ABOUT THE COVER

Great Blue Heron

The Great Blue Heron (*Ardea herodias*) is the largest and one of the most widespread and conspicuous of North American herons. Adult Great Blue Herons are unmistakable: blue-gray upper parts, reddish-gray neck streaked with black and white, bold black-and-white head and face stripes, and black shoulders. They are typical herons with short tails, long legs, and necks that are retracted into an S-shape during flight. Immature birds have more streaking on their necks, and solid dark crowns, lacking the bold patterning of adults. Great Blue Herons are closely related to the Grey Heron (*A. cinerea*) of Europe and the Cocoi Heron (*A. cocoi*) of South America. The Great Blue Heron is polymorphic with four to seven subspecies recognized by various taxonomists. Controversy still rages over *A. herodias occidentalis*, the all-white subspecies of Florida, Cuba, and scattered Caribbean islands. Some consider this a white morph, others a subspecies, and yet others, on the basis of perceived behavioral differences, as a full species.

Great Blue Herons are year-round residents throughout much of their range, although postbreeding dispersal occurs. They range from Alaska south to southern Mexico, across much of southern Canada and the United States, and in the east from Nova Scotia to Yucatan. The prairie populations of the western United States and most inland Canadian herons are migratory. Great Blues winter as far south as northern South America. They migrate alone or in groups of 100 or more, day or night.

Many Great Blue Herons overwinter in Massachusetts, and migrants appear from mid-March to mid-April. Fall migrants congregate in salt marshes in October and November. They are seasonally monogamous and usually breed in colonies that may contain 100 pairs or more. Breeding colonies are typically in swamps or on islands, presumably to reduce nest predation and disturbance by mammalian predators. In Massachusetts most Great Blue Herons nest in stands of dead trees in beaver-flooded swamps, with the largest concentration of heronries in the central portion of the state. They are silent most of the year except for an occasional squawk when disturbed or in territorial disputes, but at the heronry there is a din of *frawnk*, squawks, clucks, *roh-roh-roh*s, bill snapping, and bill clapping, that accompany courtship displays or serve as territorial advertisement. Elaborate courtship displays include circle flights with neck extended; snap displays with legs flexed, plumes erect, bill pointing upwards; and stretch displays with bill pointing to the sky. Territorial disputes are settled by full-forward displays with plumes erect, neck extended up and bill pointing at the adversary, or by bill duels. Great Blues defend an area of six-foot radius around their nests. Foraging disputes may be resolved through spectacular interactions between herons with necks extended, plumes erect, wings drooping, showing their black shoulder patches to maximum advantage, and dashing at adversaries.

Males returning to the breeding colony usually choose an old nest, if available, but not usually the one they occupied the year before. The nests are bulky platforms

of sticks up to a yard across with the central depression lined with pine needles or other soft plant materials. Great Blues may build nests up to 100 feet above the ground, or if no trees are available, they will nest on the ground or on artificial platforms. The clutch is usually three to six dull pale blue eggs laid at two-day intervals. Both parents incubate with eggs hatching in about four weeks. Both parents brood and bring food for the chicks. Unlike many heron and egret species, the young do not show much aggression toward siblings, and siblicide is not a brood-reduction strategy. The young can fly in seven to nine weeks, but return to the nest to be fed for an additional three weeks. The Great Blue Heron diet consists mostly of fish, but Great Blues will opportunistically take almost any small vertebrate including birds — they have even been reported eating Black Rails! They forage by walking slowly or by standing and waiting, spearing or grasping prey with lightning-fast jabs.

As with most birds, mortality during the first year of life is high — about seventy percent — with thirty-six percent during the second year, and twenty-two percent thereafter. In northern parts of their range severe winters pose a threat, and in the southeast, hurricanes can devastate a population. Traditionally, Great Blue Herons were hunted for food, and birds are occasionally shot while marauding at fish hatcheries or fish farms. Some eggshell thinning occurred during the DDT era, and limited mortality has been reported from agricultural pesticides such as dieldrin. Early in the nesting season, disturbance can cause nest or colony abandonment. Probably the greatest anthropogenic problem is draining wetlands for development and agriculture.

On the whole, however, Great Blue Herons have learned to get along well with people and most populations are stable. In the Florida Keys Great Blue Herons, especially the white morph, have become panhandlers, perching or walking along docks to beg for handouts from passing fishermen. Inland, one bird repeatedly tried to fly off with a trout still attached to a startled fisherman's line. Great Blue Herons can become habituated to human presence, and are a favored photographic subject in Everglades National Park. In Massachusetts a heronry located along a busy stretch of Route 2 became a traffic hazard as the birds nested close enough to attract passing drivers' attention. If we can protect the Great Blue Heron's wetland foraging and breeding habitat, we may continue to happily coexist with these magnificent birds.

William E. Davis, Jr.

About the Cover Artist

Barry Van Dusen, a wildlife artist and illustrator based in Princeton, Massachusetts, frequently contributes his insightful bird drawings to *Bird Observer*. Barry also manages production of the North American Birds Calendar 2001 for the Massachusetts Audubon Society. He is working on the cover for a forthcoming issue of *Birdwatcher's Digest*, and is contributing plates to *Birds of Peru* (Princeton University Press 2003).