

Incorporating Partners in Flight Priorities into State Agency Operational Plans: Development of a Management System for Wetland Passerines¹

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Abstract

State agencies are often considered the prime avenues for implementation of Partners in Flight (PIF) bird conservation plans. Yet, such agencies already have in place a planning structure, which allows for dispersal of Federal Aid funds and guides management actions. Consequently, superimposing additional planning frameworks (e.g., PIF bird conservation plans) on state agencies may be met with resistance. Maine has successfully overcome these obstacles through an integrated planning approach that uses stakeholder input to set objectives, meets agency commitments under Federal Aid, and culminates in a management system which directs research, management, and outreach activities for species recognized as high priority by PIF. This approach could easily be adapted by other states to better integrate PIF conservation plans into agency operations, and furthermore, offers potential for including public input into development and implementation of state comprehensive wildlife conservation plans.

Key words: assessment, implementation, planning, prioritization, public input, stakeholders.

Introduction

Few persons, if any, back in 1992 thought that implementing conservation programs for landbirds would be simple. Indeed, several authors (Carter et al. 2000, Droege 1993, Smith et al. 1993, Therres 1993) have described some of the various complexities. As a logical consequence, planning has been a featured activity of PIF, since at least 1995, and Donovan et al. (1999) and Mueller et al. (1999) described model approaches toward setting objectives for bird conservation. Donovan et al. (1999) emphasized the need for coordination among local and regional managers. Mueller et al. (1999) appear to have built a coalition of agencies and organizations to set population and habitat objectives for the Mississippi

Alluvial Valley. Yet, as of 2002 PIF lacked both the necessary funding and the “foot soldiers” to carry out its work. However, PIF has well documented the needs for bird conservation in its bird conservation plans that, together with a broader partner base, could overcome these limitations.

One of the greatest strengths of PIF has been the development of the bird conservation plans, documents that chart the course for putting landbird conservation on the ground. The power of these plans is in their technical foundations, notably, the species assessment database used to generate the priority species pools. An important weakness, at least for some plans, may be the lack of specific detail in the implementation objectives and the failure to identify who will actually carry out this work. It has been assumed (correctly), that state agencies should take on the primary role of implementing the plans. However, state conservation agencies already employ detailed plans (some more so than others) to direct staff time and expenditures toward wildlife management activities. Additional plans, that may have differing objectives, can be interpreted as unfunded mandates from an outside organization. These can unfortunately detract from agency commitment, building partnerships, and ultimately can form an impediment to landbird conservation. At a time when agencies are developing comprehensive wildlife conservation plans while simultaneously exploring how to include public input into conservation decision-making, an approach that helps to accomplish these would be useful.

The Maine Department of Inland Fisheries and Wildlife (MDIFW) uses a system of stakeholder meetings to set the goals and objectives for state-based wildlife conservation programs. This agency has used this approach extensively for game species and nongame/threatened and endangered species alike. The basic concept was outlined by Anderson and Hurley (1980), but has been modified over time. The MDIFW began to address conservation of passerines in the late 1990s with a report assessing the populations and habitats of over 100 species (Hodgman 1998). That assessment, together with other supporting materials (e.g., PIF plans and priority lists), has been used to launch a series of stakeholder meetings to set state-based conservation objectives for five habitat-based groups of passerines. With these objectives, I began to

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focus on devising conservation strategies for songbirds in Maine. The results of these efforts were assembled in a management system that formed the first step toward comprehensive passerine conservation taken by MDIFW.

For the purpose of this report, I define a “management system” as a “planning process that uses public input to set agency objectives for the conservation of species and their habitats.” Matula (1988) first described the steps in a management system from which MDIFW decides which and documents how management actions will be taken for a given species. In brief, a management system begins with consensus-driven objectives, documents the decision-making process including data inputs, identifies the management actions (e.g., PR Jobs [conservation programs carried out by state agencies with approval and financial support of Federal Aid]) necessary to accomplish conservation objectives, and provides for annual monitoring of the progress of the system. This approach meets state commitments under the Federal Aid in Wildlife Restoration Act and provides a detailed flowchart of the steps involved in implementation.

In this report, I describe a planning framework that can effectively integrate PIF priorities at the state agency level and give examples (in case-study format) from an actual management system designed for wetland-associated passerines. I hope to provide a model approach that allows the PIF plans and their objectives to be better integrated into existing state programs or to be included in comprehensive wildlife conservation plans.

The Management System Process

Stakeholders Set Goals and Objectives

To be effective, stakeholder groups need to represent the overall community of bird enthusiasts, not merely technical experts. Streamlining this process to include only a subset of the overall community is possible but may lack the breadth of consensus desired. The stakeholder group that I worked with, a subset of the Maine PIF Working Group, was a combination of technical experts, representatives of conservation NGOs, and local birders.

Each stakeholder should begin the process with the same basic understanding of the problem, including species status, current conservation efforts, and other pertinent information. To accomplish this, I found several sources of information useful, including PIF national-level plan (Pashley et al. 2000), the AOU Conservation Reports (Biessinger et al. 2000, Carter et al. 2000), PIF bird conservation plans, PIF Species Assessment Database, and current Breeding Bird Survey (BBS) trends.

Case study

To initiate discussion, stakeholders were asked to itemize their concerns for a species/habitat suite, from which objectives could be set. Participants listed the following issues and concerns for the conservation of wetland passerines:

- Cumulative loss and degradation of wetlands, especially freshwater systems
- Impacts to riparian habitat, especially buffers in coastal areas and along rivers and streams
- Increases in invasive plants
- Recreational use of wetlands (personal watercraft and all terrain vehicles)
- Environmental contaminants
- Water level fluctuations/manipulations
- Forestry practices that alter habitat for long periods or enhance habitat for competitors/predators
- Nuisance situations (damage to agricultural crops, collision with aircraft)
- Outreach needed to increase knowledge and understanding

With these concerns identified, stakeholders drafted an overall goal and several specific conservation objectives for this group of species. The goal is generalized, intended to guide the vision of the stakeholders. The objectives, however, are concise and measurable, attempt to minimize uncertainty, and were determined by stakeholders, not the agency.

Goal: Maintain the diversity and abundance of wetland passerines, and increase understanding and appreciation of wetland passerines and their habitat requirements in Maine.

Population objective: Identify and prioritize species of conservation concern by 2002, determine population trends for these species in Maine by 2009, and develop population objectives for all at-risk species by 2010 (objectives likely will be drafted well in advance of this date, but this timetable allows for collection of preliminary population trend data and sufficient time for Northeast PIF Working Group to draft these objectives for the northeast region and step them down to the state scale).

Habitat objective 1: By 2017, increase the area of upland buffers of salt-marsh habitat in conservation status by 10,000 ha, with at least 4,000 ha in York, Cumberland, and Sagadahoc Counties.

Habitat objective 2: Prioritize peatlands by size, and by 2017 increase the area in conservation status for peatlands by 12,000 ha and adjacent buffers by 24,000 ha.

Habitat objective 3: Identify and prioritize forest riparian and emergent wetland habitats by 2002, and conserve habitat for passerines of forest riparian areas and emergent wetlands at 5 priority sites by 2004 and at 20 additional priority sites by 2017.

Outreach objective: By 2005, develop and begin implementing an outreach program that increases the understanding and appreciation of wetland passerines and their habitat requirements in Maine.

Decision Criteria Identify Management Actions

Despite attempts to be concise, stakeholder-derived objectives may contain multiple tasks within a single objective. Each objective, therefore, may need to be broken into its component parts. I used these components as decision criteria. Individual components are more manageable than the entire objective and should set temporal bounds within an annual workplan.

Decision criteria, when written as a question, lend themselves to yes/no responses suitable for a decision matrix or flowchart (fig. 1). Criteria tell exactly what is required for a positive response. They may also contain rules of thumb which identify the quantitative assumptions affecting a positive response.

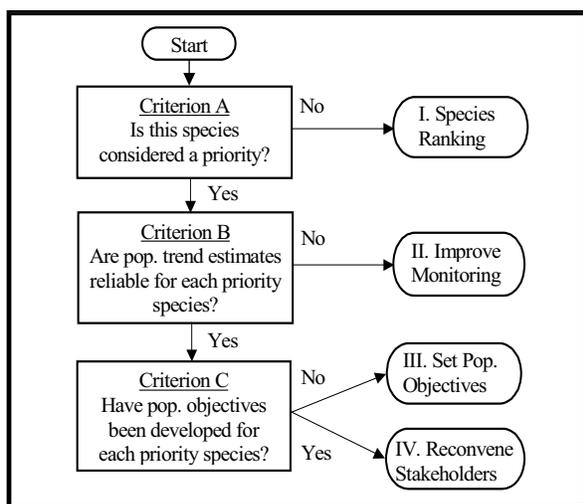


Figure 1— Flow of implementation steps for addressing the population objective and leading to management actions.

Case study: wetland passerines—population objective

Criterion A: Have all species been assessed?

An affirmative response will require that all appropriate prioritization lists (see Management Action I) have been reviewed to determine if any of the species in this group are listed.

Criterion B: Are reliable population trend data available for all priority species?

An affirmative response will require statistically reliable trend estimates based on BBS data for Maine.

Rule of thumb: Trend estimates from the BBS must be based on at least 14 routes with $P < 0.10$ from the most recent half of the BBS period (i.e., currently 1980 to 2002) to be considered reliable.

Criterion C: Have population objectives been determined for all priority species?

An affirmative response is only possible with assistance from a public stakeholder group with input from Northeast PIF Working Group.

Management Actions Accomplish Objectives

Management actions result from responses to decision criteria and identify exactly what will be done, who will do it, and when it needs to be completed. This is an excellent place to re-engage stakeholders in dividing up the tasks necessary to accomplish objectives. The use of volunteer monitors, for example, may be easier to deploy for some stakeholders than others.

Case study: Wetland passerines - management actions

I. Species Ranking

1. Species will be considered a priority and thus addressed by this management system, if species is
 - a. Recognized by Partners in Flight as a continental- or regional-level priority (see Rosenberg and Wells, this volume) for either the northern spruce hardwood forest, northern New England, or southern New England physiographic areas, or,
 - b. Listed by the U.S. Fish and Wildlife Service as a bird of conservation concern in Region V, or,

- c. Considered by MDIFW to be a species of special concern, or,
- d. If >5 percent of its global population occurs in Maine.

II. Improve Monitoring

1. If possible, improve BBS coverage by
 - a. Encouraging long-term commitments by current participants (e.g., to decrease down-time when routes are assigned to new observers).
 - b. Increasing total number of routes available in Maine. This is not likely as the number of routes was recently increased.
 - c. Increasing actual participation among currently assigned routes. Increase participation rate to >90 percent of assigned routes run each year. Accomplish this by
 - Sending letter to all observers thanking them for their volunteer participation and explaining the importance of BBS data to monitoring species populations.
 - Making follow-up phone call to volunteers who have not run their assigned route two or more times in the past five years. Encourage these individuals to resume survey or relinquish route to another qualified individual.
2. Develop separate monitoring programs for species not adequately monitored by the BBS if they are recognized as a priority under Criterion A. This will require additional volunteer support and may be coordinated with Maine Audubon.

III. Set Population Objectives

1. Convene stakeholders to establish population objectives for priority species, based on estimates provided by Northeast PIF Working Group and others.

IV. Reconvene Stakeholders

1. Develop new management system based on accomplishments to date, existing trend data, and revised goals and objectives.

Limitations

A well-crafted plan can be a great accomplishment, but the plan is a waste of time and money if it is never

implemented. The above-described process is time-consuming and requires organization and commitment by the agency. Yet, the outcome should engage stakeholders and inject the implementation process with enthusiasm and a sense of ownership. Such detail as I describe is not for everyone, but few agencies would not benefit by adopting or adapting portions of this approach to their operations. Commitment from agency administrators is essential as well (Anderson and Hurley 1980), for if they cannot support the objectives derived by stakeholders, effective implementation may not take place.

Recognizing PIF objectives as a priority can be a challenge given the many competing demands on agency staff. It may be useful to show administrators how participation by their state's staff fits into regional conservation efforts. Successes achieved by flyway technical committees for waterfowl conservation (e.g., regional coordination in setting bag limits, subcommittees made up of agency personnel focused on conservation of a single species or group of species) can serve as an excellent model for an agency. Education of upper administrators by regional (nongame) technical committees or within administrator's organizations themselves probably has been significant in the Northeast.

The approach that I have described is not without shortcomings. The case study was based just on wetland passerines, with other systems developed for forest, shrubland, and grassland species. Hypothetically, other systems would focus on waterfowl, wading birds, and so forth, and, ultimately, objectives could conflict with one another. An integrated system might overcome the taxonomic-based process that I described and that was discussed by the stakeholder group. Furthermore, the management actions are not prioritized nor has a cost estimate been placed on implementing them. This latter step, too, could assist some agencies in further deciding which actions to take first.

Finally, the PIF physiographic plans were used as supporting materials, to bring stakeholders up to speed on bird conservation priorities. Stakeholders did not critique nor modify the PIF plans, and some could argue that the PIF plans should be developed with greater consensus from all partners, thus alleviating the need for this state-based approach. I would suggest, however, that many states, at least in the Northeast, would prefer to build consensus themselves within their states, with the partner organizations that they work with on a daily basis. The state PIF working group is an obvious place where this could take place, but only if it has standing with agency administrators.

To date, the stakeholder group that I worked with has not set population objectives because Northeast PIF has only recently refined state level objectives. At a future stakeholder meeting, I believe the PIF population

objectives, at least for priority species, could be reviewed and incorporated into a revised management system. As Donovan et al. (1999) suggested, a plan should be reviewed annually and significant revisions made at intervals of 5 years with full rewrite and reconvening of stakeholders at no greater than 15-year intervals.

Conclusions

Avian conservation, like many other aspects of resource management is most effective when all parties agree on a common conservation goal and how to reach that desired end point. Unfortunately, this terminus, and the path leading to it, often are not clearly identified, and all too often are not well articulated among stakeholders. Either situation can result in conflict and ultimately in the failure to achieve meaningful conservation. Furthermore, the needs for landbird conservation far outnumber the funds available to address them at this time. As such, efficient methods for prioritizing and sharing the duties of implementation are needed. To its benefit, PIF initiative is replete with priority setting. But, broad consensus between and within states is still needed and, if successfully built, would focus all state-based stakeholders (e.g., agencies, state chapters of Audubon and The Nature Conservancy, and so forth) in a unified direction as well as give them a sense of ownership of the process and in its success.

The North American Waterfowl Management Plan often has been cited as a model for implementing migratory bird conservation (e.g., Mueller et al. 1999). The success of the Waterfowl Management Plan is a result of much hard work by many individuals over many years. Much of that success stems from the commitment by state and provincial agencies to achieve the objectives of the plan and through the teamwork or consensus facilitated through the various Joint Ventures, and, of course, a source of funding through the North American Wetlands Conservation Act (NAWCA).

As a state biologist, I can attest that the commitment by my agency in terms of staff time devoted to wetland acquisition, habitat improvement, and waterfowl monitoring appears pervasive, and by any objective measure is literally part of agency culture. For PIF to approach the same degree of success, parallel conditions should be in place. An upland equivalent to NAWCA or deeper funding of the Neotropical Migratory Bird Conservation Act is an obvious prerequisite. Perhaps if PIF conservation plans are in some way included in state comprehensive wildlife conservation plans, over time we will begin to see greater implementation by states. However, agency commitment at all levels and participation by federal partners and non-governmental organizations alike, as well as their constituents, will be critical in both a shared vision of what needs to be accomplished (gathered through stake-

holder meetings) and in sharing the load of conducting conservation activities.

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