

and energy on those terrestrial migrants experiencing population declines; the majority of which are songbirds. Weatherboards are covered by other major conservation programs like the North American Waterfowl Management Plan and the Western Hemisphere Shorebird Reserve Network. A comprehensive list of neotropical migrants that breed in North America has been developed by Partners in Flight. The list numbers 250 species, including all long-distant migratory landbirds as well as some short-distance migrants that have populations wintering in Latin America.

WHY WAS A SPECIAL PROGRAM NEEDED?

The U.S. Fish and Wildlife Service coordinates a continent-wide bird population monitoring program, called the Breeding Bird Survey (BBS); the results of which are maintained in a centralized data bank. Although these data have been collected over the past 30 years, they were not extensively analyzed until recently. Breeding Bird Survey results showed that over the last 10 years, many neotropical migratory bird species (principally in the eastern United States) have experienced significant population declines. In the west, the trends are less clear, because much of the west has been undersampled by the Breeding Bird Survey. Based on these regional and continental results, biologists recommend that increased efforts in neotropical migratory bird conservation are needed in the east, and increased sampling of bird population trends (e.g., establishment of new BBS routes) is needed in the west.

Trend data from other sources (e.g., Breeding Bird Census - BBC, migration banding stations, radar imagery) plus long term data from many local studies in the Northeast generally corroborate the broad-scale population declines detected by the Breeding Bird Survey. For a thorough literature review of research results and factors leading up to the development of the Neotropical Migratory Bird Conservation Program, see Finch (1991).

What are some of the individual species that are experiencing these population declines? According to both BBS and BBC data, populations of the wood thrush (a fairly common species in the eastern United States and Canada), have declined throughout the Northeast over the last 30 years. Ovenbird, painted bunting, Swainson's thrush, olive-sided flycatcher, and yellow-billed cuckoo are just a few examples of neotropical migratory bird species showing long-term population declines.

Suspected causes of declines include deforestation and forest fragmentation in North and Latin America, contaminants, and the cumulative effects of these factors. Tropical deforestation may contribute to population declines of migratory bird species that winter in areas where blocks of habitat have been eliminated by slash and burn agriculture, pastureland and rural community development, fuelwood harvesting, and timber extraction. Forest fragmentation in North America exposes forest interior neotropical migrants to predators (including domestic pets), cowbird parasites, avian competitors, and human disturbance. Throughout much of the northeast, woodlands and forest tracts have been subdivided by urban development into small isolated parks. These remaining habitat patches are increasingly beset by recreationalists and surrounding urbanization. In the west, forests are fragmented by clear-cutting of timber, other forest management practices, burning, roads, and recreational and urban development. Many ornithologists believe that unrestricted use of pesticides in Latin America is an important factor contributing to population declines. Little baseline data are available to evaluate pesticide effects.

STRUCTURE OF THE PROGRAM

The first annual meeting of the Neotropical Migratory Bird Conservation Program was held December 1990 in Atlanta, Georgia. Meeting participants designed, endorsed, and initiated the program through a consensus process. At the meeting, program

plans were developed by topic (research, monitoring, information and education, management, and international affairs) and by two lead agencies (U.S. Fish and Wildlife Service and the U.S. Forest Service).

Two oversight committees were established which represented the signatories to the Memorandum of Agreement. These are committees consisting of representatives from federal agencies and a committee of nongovernment organizations. These two committees meet concurrently twice a year for the purpose of reviewing and guiding program direction.

The heart of the program is implemented by international, national, and regional working groups. National and international working groups address topics in Monitoring, Research, Information and Education, Legislation, International Affairs, and Caribbean Countries. Regional working groups focus on management, conservation, and related issues in the Northeast, Southeast, Midwest, and West. In the United States, new working groups can be established by submitting proposals to the two oversight committees. To foster Canadian participation, a Northern Boreal Forest working group has been suggested. Cooperation and coordination with governments, professional societies, and working groups in other countries are highly encouraged.

GOALS FOR POPULATION AND HABITAT MONITORING

Monitoring of bird populations and their habitats is a major focus of the Partners in Flight program. A Monitoring Needs Assessment has been prepared by the Monitoring Working Group and can be obtained from Greg Butcher, Cornell Laboratory of Ornithology. The Assessment identifies the need to: 1) evaluate, modify, and implement procedures for long-term monitoring of population changes of neotropical migrants on the breeding and wintering grounds; 2) implement long-term monitoring of habitat changes in forests, shrublands, and grasslands; 3)

strengthen and standardize current monitoring programs like the Breeding Bird Survey and the Breeding Bird Census; 4) standardize bird count procedures used in research and management; 5) design agency-specific monitoring using standardized protocols; 6) evaluate and incorporate complementary monitoring programs (e.g., Environmental Protection Agency's Environmental Monitoring and Assessment Program (EMAP)), and 7) design and establish centralized data storage and retrieval centers and systems.

Many National Forests are establishing new BBS routes in roadless areas in an effort to contribute to the need for increased BBS monitoring in the western United States. In addition, the U.S. Forest Service has developed a Monitoring Task Force whose goals are to evaluate and recommend current bird population monitoring procedures for National Forests and Grasslands.

Compatible with the objectives of Partners in Flight are the goals of a relatively new monitoring program called MAPS (Monitoring Avian Productivity and Survivorship). The MAPS program is a constant-effort mistnetting¹ and bird banding program implemented through a continent wide network of stations. It is centrally coordinated by the Institute for Bird Populations (Leader: David DeSante). Primary objectives of the program are to: 1) provide annual regional estimates of bird productivity, recruitment, adult survivorship, and adult population levels; 2) publicize conservation of birds through volunteer participation; and 3) use protected public lands for long-term monitoring efforts. In 1992, 70 MAPS stations were established on public lands. At least 40 were established on private lands throughout the United States. The Forest Service established nine MAPS stations on a trial basis on National Forests in 1992.

GOALS FOR MANAGEMENT

At the first Annual Meeting of the Partners in Flight program December, 1990 in Atlanta, Georgia managers identified the following goals: 1) to identify and conserve habitats essential for declining species; 2) to manage populations and habitats on a sustainable basis; 3) to coordinate management among federal, state and private agencies and organizations; and 4) to manage for biological diversity and viable neotropical migratory bird populations.

The U.S. Forest Service has now developed action plans for each of its nine regions. Action plans in 1992 outline a variety of methods to implement Partners in Flight on National Forests. Included are the following: habitat improvement projects to benefit neotropical migratory birds; public awareness activities like slide shows, posters, and public school projects; cooperative conservation projects with partner organizations like National Audubon Society and The Nature Conservancy; monitoring projects using MAPS and point counts; development of Wildlife Habitat Relationships Models; training of personnel, and identification and protection of critical habitats. By integrating Partners in Flight goals into New Perspectives/Ecosystem Management plans, the Forest Service can increase its ability to sustain biological diversity in managed ecosystems.

GOALS FOR RESEARCH

General Partners in Flight goals for Research are to: 1) determine why neotropical migratory bird populations are declining; 2) verify the species of greatest concern, i.e., those that are most sensitive to changes in habitat; 3) identify the critical resources for maintaining wintering and breeding neotropical migratory

¹ Live capture of small birds using a very fine mesh net.

bird populations; 4) assess ecological and socio-economic impacts of management; 5) develop methods for sustaining and conserving neotropical migratory bird populations; 6) evaluate consequences of land management, including effects of habitat fragmentation due to silvicultural treatments; and 7) transfer research information and technology to land managers and conservationists.

The Research Working Group of the Partners in Flight program has developed a Research Needs Survey which is being summarized and should be available in published form in 1993. The Research Needs Assessment will be circulated to federal, and state agencies, and the private sector. The intention will be to stimulate funding and focus research on high priority topics. The Research Working Group has also been instrumental in organizing the National Training Workshop, Status and Management of Neotropical Migratory Birds, September 1992 in Estes Park, Colorado. In addition, a working list of neotropical migratory bird species is maintained by the Research Working Group.

INTERNATIONAL CONCERNS

The Partners in Flight is a western hemisphere initiative. It is in the process of actively seeking program participation from governments and private organizations in other countries. In 1992, Partners in Flight financed neotropical migratory bird projects in Latin American and Caribbean countries through: the National Fish and Wildlife Foundation's Challenge Grants Program, the Forest Service's Tropical Forestry Program, the U.S. Agency for International Development, and the U.S. Fish and Wildlife Service's Western Hemisphere Program. Of high priority are projects that: 1) support in-country conservation programs; 2) develop opportunities for training and public education; 3) integrate conservation with sustainable resource development; 4) encourage conservation compatible with human needs, particularly of rural populations in developing countries; 5) transfer knowledge between and within countries; and 6) improve or restore habitats for migratory and resident birds.

CONCLUSION

My hope in coming to this meeting was to stimulate Canadian interest in the Partners in Flight program. Canadian Wildlife Service has participated to some extent already by sending representatives to the first Annual Meeting in Atlanta, Georgia, and by presenting a talk at the 2nd Annual Meeting in Madison, Wisconsin, October 21-23, 1991 (Wendt and Hyslop 1991).

This program is not truly western hemisphere in scope unless natural resource agencies like Canadian Wildlife Service and Forestry Canada join in or implement comparable programs within Canada. Participants at this meeting requiring more information about the program, can have their names and addresses added to the Partners in Flight Newsletter mailing list by writing to Editor, Partners in Flight Newsletter, National Fish and Wildlife Foundation, 1120 Connecticut Ave., NW, Suite 1100, Washington, D.C. 20036. Inquiries about opportunities to coordinate with Partners in Flight can be made by writing to the Chair, Federal Agency Committee, Partners in Flight, Office of Migratory Bird Management, U.S. Fish and Wildlife Service, Washington, D.C. 20240. Future partnerships with Canadian organizations will be most welcomed.

REFERENCES

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- Wendt, J.S.; Hyslop, C.F. 1991. International Perspectives - Canada. Pp. 19-21, in *The Neotropical Migratory Bird Conservation Program, Second Annual Meeting*, Madison, Wisconsin. Copies of the proceedings can be obtained from National Fish and Wildlife Foundation, Washington, D.C.

DISCUSSION

Question by Ms. Hannon: We've identified some similar goals to what you have. One of the things that we really need is more detailed information about some of these neotropical migrants on the breeding areas in western Canada. Does your organization have research money that can support some of these studies?

Response by Ms. Finch: The principal funding institution in this program is the National Fish and Wildlife Foundation. The National Fish and Wildlife Foundation will review grant proposals from any organization, whether it's in the United States or Canada or any developing country. If a Canadian is interested in accessing that grant system, they can write to the address that I've listed for the newsletter. It's the same address to get a package request for proposals. The National Fish and Wildlife Foundation has four funding cycles each year. I think they're in the middle of one of their funding cycles.

Question by Mr. DesGranges: I was interested in the map that you showed us of the United States and the places where a large proportion of the neotropical migrants declined. Did the people who produced that look at common natural life history traits of the species that were declining? What are they doing when they're in the north, and when they're spending the winter in the south?

Response by Ms. Finch: What we're doing at this time is trying to address the question of what the population status of that species is, and why is it increasing or declining? The four working groups that are regionally oriented are

each coming up with a matrix approach to identifying or prioritizing the most sensitive species. Their life history attributes, and their population trends are the types of criteria that are being used to classify species. It seems fairly obvious that the most common species and the ones that are actually increasing, or that their populations are stable are not the species that we really want to focus our conservation and management attention to. We want to identify those species that are declining. We want to identify why they're declining, and we want to implement procedures for restoring their populations.

Question by Mr. Desgranges: I have a second question. It looks like the birds from eastern North America, are spending the winter in the Caribbean and in South America while birds from western North America, spend the winter in Mexico and Central America. Is there a difference in the proportion of those birds that are declining? Is there a larger proportion of birds in eastern North America, that are declining as opposed to those in western Canada?

Response by Ms. Finch: Yes. The best information we have on declines is for eastern North America. The best information on population trends overall is for eastern North America, where we have a sufficient sample size to determine population trends. Information in the west is really not sufficient at this time to determine. Overall, I think there's an agreement that the problem's more serious in the east, and that it's not clear whether there is a problem at all in the west.