

The Great Bay Important Bird Area

The New Hampshire Important Bird Area Program is part of a national and international effort to identify areas that provide critical habitat to birds during some stage of their annual cycle. In New Hampshire the program is a partnership of New Hampshire Audubon, the New Hampshire Fish and Game Department, and the University of New Hampshire Cooperative Extension. IBAs are identified based on strict scientific criteria, including 1) the presence of threatened or endangered species, 2) other species and habitats of conservation concern, and 3) areas where birds congregate during breeding, migration, or winter. It is hoped that recognition of IBAs can help guide future conservation and research efforts at areas that meet these criteria.



The Great Bay Estuary meets all three IBA criteria, as follows:

1) Endangered and threatened species

Bald Eagle (state threatened) – Between 1994 and 2005, from 6 to 19 eagles have spent all or part of the winter on Great Bay. Depending on the year, this represents up to 25% of the state’s wintering population.

Osprey (state special concern) – Osprey populations have been increasing on the bay since the mid-1990s, and in 2006 there were 9 known pairs. Not only does the bay host a significant and growing portion of the state’s breeding population, it also provides valuable habitat for Osprey during spring and fall migration.

Common Tern (state threatened) – Historically, the bay provided habitat for small colonies of Common Terns, although they tended to experience low productivity. With the success of the tern colony at the Isles of Shoals, these colonies have become less important in the overall picture, although the colony on Hen Island continues to support roughly a dozen pairs.

2) Other species and habitats of high conservation concern

Two of New Hampshire’s critical wildlife habitats comprise a major portion of the Great Bay IBA: estuary and salt marsh/mudflats. There are relatively few species that breed exclusively in these habitats, although they provide important non-breeding habitat for waterfowl and shorebirds respectively, as discussed under category 3.

One waterfowl species that warrants specific mention is the American Black Duck, a species of conservation concern throughout the Northeast. Great Bay is the primary wintering area for black ducks in New Hampshire, with 1000-2000 usually tallied on the Christmas Bird Count. In contrast, the rest of the state combined supports 500-1000 individuals of this species.

Although Great Bay’s salt marshes are much smaller than those along New Hampshire’s coast, they do support some locally rare birds. In particular, both Saltmarsh and Nelson’s Sharp-tailed Sparrows nest here. The marshes at Chapman’s Landing in Stratham are the primary site in the state for the latter species, here at the southern edge of its range.

Most of the emergent freshwater marsh habitats around Great Bay are not currently part of the IBA, although they are recognized as important to several species. These areas are known to support small

populations of other wetland species, particularly Virginia Rail (which also occurs in salt marsh). In particular, the marsh at Stubb's Pond on Great Bay NWR has hosted Pied-billed Grebe (state endangered) and Least Bittern (conservation concern). The IBA Technical Committee has considered a nomination of Stubb's Pond as a separate IBA, but has tabled the nomination pending discussion of other freshwater wetlands in the entire Great Bay system.

3) Congregatory species

Waterfowl – In addition to American Black Ducks, five other waterfowl species have regionally high wintering populations on the Bay. These are Canada Goose (3000-6000), American Wigeon (50), Mallard (500-1000), Greater Scaup (400-800), and Common Goldeneye (200-400). Several other species are less common, but contribute to the overall waterfowl diversity of the estuary. Great Bay is the most reliable area in the state for Canvasback, and at times has hosted over 200 Hooded Mergansers during spring migration. Spring counts of 50-100 Green-winged Teal have been recorded at Chapman's Landing alone. Twenty species of waterfowl have been recorded overall.



Shorebirds – Although shorebird numbers and diversity are low relative to areas on the immediate coast, Great Bay probably ranks second in the state as a stopover site for migrating sandpipers and plovers. Yellowlegs in particular are well represented, with single flocks at Chapman's Landing often numbering 10-50 in spring. Other species are present in smaller numbers. A total of 27 species have been recorded on the bay at some time of year.

Wading Birds – 13 species of herons, egrets, and ibis have been recorded on the bay at some point. Most common are Great Blue Heron (some colonies nearby), Great Egret, Snowy Egret, and Glossy Ibis. The latter was formerly much more common than it is now, with maximum counts as high as 50 in the mid-1990s. Black-crowned Night-Herons may be more common around the edge of the bay than in most other areas of the state, but detailed data are not available.

For the purposes of the NH IBA Program, the Great Bay IBA is defined as the open water of the bay itself, the intertidal areas around its shoreline, and the 250 foot buffer as defined by the Shoreland Protection Act. Taken together, this geographic area incorporates all the important waterfowl, shorebird, and salt marsh habitats, the roosting areas used by wintering eagles, and some of the active Osprey nests (and most of the Osprey foraging areas).

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More details on the IBA Program are also available on the N.H. Audubon web site.