

**PENNSYLVANIA IMPORTANT BIRD AREA #15
AKELEY SWAMP (SGL 282)**

**Phase I Conservation Plan
(Prepared By: Linda Ordiway; May 2004)**

Purpose of the Phase I Conservation Plan: This phase I conservation plan is a preliminary document to: 1) catalogue the natural resources and built environment for each Important Bird Area, 2) identify site boundaries, 3) document the criteria for which it was selected, 4) describe the birds and wildlife habitat which occur on the site with special reference to the species for which the site was selected as an IBA, 5) identify any conservation issues or threats to the site, and 6) provide recommendations for conservation actions to conserve or enhance habitat for bird populations, especially for those species for which the site was selected as an IBA. This Phase I Conservation Plan is intended to augment and expand the one-page site report contained in “A Guide to Critical Bird Habitat in Pennsylvania” (Crossley, 1999). The recommendations are presented from the perspective of bird and wildlife habitat conservation. It is acknowledged that not all the recommendations contained herein may be feasible or affordable. However, the plan is presented as an initial position from which to plan for and implement bird conservation on the site.

Site Name: Akeley Swamp

Size: 495 acres (primary swamp approximately 158 acres)

Ownership:

State/Pennsylvania Game Commission State Game Lands and Private/Northern Allegheny Conservation Association approximately 40 acres (814-723-8660)

County/Municipality:

Warren County/Pine Grove Township

Physiographic Province/Bird Conservation Region/Watershed:

Appalachian Plateau /BCR 28/Conewango Creek watershed

Legislative Districts:

3rd Congressional District, U.S. Representative Phil English (R)

21st Senatorial District Mary JoWhite (R)

65th House District Jim Lynch (R)

Stewardship Adoption Status:

Based on the information gathered, Ducks Unlimited has participated in the design of impoundment structures. Further involvement by this organization is not known. The Northern Allegheny Conservation Association located in the Integra Bank Building in

Warren, Pa 16365, is another organization with an interest in managing the area to enhance the quality of the wetlands.

IBA Selection Criteria:

- (1c) Akeley Swamp supports an abundance of wading birds and has a history of breeding populations of Soras, Virginia Rails, Green Herons, Great-blue Herons, and Least Bittern. American Bittern, and Black-crowned Night-Heron have been observed during Spring migration;
- (1e) Based on the Atlas of Breeding Birds in Pennsylvania and reputable individuals, a total of 147 species have been recorded in Akeley Swamp;
- (2) The inundated grasslands provide spring migration habitat for Least Bittern, American Bittern, Great Egret, Common Snipe, and Osprey;
- (3) The scrub-shrub habitat provides potential breeding sites for state species of concern including the following migrants: Northern Harrier, Northern Shoveler, Ruddy Duck, American Wigeon, and Gadwall. The Pied-billed Grebe has been recorded by local birders as successfully breeding in Akeley;
- (5) A local respected birder has been actively monitoring nesting boxes for American Kestrels within Akeley Swamp for approximately eight years.

Note: Numbers indicate single season maximum documented in recent years.

*SM= spring migration; FM= fall migration; B= breeding; W= winter

Important Avian Habitats:

The primary habitats include shrub-scrub, swamp, and open water with few flooded timber areas. Secondary habitats include small fragments of deciduous and mixed forested stands, riparian stretches, and combinations of grassland, cultivated and fallow fields.

General Site Description:

The Akeley Swamp IBA is located on SGL 282, in Pine Grove Township, Warren County, Pa. The general boundaries of the site are US route 62 to the west, old route 62 to the south and east, and the NY-PA line to the north, in neighboring Chautauqua County, NY.

Akeley Swamp is a 495-acre tract of wetland, swamp, early successional scrub-shrub, mixed deciduous woodlands, flooded timber, grassland, cultivated and fallow fields, and riparian partitions. In addition to being designated an IBA, the primary impoundment (approximately 158 acres) has been identified as a community of concern in the Pennsylvania Natural Diversity Inventory (PNDI). In 1993 botanical surveys conducted by the Cleveland Museum of Natural History listed three species identified as of concern under the Federal Endangered Species Act and/or the Pennsylvania Wild Plant Conservation Act. The three species are Bog bluegrass (*Poa paludigena*), Alder-leaved Buckthorn (*Rhamnus alnifolia*), and Highbush Cranberry (*Viburnum trilobum*), and were collected by James Bissell and Shayne Hoachlander. The Pennsylvania Fish and Boat Commission. has identified the main impoundment as a critical nursery habitat for Northern pike (*Esox lucius*).

The primary impoundment has been anthropogenically influenced through the construction of the now abandoned Penn-Central railroad grade. The grade, which provides an elevated herbaceous opening, runs north to south and generally parallels the Conewango Creek, a tributary of the Allegheny River. This elevated grade provides adequate nesting sites for both the Eastern and Midland painted turtles, Common snapping turtle, and the Spiny softshell turtle, which uses the Conewango Creek as its primary habitat. Three secondary drainages flow west through the grade, draining directly into the Conewango Creek. Historically beavers have dammed these drainages thereby maintaining the flooded stage of the swamp.

An overall visual description of the area is mixed deciduous forest stands in the northern section and near the Conewango Creek, including Swamp white oak (*Quercus bicolor*), scattered isolated conifers, emergent snags of varying dbh and bark depletion, open water with Floating pennywort, scattered island bands of *Solidago* sp., *Crataegus* sp., Buttonbush, and Alder-leaved Buckthorn. Some of the herbaceous species on the elevated grade include but not limited to members of the genera *Erigeron*, *Trifolium*, *Melilotus*, *Desmodium*, *Galium*, *Bidens*, and *Lotus* sp.

Summary of Birds:

The distinctive avifauna in Akeley Swamp is primarily associated with the open swamp community and the early successional community. Fourteen species of waterfowl have been seen during migration in the spring and fall, with four breeding, including the Hooded Merganser. Twelve species of raptors have also been observed during migration three of which are known to breed in or near the IBA. A fourth species of raptor, the Northern Harrier, may be a possible breeder in this area. It is known to breed just north in NY within the same drainage. A distraction display has been reported for a Virginia Rail, and probable nesting behavior for a Sora. Six species of sandpiper, including the Pectoral Sandpiper, and a Semipalmated Plover have been reported during fall migration. Seven species of woodpecker, including confirmed nesting of Red-headed Woodpeckers during the first Pennsylvania Atlas Project, have been recorded here. Seven flycatcher species and five swallow species have been seen in this IBA. Nesting records of Marsh Wren are notable, and there are irregular reports of wintering Northern Shrikes. Twenty-two species of wood warblers, mostly in spring migration, have been reported, including Pine and Palm Warblers, Wilson's Warbler (fall migrant), and the Yellow-rumped Warbler. Some of the sparrows reported include Savannah, White-throated, Lincoln's (uncommon spring migrant), and White-crowned (common spring and fall migrant).

Avian Monitoring Efforts:

The area of Akeley Swamp is heavily birded by local groups and individuals. Most of the observations come from walking the dry, elevated Penn-Central grade. There is an ongoing American Kestrel nest box project run by a local individual. A BBS route is located on the northwest perimeter of the swamp and extends westward, not penetrating the swamp proper. There are not any programs or standard protocol surveys for this IBA presently.

Education/Recreation/Ecotourism Activities and Opportunities:

The PGC offers educational programs, but as yet not in this IBA. Organizations such as school clubs, local 4-H groups and others would benefit by taking on small adoption/monitoring projects within the existing management plan (PA Game Commission), helping to maintain the ecological integrity of Akeley Swamp. Many local and regional birders visit Akeley Swamp and other passive wildlife observers as a “hotspot” based on its unique habitat and accessibility throughout the year. The Penn-Central grade provides an excellent vantage point for censusing the habitat. Other outdoor activities include cross-country skiing, walking, hunting, trapping, and fishing.

Management/Conservation Issues and Opportunities:

The Akeley Swamp primary impoundment has lost 85 to 90 percent of its water since beaver activity in the area has vanished according to the PGC. The beavers had actively dammed the three secondary tributaries mentioned above. These dams in conjunction with the elevated Penn-Central grade comprised an elongated dam running approximately north-south thereby impeding the natural drainage into the Conewango Creek. The unique mix of swamp characteristics associated with Akeley Swamp developed over time. The beavers depleted their food source, experienced trapping pressure, and through natural movements abandoned the area. Through natural processes the series of dams are being compromised, and subsequently the pool level has begun to decrease. As a result the introduction of invasive flora and fauna from nearby residential development is becoming more prevalent.

Conservation Actions: *The following conservation actions describe **current and ongoing** efforts by the Pennsylvania Game Commission:*

- Continue to manage the Penn-Central grade as a herbaceous opening maintained in legume cover, to provide a high protein forage base directly for grazing species, and indirectly through the high production of insects conjoined with legume crops.
- Continue to promote the need for conservation of the unique wetland habitat, and the benefits it provides to both wildlife and people.
- Continue to work with Ducks Unlimited in developing the design and construction of water control structures.
- Support the Growing Greener Project proposal for the construction of three water control devices by the Pennsylvania Audubon Society.

*The following conservation actions describe **proposed recommendations** for consideration by the Pennsylvania Game Commission and other interested organizations, agencies and groups for the maintenance, improvement and enhancement of habitat for bird species especially to optimize habitat value for IBA target species as well as for the promotion of bird conservation through educational outreach:*

- Install an interpretive sign describing what an IBA is, and why Akeley Swamp is an IBA.

- Install an interpretive sign describing the function and purpose of the water control structures, and the organizations involved in implementing the project.
- Monitor and manage water levels in support of the wetland wildlife throughout the year.
- Establish or adopt standard monitoring protocols for the differing communities and guilds of birds using the various habitat components.
- Provide a seasonal checklist based on activity and season, including an address and/or phone number for reporting unusual sightings.

Institutional Partners and Key Contacts:

- Pennsylvania Game Commission (PGC) Shayne Hoachlander, Land Management Group Supervisor, R.D. #2, Box 140, Corry, Pa. 16470. 814-664-8867.
- U.S. Army Corps of Engineers, Scott Hands, 1000 Liberty Ave, Pittsburgh PA 15222-4186, 412-395-7154
- Pennsylvania Department of Environmental Protection (DEP), Donald L. Watts, 814-723-9125. 163 Crestview Blvd., Warren Pa. 16365

References:

Crossley, Gary, 1999. A guide to Critical Bird Habitat in Pennsylvania, Pennsylvania Important Bird Areas Program, Pennsylvania Audubon Society, 211pp.

Pennsylvania Natural Diversity Inventory database.

<<http://www.dcnr.state.pa.us/forestry/pndi/pndiweb.htm>