



Audubon MARYLAND-DC

Important Bird Areas

Jug Bay IBA

Date of Site Account: May 2016

County: Anne Arundel, Calvert County, Prince George's

Status: Recognized

Area: 5,847 acres (2,366 hectares)

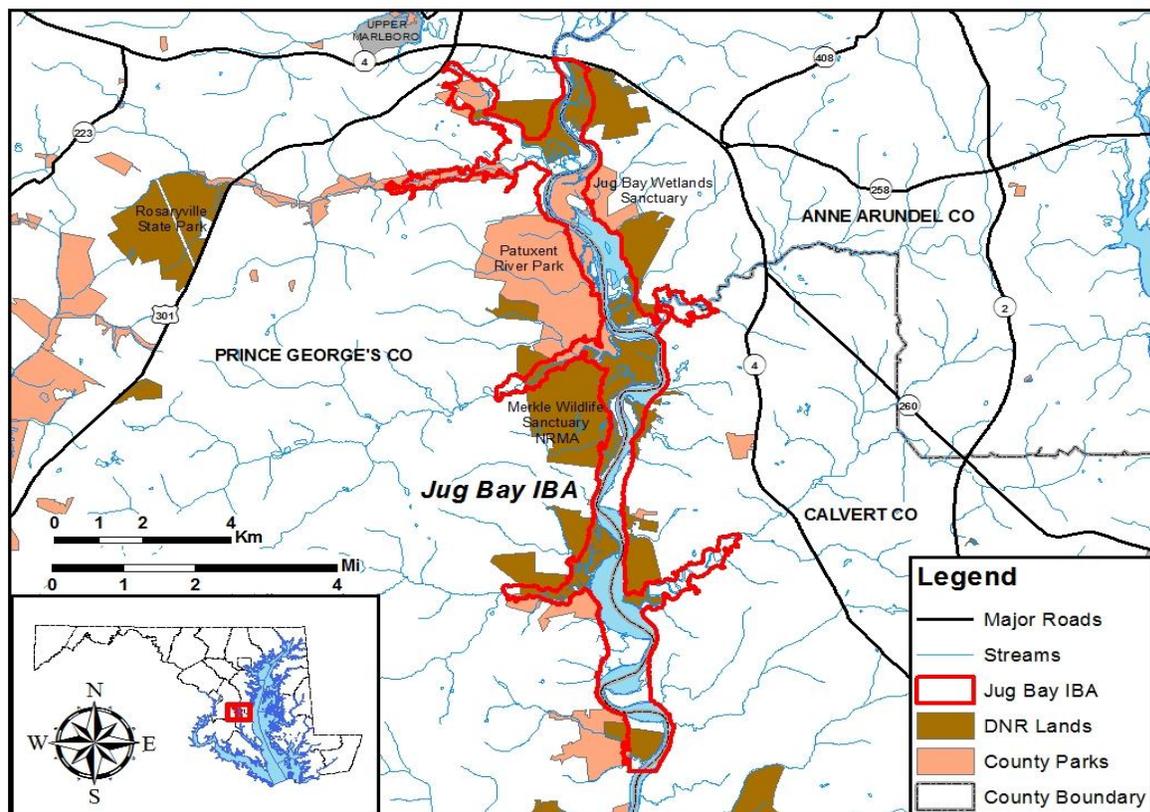
Priority: State

Site Description:

At Jug Bay, the Patuxent River meanders through the most extensive tidal freshwater wetland in Maryland. Although the site is several miles from the coast and has the appearance of a typical inland river, the tide here rises and falls more than two feet, exposing broad mudflats at low tide. The marshes contain over 50 plant species with wild rice, cattail, spatterdock and arrow arum among the dominants. This IBA extends from the Route 4 bridge near Upper Marlboro to Spice Creek near Lower Marlboro and includes portions of three publicly owned conservation areas: Jug Bay Wetlands Sanctuary, owned by Anne Arundel County, Patuxent River Park, owned by M-NCPPC and Merkle Wildlife Sanctuary, owned by Maryland DNR.



Least bittern



Birds:

Jug Bay is a site of statewide importance for bird conservation based on populations of several freshwater marshbird species. A survey in 2006 found a significant population of Least Bittern during the breeding season. In the 1990s, an innovative method of trapping rails using ground traps revealed large numbers of migrant Sora and Virginia Rail present in the fall. Combined numbers of the two rail species was estimated at approximately 4,000, occurring throughout the fall and considered to be one of the greatest concentration of these species in the world.

Table 1. Qualifying IBA criteria¹:

IBA Criterion	Species	Data	Season
Category 1: <i>At-risk species</i>	Least Bittern	6 individuals detected during survey. Indicates significant breeding population.	Breeding
Category 3c: <i>Species assemblage: Rails</i>	Sora	560 = Mean seasonal total banded each year (1994-97) ²	Migration (Fall)
Category 3c: <i>Species assemblage: Rails</i>	Virginia Rail	61 = Mean seasonal total banded each year (1994-97) ²	Migration (Fall)

1. Audubon Maryland-DC. 2011. Important Bird Areas Program criteria for site selection. Available online: <http://md.audubon.org/important-bird-areas-2>.
2. Kearns, G. D., N. B. Kwartin, D. F. Brinker, and G. M. Haramis. 1998. Digital playback and improved trap design enhances capture of migrant Soras and Virginia Rails. *Journal of Field Ornithology*, 69:466-473.



Photo: Dominick Lascone

Conservation and Management Units:

The Jug Bay Wetland Sanctuary, which consists of 1,700 acres, is owned and operated by the Anne Arundel Department of Recreation and Parks. Since 1985, the County, the State (via Program Open Space) and NOAA have continuously purchased additional adjacent lands in order to expand the Sanctuary, to enhance wildlife habitats, and to better protect the Patuxent River estuary and the Chesapeake Bay. As a result, the majority of the IBA is protected either through conservation easements, public lands, or regulated wetlands.



Photo: Dominick Lascone

Threats and Conservation:

Invasive plants as well as fish species continue to threaten the Jug Bay IBA. The invasive snakehead has been an ongoing and insidious aquatic invader. Encroaching development along the IBA's borders and subsequent sedimentation also impact the quality of this still relatively pristine wetland complex. An occasionally failing wastewater treatment plant has also been an issue although the wetlands, prolific aquatic plants, and natural shoreline have helped mitigate the effects of some of this pollution. Climate change, and in particular, sea level rise, has also led to increased flooding and threatens the area with salinity intrusion.

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.



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