

*Priority Projects of the Northeast Partners In Flight and North Atlantic Shorebird Group*



On September 4-6, 2002, the Northeast Partners in Flight (PIF) and the North Atlantic Shorebird Group held a joint meeting to determine the most important projects and areas for shorebirds and landbirds in the North Atlantic coast (BCR 30). In addition, on October 29-30, the Mid-Atlantic/New England/Martime Waterbird Conservation Working Group met to determine the most important projects and areas for waterbirds for the lower portion of the North Atlantic coast. This area, which includes portions of nearly all the northeast states, is extremely important for a variety of high-priority breeding and migratory birds such as Cerulean Warbler, Henslows Sparrow, Red Knot, American Oystercatcher, and Least Terns. It is an especially crucial migratory stopover for both spring and fall shorebirds and landbirds, and to beach-nesting and marsh waterbirds.

The first meeting also aimed to close the gap between the shorebird and landbird regional groups to accomplish two other important goals. Many of the professionals share interests in both bird groups and their combined perspectives helped to facilitate region-wide consensus. **For all three bird groups, our first major goal was to identify highest priority research, monitoring, and management projects and priority areas for funding through State Wildlife Grants (SWG), Landowner Incentive Program (LIP), NAWCA and other state and federal funding.**

**The second goal of the bird groups was to provide a much-needed venue for professional association already available to waterfowl biologists through the Atlantic Coast Joint Venture or Atlantic Flyway Technical Committees.** The bird groups determined that joint meetings will occur yearly with the specific intent of revisiting priority projects and important area list. This list will be submitted yearly to the Atlantic Coast Joint Venture through its newly formed Integrated All-Bird Conservation Committee. The yearly review of progress on accomplishing these state-based projects will help assess effectiveness of state programs and the regional bird plans. It will also provide a meaningful yearly interaction between regional shorebird, landbird, and waterbird biologists with the Atlantic Coast Joint Venture Management Board.

The bird groups developed a separate project and area list for shorebirds (17 projects), landbirds (20 projects), and waterbirds (18 projects). When ranked by the entire group most projects were judged equal in priority, but the following projects stood out as exceptionally important:

## **Landbirds**

1. Create a patch-based, GIS system for evaluating priorities for forest, grassland, and marsh habitats as part of a standardized regional approach (patterned on William and Mary Center For Conservation Biology, Mid-Atlantic PLF Project)
2. Integrate existing bird initiative plans, such as the PIE habitat plans, into state wildlife conservation plans.
3. Use radar and (315 methods to identify and evaluate migratory stopover sites, as demonstrated by New Jersey Audubon's Migratory Oases Project.

## **Shorebirds**

1. Create a patch-based, GIS system for evaluating priorities for forest, grassland, and marsh habitats, including detailed habitat types from the Northern Atlantic Shorebird Plan, as part of a standardized regional approach; (patterned on William and Mary Center For Conservation Biology, Mid-Atlantic PIE Project).
2. Implement PRISM (Program for Regional and International Shorebird Monitoring) to develop a state-by-state assessment of regional shorebird abundance and distribution.
3. Assess impacts of aquaculture on shorebirds in all states where significant activity is underway, and predict probable impacts of proposed aquaculture development.

## **Waterbirds**

1. Develop a regional monitoring program for waterbirds
2. Creation and restoration of breeding and nonbreeding habitat in waterbird focus areas through manipulation, augmentation, etc.
3. Increase agency capacity focused on permit and technical assistance for waterbird species
4. Research, assess, and implement control programs for mammalian and avian predators for high priority waterbirds

The following pages are the full project list developed from both meetings. High-priority projects described above are included in bold print.

# **Priority Landbird Projects for State Wildlife Grant Program**

The following is a list of priority PIF landbird projects identified by the Joint Bird Group for funding through State Wildlife Grants. The time frame is for the next 3 to 5 years.

## **All Habitats**

1. Develop state-level IBA (Important Bird Area) Programs.
2. **Create a patch-based GIS system for evaluating priorities for forest, grassland, and marsh habitats as part of a standardized regional approach.**
3. **Integrate existing bird initiative plans into state wildlife conservation plans.**

## **A. Salt Marshes**

2. Prioritize high marsh areas (>50 ha) coupled with field surveys of high marsh species and habitat composition.
3. Restore and protect high marsh/upland ecotone (where appropriate) for Henslow's sparrow, swamp sparrow, sedge wren, and sharp-tailed sparrow.
4. Develop a targeted monitoring program for marsh species following a standardized regional (or national) protocol.
5. Research impacts of existing marsh management techniques, including phragmites control, on high-priority marsh birds.

## **B. Forested Wetlands**

6. Develop a targeted monitoring program for forested wetland species.
  - o Swainson's Warbler
  - o Prothonotary Warbler
  - o Cerulean Warbler
  - o Louisiana Waterthrush

## **C. Upland Mixed Forest**

7. Develop demographic studies to identify limiting factors causing population declines in priority forest birds, and implement at a landscape scale to assess relationship to fragmentation; (e.g., link studies with Cornell's Birds in Forested Landscapes project)
  - o Wood thrush
  - o Cerulean warbler
  - o Kentucky warbler
  - o Scarlet tanager

8. Develop specific forest management guidelines *for* high priority forest birds.
  - o Wood thrush
  - o Cerulean warbler
  - o Kentucky warbler
  - o Scarlet tanager
9. Develop guidelines for recommended deer densities that are compatible with reversing declines of priority forest birds.

#### **D. Early Successional Grassland and Scrub/Shrubland**

10. Develop targeted monitoring/research program on demographics and habitat-area relationships for priority grassland birds building on and expanding the techniques developed by Massachusetts Audubon.
11. Develop detailed atlas of existing and potential Henslow's Sparrow breeding sites following techniques recently used for other priority species such as Cerulean Warbler and Golden-winged Warbler.
12. Develop and implement integrated management plans for grasslands on civilian and military airfields.
13. Increase utilization of Farm Bill programs to benefit priority grassland and shrubland birds.
14. Expand traditional game management in early successional habitats to include nongame bird priorities and objectives; including evaluation of effects of traditional game management on priority nongame species
15. Develop management recommendations for maintaining power line rights-of-way in a manner beneficial to priority early-successional birds.

#### **E. Migration Stopover**

18. Use radar and GIS methods to identify and evaluate migratory stopover sites.
19. Conduct studies on energetics to help evaluate relative quality of stopover sites.
20. Expand the Cape May Stopover Project concept to the entire northern Atlantic coast.

### **Priority Shorebird Projects**

## **for State Wildlife Grants Program**

The following is a list of priority Shorebird projects identified by the Joint Bird Group for funding through State Wildlife Grants. The time frame is for the next 3 to 5 years.

1. **Create a patch-based, GIS system for evaluating priorities for forest, grassland, and marsh habitats, including detailed habitat types from the Northern Atlantic Shorebird Plan, as part of a standardized regional approach; (patterned on William and Mary Center For Conservation Biology, Mid-Atlantic PIF Project) including:**
  - region-wide habitat identification and ownership analysis
  - Identify all managed wetlands, with contact information for managers
  - Include habitat detail sufficient to address as many species-specific information needs as possible
  - Include all land in appropriate habitat types
  - Develop methods and habitat categories that can be used independently by particular states that want to carry out their own analyses
  
2. Develop and implement a program for adaptive impoundment management in the northeast in cooperation with the project underway in the southeast.
  - Southeast project proposed by USFWS and USGS includes detailed analysis of shorebird energy needs, migration dynamics, and habitat use and availability
  - In the northeast, information on these topics and management for shorebirds are limited
  - Availability of early fall migration habitat may be a regional limiting factor for shorebirds.
  - There is also a need for data on shorebird responses to management practices
  
3. Implement best management practices for shorebirds at all appropriate impoundments in each state.
  - List all managed impoundments ownership
  - Develop contact information, and request that managers participate in achieving regional goals for managed wetland area.
  - Incorporate shorebird management at all appropriate impoundments.
  
4. Each state should participate in the implementation of the Program for Regional and International Shorebird Monitoring (PRISM).
  - Migration monitoring surveys necessary to determine population size, status, and trends of high priority shorebirds.
  - A regional analysis is underway for BCR 30, which will produce a framework design for migration monitoring surveys.
  
5. Design and conduct a coordinated aerial survey for the Atlantic Coast, where appropriate, targeting migrating shorebirds in spring.

- Aerial surveys are necessary to determine numbers of shorebirds using inaccessible coastal habitats
6. Identify and protect breeding habitat of American Oystercatcher, Piping Plover, Willet, and Wilson's Plover
    - Follow protocols developed for Massachusetts and Virginia, with Oystercatcher surveys completed in conjunction with Piping Plover survey, same in VA
  7. Develop a targeted monitoring program for high priority shorebird species, including staging and migration sites (coordinate with PIE projects).
  8. Implement Landowner information/incentive program (LW) (coordinate with PIF recommendations) for high priority species
  9. Assess habitat quality for foraging shorebirds through resource or energetic studies in representative habitats throughout the BCR.
  10. Develop and implement a region-wide education and outreach project to reduce human disturbance of sensitive shorebird areas.
  11. Increase agency capacity focused on permit and technical assistance for shorebird/landbird species.
  12. Expand existing beach nesting bird protection programs to increase shorebird roosting and foraging areas.
    - Maintain breeding season exclosures during spring and fall
    - Monitor effects of exclosures and manage appropriately to avoid establishment of excessive vegetation
  13. Analysis of threats to priority shorebird sites; (a goal of IBA program)
  14. Research, assess, and implement control programs for mammalian and avian predators for high priority beach nesting birds.
  15. Incorporate protection of priority shorebird species into existing oil spill response plans.
  - 16. Assess impacts of aquaculture on shorebirds in all states where significant activity is underway, and predict probable impacts of proposed aquaculture development.**
    - Conduct an immediate analysis of current threats to shorebirds from ongoing aquaculture projects
    - Ensure that an appropriate staff person from each state is involved with the aquaculture regulatory process
    - Develop Best Management Practices for aquaculture that minimize impacts to shorebirds

17. Compile current knowledge and assess impacts of beach replenishment and shoreline hardening on shorebirds.

## **Priority Waterbird Projects for State Wildlife Grant Program**

The following is a list of priority Waterbird projects identified by the Lower BCR 30 Waterbird Working Group for funding through State Wildlife Grants, and other funding sources. The time frame is for the next 3 to 5 years. ***Bold items are the highest priority.***

(habitat = breeding and non-breeding)

- 1. Develop a regional monitoring program for waterbirds**
  - C **Include breeding, nearshore, and offshore migration and winter surveys**
  - C **Continue 10-year Atlantic-wide breeding survey**
  - C **Develop a targeted monitoring program for secretive marshbirds (esp. BLRA) following a standardized regional (or national) approach, and using remote acoustical techniques**
  - C **Develop standardized beached bird survey (monitoring mortality)**
  - C **Expand existing regional monitoring database compiling all state and federal surveys**
  - C **Organize and contribute existing data to Patuxent Monitoring Database, include threat data to analyze priorities**
- 2. Creation and restoration of breeding and nonbreeding habitat in waterbird focus areas through manipulation, augmentation, etc.**
  - C **Examples include Stone Harbor (human-related predator removal)**
  - C **Establish, maintain, and enhance waterbird focus areas using dredged materials (e.g., ACOE dredge spoil projects)**
  - C **Provide incentives and other methods to create easements, purchase development rights, or acquire land for waterbird focus areas. Examples: Middle Island, DE; Mispillion Harbor, DE; South Bowers Beach, DE; Plantation properties on James River; Troy Meadows, NJ**
  - C **Prepare best management practices manuals (e.g., Managers' Tool Box on Aquaculture, Disturbance, etc.) for use on federal and state refuges and management areas**
  - C **Manage/restore wild rice habitat for rails**
  - C **Research life history and population effects of artificial/urban versus natural nest site use**
- 3. Increase agency capacity focused on permit and technical assistance for waterbird species**

- C **For specified issues (fisheries, wind power, increasing aquaculture, beach renourishment, sand-mining, development, recreational conflicts, erosion control, water supply planning, spill response), ensure involvement from an appropriate state staff person. Include waterbird conservation goals, as feasible, in state projects.**
- C **Ensure involvement of appropriate state person in construction, avoidance measures, evaluating permits and enforcing regulations on aquaculture industry.**
- C **Discourage reservoir construction in priority waterbird habitats, specifically, King William reservoir in York River watershed**

**4. Research, assess, and implement control programs for mammalian and avian predators for high priority waterbirds**

- C **Couple with productivity studies**
- C **Ensure funding sources are available, or investigate “endangered species trapper” route**
- C **Use outreach wisely**
- C **(Specific recommendations to be developed: e.g., Continue VA Barrier Island work)**

5. Incorporate protection of priority waterbird species/habitats in existing oil-spill response plans

6. Increase state outreach and education capability to minimize abundant and nuisance species conflicts and negative human responses

- C Via education and outreach
- C Identify state staff and partners (NGOs)
- C Monitor perception/behaviors of the public to determine existing and impending threat
- C (could be tied in with biological monitoring)

7. Partner with the Atlantic Flyway to manage adverse effects of Mute Swans

8. Develop and implement a disturbance management program across states

- C Assess the problem
- C At-risk breeding and roost sites should be identified to the public, posted, protected, patrolled, and anti-disturbance policies developed and implemented (enforced) as needed
- C Outreach information
- C Coordination among partners (federal, state, NGO)

9. Assess impacts of aquaculture on waterbirds in all states where significant activity is underway, and predict probable impacts of proposed aquaculture development.

- C Conduct an immediate analysis of current threats to waterbirds from ongoing aquaculture projects
- C Ensure that a wildlife biologist from each state is involved with the aquaculture regulatory process
- C Develop Best Management Practices for aquaculture that minimize impacts to waterbirds

10. Create a patch-based GIS system for evaluating priorities for waterbird habitats as part of a standardized regional approach
  - C Underway at WM: expand past partner lands, to all habitats, region-wide
  - C Includes spatial/temporal availability analysis, habitat classification by ownership
  - C By species, can map suitable habitat, determine ownership, and (if targets exist) determine how much of population target is met on partner lands.
  
11. Increase basic research of poorly understood waterbirds, especially rails
  - C Monitor and evaluate impact of hunting on rail populations
  - C Understand rail populations and rail harvest
  - C Insert science-based info into hunting regulation (WB folks should go to game meetings)
  - C Manage/restore wild rice habitat for rails
  
12. State agencies should fund incentives or measures to eliminate waterbird bycatch; specific suggestion for mid-Atlantic is to buy out gill-net fisheries
  - C Easier in states with limited entry; may need legal action in others (example: NFWF bought Norwegian salmon rights)
  - C Bycatch Plan spells out alternatives
  - C Effective data collection and monitoring
  
13. Fund independent assessment for addressing effects of bird strikes at wind power facilities on waterbirds
  - C Draw from cell tower research, lighting studies, BASH
  - C This type of project would require a multi-state application
  
14. Understand foraging/food-chain dynamics, effect on colonial populations
  
15. Support/advise NPS Chesapeake Bay unit
  
16. Monitoring of contaminant loads and effects in waterbirds and maintenance of long-term data and tissue repositories are needed
  - C Changes in habitat due to water quality alterations should be avoided or reversed in important waterbird habitat
  - C Work to eliminate toxic discharges generally (implement EPA's Chesapeake Bay program recommendations)
  
17. Support existing studies on disease
  - C Recently discovered algae-related problem; West Nile;
  - C Coloniality increases vulnerability
  
18. Encourage local planning (e.g., rolling setbacks and other tools) to ensure important waterbird habitat (nonbreeding too!) is not affected by sea level rise due to climate change
  - C Work into education/outreach projects
  - C Research: assess and mitigate impacts of sea level rise
  - C Develop BMPs and insert waterbird goals into state erosion control programs