



Audubon MARYLAND-DC

Important Bird Areas

Zekiah Swamp IBA

Date of site account: May 2016

County: Charles

Status: Recognized

Area: 15,088 acres (6,106 ha)

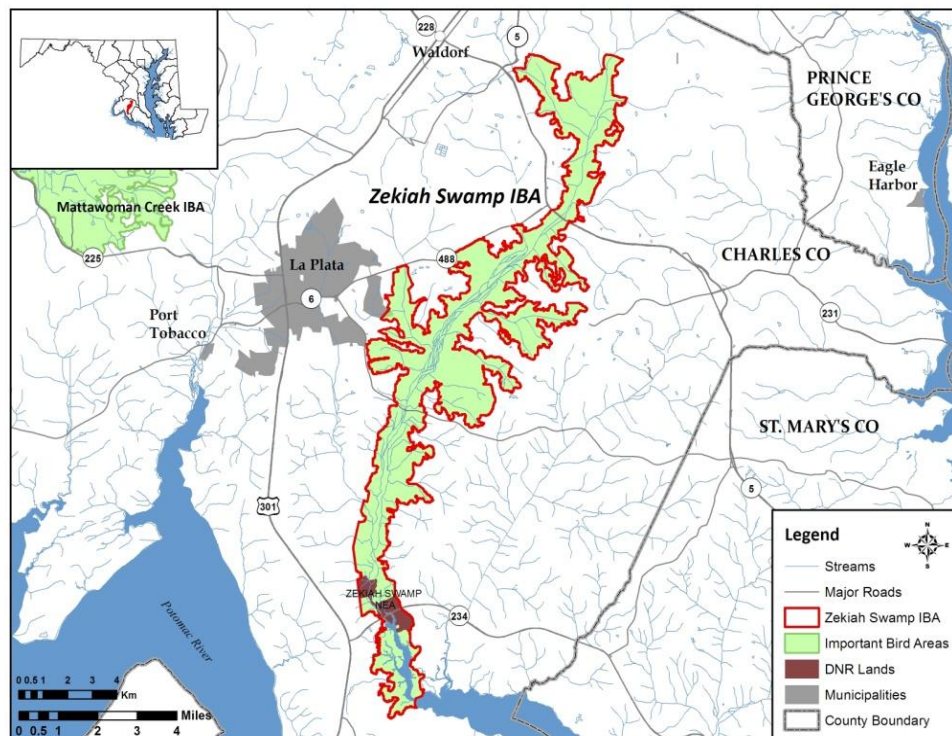
Priority: State



Red-headed Woodpecker

Site Description

Zekiah Swamp IBA encompasses 15,088 acres of forest and wetlands in Charles County along Zekiah Swamp Run, a 48-mile network of braided streams in eastern Charles County. The site extends from Poplar Hill Rd just south of Cedarville State Forest to Allen's Fresh Run and the mouth of the Wicomico River. The major habitat types are deciduous floodplain forest of considerable diversity and upland oak-hickory forest, together accounting for 75% of the area. A number of shrub and emergent herbaceous wetlands, with numerous standing dead trees, have also formed as a result of beaver activity. Scattered patches of loblolly pine account for just less than 3% of the area. About 435 acres of the IBA are owned and managed by the Maryland DNR as the Zekiah Swamp Natural Environment Area (NEA), while the remaining land is privately owned. The northern half of the site lies within the Zekiah Rural Legacy Area. The boundary of this IBA is based on green infrastructure hubs from Maryland's Green Infrastructure map.



Birds

Zekiah Swamp IBA is a site of statewide importance for bird conservation. Bird Blitz surveys in 2009 yielded counts exceeding the IBA threshold for one at-risk species (Prothonotary Warbler), and population estimates exceeding IBA thresholds for three additional at-risk species (Wood Thrush, Kentucky Warbler, and Red-Headed Woodpecker). The Prothonotary Warbler is a specialist of floodplain forests and nests in tree cavities. Kentucky Warbler requires forests with a dense shrub layer. Wood Thrush inhabits a wide variety of forest types but has declined steadily across its range in recent decades, and Red-Headed Woodpecker habitat combines open ground, scattered large trees and standing snags for nest and roost holes. At Zekiah, Red-headed Woodpeckers nest in dead trees standing in openings created by beaver activity. The data in Table 1, below, indicate that the Breeding Bird Atlas project under-recorded the incidence of Red-headed Woodpecker at Zekiah Swamp, most likely because nesting areas for the species at this site are away from public roads.

Table 1. qualifying IBA Criteria¹: Category MD-DC 1 (D1)

IBA Criterion	Species	Data	Season
Category 1: <i>At-risk species</i>	Prothonotary Warbler	222 Pairs estimated ² , 3 of 5 blocks occupied ³	Breeding
Category 1: <i>At-risk species</i>	Wood Thrush	242 pairs estimated ² , 5 of 5 Atlas blocks occupied	Breeding
Category 1: <i>At-risk species</i>	Kentucky Warbler	111 pairs estimated ² , 4 of 5 Atlas blocks occupied ³	Breeding
Category 1: <i>At-risk species</i>	Red-Headed Woodpecker	32 pairs estimated ² , 0 of 5 Atlas blocks occupied ³	Breeding
Category 2: Species Assemblage	Forest Interior Dwelling Species (FIDS): Red-shouldered Hawk, Barred Owl, Hairy Wood Pecker, Pileated Woodpecker, Acadian Flycatcher, Yellow Throated Vireo, Wood Thrush, Northern Parula, Black-and-white Warbler, American Redstart, Prothonotary Warbler, Worm-eating Warbler, Ovenbird, Louisiana Waterthrush, Kentucky Warbler, Hooded Warbler, Scarlet Tanager, Summer Tanager	19 FIDS breed regularly out of 24 potentially regular on Maryland's Coastal Plain. Mean FIDS per Atlas block = 13.8; represents the 69.3 rd percentile. ³	Breeding

1. Audubon Maryland-DC. 2011. Important Bird Areas Program criteria for site selection. Available online: <http://md.audubon.org/important-bird-areas-2>.
2. Audubon Maryland-DC. 2009. Bird Blitz survey data and population estimates. Unpublished data.
3. Ellison, W.G., editor. 2010. Second atlas of the breeding birds of Maryland and the District of Columbia. China: Johns Hopkins University Press. 494 p.

Conservation and Management Units

The 435 acres owned and managed by the Maryland DNR as the Zekiah Swamp NEA make up only 2.9% of the total IBA. All other remaining lands are privately owned. The northern half of the site that is within the Zekiah Rural Legacy Area has about 3,436 acres of protected, but working, private lands. Most of the Zekiah Swamp NEA is a State Wildland. This designation is intended to preserve the property in as natural condition as possible. There are no mechanized vehicles of any kind or equipment permitted in the Wildland section of the NEA. Access is strictly pedestrian.

Threats and Conservation

Zekiah Swamp is the largest hardwood swamp on the western shore of Maryland. The main threats to the Zekiah Swamp IBA include development pressures, gravel mining, sedimentation, emerald ash borer, and point source pollution. The floodplain is protected from development, but adjacent upland parts of the IBA are vulnerable to development and subsequent forest fragmentation under Charles County's permissive zoning. Development proposals pose a persistent threat to the northern sections of the IBA.

Mature ash trees make up a significant portion of the IBA. With the scourge of the emerald ash borer, many of those trees will likely be lost. In the short term, this will create some new snags for nesting but in the long term it could open the canopy for invasive species.



Prothonotary warbler chicks huddle in a hollow tree in the swamp. *Photo: Kerry Wixted*

At Zekiah Swamp NEA pollution and sedimentation threats are being addressed by determining the sources of pollution and promoting healthy riparian buffers and submerged aquatic vegetation through natural regeneration or planting. The Zekiah Swamp NEA remains in relatively good health, despite point source pollution identified in recent years. Habitat restoration is not presently being done at the NEA, but could be considered if determined necessary to mitigate the effects of pollution and sediment. The state should continue to work to purchase and protect land in the IBA through the Rural Legacy Program and public land acquisition.

For more information about this and other Important Bird Areas, visit Audubon Maryland-DC online at: <http://md.audubon.org/conservation/important-bird-areas>

This IBA site account was produced with a generous grant from Cove Point Natural Heritage Trust.

