

tricial young are unable to fly until they are 5 to 6 weeks old. Full independence from the parents may take 10 weeks to achieve (Palmer 1962). Strong fliers when airborne, Double-crested Cormorants usually depart

from Vermont in October; they winter from the mid-Atlantic states south to the Gulf Coast.

DOUGLAS P. KIBBE
SARAH B. LAUGHLIN

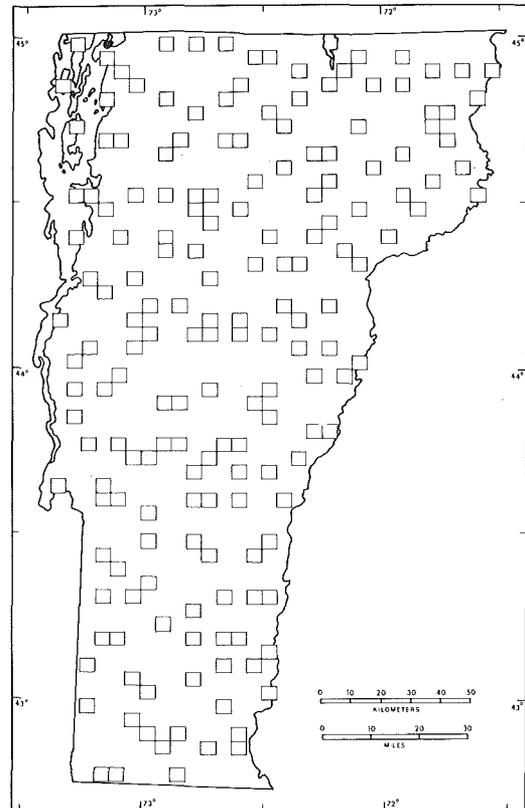
Great Egret

Casmerodius albus

Great Egrets breed on all continents but Antarctica. In North America they breed north into parts of southern Canada (AOU 1983). Most Vermont sightings fall between mid April and late May, and from early August to mid November (RVB 1973-83). The species is known to disperse widely in late summer before fall migration (Palmer 1962). Great Egrets winter in North America, primarily along the southern coasts, and south through South America (AOU 1983).

During the Atlas Project, the Great Egret was recorded as a probable breeder (for a pair present during the breeding season) at the Missisquoi National Wildlife Refuge. Two egrets were observed on the Missisquoi River on June 15, 1977, and were seen almost daily until July 1. Thereafter, occasional single egrets were observed. On July 28 on Missisquoi Bay three Great Egrets were observed, including an adult-sized, dark-billed bird suspected of being an immature. The birds were carefully identified as Great Egrets; there was also an albino Great Blue Heron present during the same summer at the refuge. George O'Shea, the refuge manager, believed that the egrets could have nested in the Great Blue Heron rookery.

The earliest record of Great Egrets in Vermont was of two birds collected in New Haven, in the Champlain Lowlands, during August 1882 (Howe 1902). Forbush (1925) alluded to their occurrence in Vermont and stated that they are "rare or occasional summer visitors." Apparent "invasions" occurred in 1936 and 1948 (Smith 1950b). More than 50 Great Egrets were seen in August 1936 at the mouth of the Black River



No. of priority blocks in which recorded

TOTAL 0 (0%)

Possible breeding: 0 (0% of total)

Probable breeding: 0 (0% of total)

Confirmed breeding: 0 (0% of total)

Physiographic regions in which recorded

	no. of priority blocks	% of region's priority blocks	% of species' total priority blocks
Champlain Lowlands	0	0	0
Green Mountains	0	0	0
North Central	0	0	0
Northeast Highlands	0	0	0
East Central	0	0	0
Taconic Mountains	0	0	0
Eastern Foothills	0	0	0

in Springfield. In 1948, 350 Great Egrets at 42 localities were reported; the first reported date was July 14. Most localities were in the Champlain Lowlands.

Aside from the 1948 summer record, there are 9 records for either June or July. Of all 10 records, 5 are from Dead Creek Wildlife Management Area, 2 from Missisquoi Bay, and 1 each from Norwich, Waterbury, and Shelburne Bay. Most of these records were for late July, a strong indication that the birds were post-breeding-season wanderers.

Nesting habitats include swamps of cypress or mangrove in the South or of willow in the North, and forests on dry ground or on islands adjacent to marshes, swamps, or estuaries (Palmer 1962). Great Egrets nest

singly or colonially, often in mixed colonies with other Ardeids. The stick nests are generally placed in tall trees. The breeding season in the northern part of the range is mid-April, but the dates vary from year to year and are perhaps influenced by the weather (Harrison 1978). In Michigan, one nest building date exists for April 17, and one egg date for April 24 (Palmer 1962). Clutch size is 3 to 4 eggs.

Foraging Great Egrets are usually found in open areas; they are known to feed on fish, amphibians, snakes, crustaceans, small mammals, and even insects (Palmer 1962). Great Egrets, like Cattle Egrets, are known to feed in fields where cattle are grazing (Palmer 1962).

CHRISTOPHER FICHTEL

Northern Shoveler

Anas clypeata

The Northern Shoveler is a prairie-nesting dabbling duck. Before 1976 it had one nesting record in Vermont, and during the Atlas Project it was recorded once. The species reaches its greatest nesting densities in the mixed prairie regions of south central Canada and the northern Great Plains (Bellrose 1980). Though widely distributed, the Northern Shoveler is a local breeder on the Great Plains and east of Manitoba (Bellrose 1980). Historically, shovelers have always been rare in Vermont, although occurring occasionally as migrants on Lake Champlain (Perkins and Howe 1901; Fortner et al. 1933).

The Northern Shoveler has been confirmed as nesting in Vermont only once. On May 31, 1962 a shoveler nest was discovered in North Hero in a meadow, where on May 9 a pair had been seen (Fuller and King 1964). The nest, located quite a distance from water, contained 11 eggs. This nest was subsequently destroyed by a mammalian predator (Fuller and King 1964). In 1977, in the Missisquoi National Wildlife Refuge, a pair of Northern Shovelers was observed mating

(D)—a probable nesting occurrence (ASR, G. O'Shea).

Normal breeding habitat for shovelers in the Great Plains includes tall-grass and mixed prairies, and open marshy areas with "surrounding dry meadows for nesting" (Palmer 1976). The clutch is generally initiated between the end of April and mid June. The clutch of 10 to 11 eggs is incubated for 22 to 24 days; young can fly in 52 to 60 days (Palmer 1976).

Records of migrating Northern Shovelers indicate that the species is found most frequently in marshes of the Champlain Lowlands. Peak counts during either spring or fall migrations are fewer than 10 birds per sighting. Spring migrants occur from the first week in April through the third week in May, and autumn migrant shovelers can be found between mid August and early November. This species winters in scattered locations along the middle and southern Atlantic Coast, and is abundant in coastal Louisiana, Texas, California, and Mexico (Bellrose 1980).

Probably the most interesting facet of the