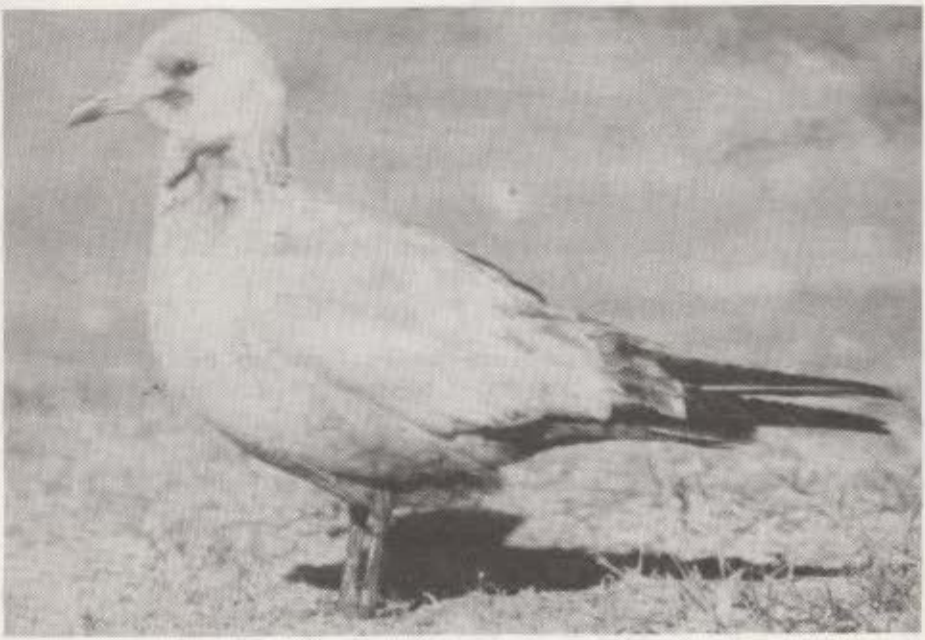
THE CONNECTICUT WARBLER

A Journal of Connecticut Ornithology



Volume V Number 1 January 1985 Pages 1-13

The Connecticut Warbler is published quarterly (January, April, July, and October) by the Connecticut Ornithological Association (COA). Membership to COA is based on a calendar year, with membership renewable in January. New members of COA receive all four issues of *The Connecticut Warbler* for that year. Make checks payable to The Connecticut Ornithological Association, and mail checks to 314 Unquowa Road, Fairfield, CT 06430.

Membership Fees

Member	$10.00	Contributing	$20.00
Family	$15.00	Sustaining	$30.00

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The editors invite submission of articles, notes, black and white photographs and line drawings for publication in *The Connecticut Warbler*. Manuscripts should be typewritten, double-spaced and on one side of the sheet only, with ample margins. The style of manuscripts should follow the general usage in recent issues.

Cover Photograph: Mew Gull, photographed in West Haven Dec. 23, 1984 by Mark Szantyr

A MESSAGE FROM THE EDITOR

The October issue of volume 4 of *The Connecticut Warbler* introduced several changes in the appearance, format, and content of the journal. Readers may have noticed that the journal has returned to a type-set print, that the type face is new, and that the inside front cover has been revised to reflect the province the Connecticut Ornithological Association (COA) now holds over the publication of the journal.

Indeed, COA has created options for improving the journal, and the changes introduced last issue make *The Connecticut Warbler* a more pleasing, easier to read publication. In addition, the journal has broadened its scope to include a variety of articles and features of interest to all ornithologists, amateur and professional alike. *The Connecticut Warbler* thus provides the Connecticut ornithological community with a range of information about the birds of our state and those who study them. The link between professional and amateur gives the publication and its host organization, COA, special meaning, and a special flavor.

In the current volume, our editorial staff has supplemented last issue's changes with some further innovations. This issue introduces two regular features.

The first, "Connecticut Birds", describes the status, distribution, and site localities of a selected Connecticut species each issue. In this issue Gene Billings discusses the occurrence of Bald Eagles in Connecticut and provides information about where and when our readers can see them.

The second new feature, the "Book Review", presents reviews of volumes of especial interest to our readership. The current "Book Review" critiques the National Geographic Society's *Field Guide to the Birds of North America*, a new, comprehensive field guide to the birds of Connecticut and the rest of the North American continent.

We continue to provide COA field observers the opportunity to publish interesting observations and to contribute to our knowledge of birds, their lives, and their habits. We also continue to offer a standard complement of original, full-length articles plus the regular "Connecticut Field Notes" and "Notes and News" features. Our editorial staff welcomes comments and suggestions from the readership on past and future improvements of *The Connecticut Warbler*.

Anthony H. Bledsoe
Editor
The Connecticut Warbler

THE 1984-1985 CONNECTICUT CHRISTMAS COUNTS

FRED C. SIBLEY

Without question the 1984-85 Christmas counts were most unusual. People were bitten by mosquitoes, surprised by earthworms, buzzed by flies, and generally perplexed by basking turtles and hopping toads. The 885 observers who turned out for the 6 coastal, 5 mid-state,and 4 northern counts (plus a new northern count at Barkhampstead) were treated to the warmest count period in many years.

Despite the warm weather, the number of observers dropped to the level of 10 years ago and was nearly 30% below the record total in 1981. The state species total of 176 was high for recent years, as were the coastal, mid-state,and northern species totals of 169, 105, and 116, respectively.

The total number of individuals seen (573,000) established a record, yet the coastal counts recorded the fewest birds in 10 years. Hartford recorded the most individuals (132,000), followed by Stratford-Milford (75,000).

Only three counts exceeded previous species totals: Greenwich-Stamford (119), Hartford (91), and Litchfield Hills (76). New Haven had the most species (124), Woodbury-Roxbury and Salmon River had the highest totals in the mid-state region (78), while Hartford (91) continued to dominate the northern counts.

The warmest December in memory was expected to produce great rarities and did. A Yellow-crowned Night-Heron appeared on the Stratford-Milford count, a Glossy Ibis was found at New London, an American Oystercatcher stayed on in the Westport area, and the Greenwich-Stamford counters recorded both a Black-and-white Warbler and a Blue-gray Gnatcatcher. A second Blue-gray Gnatcatcher was recorded on the New Haven count. These 5 species were new for the state Christmas Count list.

Other regional firsts of almost equal rarity were Marsh Wrens at Salmon River and Litchfield Hills for the first inland records, Blue-winged Teal (Hartford) and Northern Shoveler (Litchfield Hills) for first northern Connecticut records, Lincoln's Sparrow (Woodbury-Roxbury) and Northern Oriole (Oxford) for first mid-state records, and finally a Wilson's Warbler at New London for the first coastal record.

With the prolonged fall and mild December one expected great numbers of late lingerers, and even though this was the third warm year in a row everyone was looking for some record high numbers. A few species responded. Northern Flickers were found in record numbers on every count but one. Yellow-rumped Warbler numbers were double the previous high and they were found in record numbers on 11 of 14 counts. Belted Kingfishers were present in high numbers across the state and broke records on 8 counts. Other species responding to the warm weather were Golden-crowned and Ruby-crowned Kinglets, Cedar Waxwing, White-throated Sparrow, and Dark-eyed Junco. All of these birds were recorded in record numbers state-wide.

Although the state species total and in most cases the coastal and northern species totals did not strongly reflect the warm weather, the mid-state counts blossomed with new records, and over 40% of the species mid-state were seen in record numbers. Several species showed marked shifts of

population inland. Comparing coastal and inland counts, one observes that there were 38 species for which more than 60% of the individuals were found on the inland counts. Inland counts had 406 observers compared to 479 for the coast, so the difference in numbers of individual birds is significant. Species such as Canada Goose, Red-tailed Hawk, Mourning Dove, Hairy Woodpecker, and American Tree Sparrow have become consistently more common inland during the last 15 years. However 18 species have shifted markedly in just the last few years with some showing a shift only during this year. In a normal year 90% of the Ring-necked Ducks are seen on coastal counts, compared to 30% this year. For Common Merganser the figures were 41% and 7%. A similar pattern held for Red-winged Blackbirds, Brown-headed Cowbirds, and American Robins. There were very few Pine Siskins and Evening Grosbeaks, apparently the result of a late departure from more northern sites. It is interesting that some of the late lingerers (Brown Thrasher, Common Yellowthroat, and Vesper Sparrow) were more common on mid-state counts than on the coast.

Some of the other shifts reflect longer term trends than one warm December. The owl numbers have shifted sharply in the last five years. Most Barred Owls (55%) were previously found on the coastal counts, but this year only 24% were there. Similarly Long-eared Owl has shifted from 90% to 33% and Northern Saw-whet Owl from 65% to 22%. Eastern Screech-Owl and Great Horned Owl sightings have exhibited a less dramatic shift. These changes can easily be attributed to the better birding inland rather than a shift in populations.

Northern Bobwhite and Eastern Bluebird present different but possibly related trends. Prior to 1982 Bobwhite were recorded only on the coast. The last two counts their numbers have increased inland while decreasing coastally, so that only 23% of the birds seen this year were on coastal counts. Are the inland increases due to better winter survival in warm winters or to more stocking? Bluebirds by comparison have increased dramatically inland while decreasing only slightly on the coast. As a result the coastal counts now record only 17% of the bluebirds in the state; formerly over half the birds were found there. The increase has been most pronounced on mid-state counts where numbers have increased each of the last six years.

Rarities (those species seen fewer than four times in ten years) were numerous this year with an average of ten per count. Those seen only once before in the state were mainly on coastal counts. High counts were relatively few and low counts were mainly confined to the coast. Some of the more interesting sightings are summarized below.

COMMON LOON: A single bird on the Salmon River count is only the second sighting on mid-state counts.

DOUBLE-CRESTED CORMORANT: Although still found mainly on the New London count, individuals were recorded on most coastal counts and at Litchfield Hills in the north. The total count is 4 times the previous record.

HERONS: Great Egrets seen at Greenwich-Stamford and Stratford-Milford were the second records in ten years. Great Blue Herons were 50% more common than last year and found in record numbers all along the coast. A Green-backed Heron at New London was a rarity.

MUTE SWAN: This species continues to increase; it reached new highs on all the mid-state counts and was recorded on half the northern counts. The population is now three times what it was 12 years ago.

CANADA GOOSE: A slight increase in total numbers, with high counts in the northern and mid-state regions.

DUCKS: Numerous rarities, new highs, and new species for mid-state and northern counts. On the coast there were record lows for Canvasback, Greater Scaup, Black Scoter, and American Black Duck, but record high counts for Bufflehead.

HAWKS: Discovery of a large Turkey Vulture roost on the Old Lyme count boosted the state total to a record 145. Northern Harriers were back in record numbers on 8 of 10 counts after a few poor years. A Golden Eagle at Old Lyme was only the second Christmas Count sighting for the state. American Kestrel numbers continued to drop, particularly along the coast, where counts are half what they were 10 years ago. The Peregrine Falcon seen on the Hartford count was only the second for the northern counts in the last ten years.

AMERICAN COOT: Ten years ago they were regular on most counts, with a statewide total of close to 1000. This year there were only 228, and the species was virtually absent from the coast (62 individuals).

SHOREBIRDS: A Semipalmated Plover at New Haven was the second Christmas Count sighting for the state. Shorebird numbers are back to the levels of 10-15 years ago, with continuing increases for Black-bellied Plover. American Woodcock and Common Snipe numbers usually follow the same pattern, but this year Common Snipe were at record lows and American Woodcock at record highs. The American Woodcock seen on the Litchfield Hills count was only the second sighting for northern counts.

GULLS: Ring-billed Gulls were up statewide for the eighth year in a row, with a 15-fold increase on mid-state counts in 4 years, and a 12-fold increase in 3 years on northern counts. Herring Gulls increased for the fourth time in 5 years with a 4-fold increase mid-state. The Great Black-backed Gull population was double the size of 6 years ago.

WOODPECKERS: An excellent year for Northern Flicker, while Yellow-bellied Sapsucker, Pileated Woodpecker,and Red-bellied Woodpecker also increased.

CREEPERS, WRENS, AND MIMIDS: Brown Creeper totals were high on coastal and northern counts. Carolina Wrens were not only new to mid-state and northern counts but were found in record numbers along the coast. Gray Catbirds were recorded in high numbers on coastal and mid-state counts although Northern Mockingbird numbers were unexceptional and Brown Thrashers were at a record low for the state.

WARBLERS: An exceptional number of warblers were seen this year.In addition to the 1200 Yellow-rumped Warblers and the Black-and-white Warbler (new to the state), 7 other wood-warblers were seen. Any warbler inland is a rarity and the Pine Warbler at Woodbury-Roxbury and Common Yellowthroat at Hartford were second sightings respectively for mid-state and northern counts. The Common Yellowthroats on the Salmon River count were new to the count and represented only the third occurrence in ten years on a mid-state count. The Nashville Warbler at Greenwich-Stamford, Northern Waterthrush at Stratford-Milford and Wilson's Warbler at New London constituted rarities, while the 5 Palm Warblers at New London were a record high. The standard Common Yellowthroat and Yellow-breasted Chat rounded out the coastal list of wood-warblers.

SPARROWS: Generally unexceptional although.Vesper Sparrows were seen on four

counts. Savannah Sparrows set records on 7 of 10 counts. Dark-eyed Juncos and White-throated Sparrows were recorded in high numbers state-wide.

BLACKBIRDS: A Yellow-headed Blackbird at Storrs, a third Christmas Count sighting for the state, provided the only excitement.

Summary

What is the big picture? The 1984-1985 Christmas Counts, held during one of the warmest count periods ever, produced a lot of enjoyable birding and a record number of new species, but the number of new count species and of record species totals was not overwhelming.

Rarities and new species were concentrated along the coast although a number of normally coastal species penetrated to interior counts. The 5 new species added to the count set a one year record. The mid-state counts in particular recorded a large number of new high counts evidently related to the warm weather, while the coast had some all time lows of sea ducks for the same reason. Many species continued long term increases with Double-crested Cormorant, Mute Swan, Canada Goose, Ring-billed Gull, and Eastern Bluebird being the most notable.

Peabody Museum, Yale University, New Haven, CT 06511

CONNECTICUT BIRDS

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BALD EAGLE

Gene Billings

Few events are as exciting to a birder as seeing a Bald Eagle (*Haliaeetus leucocephalus*). Fortunately Connecticut birders can enjoy this experience by finding one of the 30 plus eagles wintering in our state.

During the rest of the year, it is unusual to see a Bald Eagle in Connecticut. Golden Eagles (*Aquila chrysaetos*) are even rarer, though individual birds are occasionally reported in the fall at hawk-watching locations or in winter along the coast.

The Bald Eagle is listed on the Federal Endangered Species List and is rare throughout most of the United States. Eagles were never abundant in Connecticut, but formerly nested and were not uncommonly seen. A widespread decline in Bald Eagle numbers started in the late 1940's, and continued for the next two decades. By the early 1970's only 400 breeding pairs were left in the lower 48 states, and Bald Eagles had virtually disappeared from many areas, including New England. A prime cause of this near-extermination was the use of the agricultural pesticide DDT, banned in 1972.

Since that time, Bald Eagles have been making a slow but steady comeback. Systematic nationwide counts of Bald Eagles have been made only recently, but the results are encouraging. The 1983 winter count for the lower 48 states was 13,807 and represented the fourth consecutive yearly increase.

Most of the Bald Eagles in North America are found in Alaska, Canada, the northwestern states, the central Mississippi Valley, and Florida. In summer most of the northeast's Bald Eagles are found in the Canadian Maritime Provinces, Quebec, and Maine. Bald Eagles are usually found near large bodies of water, since these provide a good source of food. When inland lakes and rivers freeze, most eagles move south.

During migration Bald Eagles seem to move shorter distances and at a slower rate than is typical of other migrating raptors.

Many of the birds that winter in southern New England probably summer in Maine, while those wintering in Maine probably breed in Nova Scotia or mainland Canada. Bald Eagles leave their breeding grounds in Maine as early as late August, and begin to appear in their winter locations during December. Peak winter numbers are recorded in mid-February with northward movement commencing in early March. Bald Eagles migrate to localities near rivers, lakes, or reservoirs, and the major winter populations in southern New England and downstate New York are at the Quabbin Reservoir in Massachusetts, along the Hudson River within fifty miles of New York City, at several reservoirs in the Catskill Mountains, and along the lower Connecticut River Valley.

Connecticut's Bald Eagle Population

There have been only scattered, although increasing, summer reports of Bald Eagles in Connecticut and no confirmed evidence of nesting. Each year a few Bald Eagles are seen in the early fall passing over hawk-watching locations in Connecticut. Winter sightings of Bald Eagles are numerous with over 30 birds present in the state at that time.

The largest group of wintering Bald Eagles in Connecticut occurs along the lower Connecticut River, within a few miles of Long Island Sound. A smaller but predictable group winters at two hydroelectric dams on the Housatonic River, and occasional birds are reported at reservoirs in the northwestern part of the state, and along the Connecticut River near Enfield.

Lower Connecticut River. Over half of the wintering Bald Eagles reported in Connecticut are found along the Connecticut River from Haddam and East Haddam south to Old Saybrook and Old Lyme. Getting a close look at them can be a problem — the river is quite wide along this stretch and finding access to the river is difficult. However, several boat launches and other public areas offer views of sections of the river. All of these locations are also good places to look for wintering ducks and other water birds.

Haddam Area

1) The Marine Park excursion boat landing is located at the west end of the Route 82 bridge.

2) Goodspeed Airport is just south of the Route 82 bridge on the east side of the river.

3) The boat launch area on the east side of the Connecticut River at the mouth of the Salmon River is a left exit off Rt. 149 approximately 1.2 miles north of the Rt. 82 bridge.

4) To reach Salmon River Cove take Rt. 149 north 2.6 miles from the Rt. 82 bridge, turn left on Johnsonville Road and turn left again on Cove Road to a small parking area overlooking the cove.

Chester and Lyme Area

Either landing dock of the Chester-Hadlyme ferry provides access to the river.

Essex Area

1) Great Meadow is 2.2 miles north from the rotary in the center of Essex following Main Street-River Road. Turn right on Pettipaug Road to river.

2) The historic landing and steamboat dock are only a few blocks east on Main Street from the central rotary.

Old Lyme Area

1) The town landing at Calves Island is left off Rt. 156 about 0.6 miles north of the I-95 bridge on east shore of Connecticut River.

2) The Great Island boat launch is a right turn off of Rt. 156 about 2 miles south of I-95.

HOUSATONIC RIVER. The best location in the state to get a really good look at a Bald Eagle is at the Shepaug Dam in Southbury. The dam and its access road are now closed to the public, but pull-offs along River Road south of the dam are good eagle-watching sites. In really cold weather, this part of the river may be frozen, reducing your chances of seeing an eagle. Eagles can also be seen under similar circumstances at the Stevenson Dam about eight miles downstream.

Shepaug Dam

Take exit 14 from westbound I-84 and go right at end of ramp and left at traffic light intersection. Follow this road 1 mile until it crosses over I-84 and turn right on Fish Rock Road at far end of bridge. This becomes River Road and follows the east bank of the Housatonic 3 miles to the dam.

Stevenson Dam

This is 8 miles downstream from Shepaug Dam where Route 34 crosses the Housatonic River.

NORTHWEST RESERVOIRS. Eagles have been reported for several years at Barkhamsted Reservoir, near Winsted, where several overlook points offer a chance of getting at least a distant view of them. There have also been reports of eagles — perhaps the same ones — along the nearby West Branch of the Farmington River between Riverton and Pleasant Valley. In some winters, eagles have been seen at the Nepaug Reservoir, about 10 miles away in New Hartford.

CONNECTICUT RIVER NEAR ENFIELD. During recent winters several eagles have been seen on the Connecticut River within five miles of the Massachusetts line, in the vicinity of King's Island. The birds seem to arrive here late in the year, often not until mid-January. Several boat launch areas and other overlook points provide opportunities to view this stretch of river.

Enfield Area

1) At the east end of the Route 140 bridge go north on River Road 0.8 mile to overlook point.

2) From Route 5 just south of the Enfield Street School, in Enfield, go west on Bridge Street 0.6 miles to the river and then south 0.8 miles along the river to the launch area.

3) From the west end of the Route 190 bridge go south on Route 159 0.2 miles to Canal Road. Follow this east to the river and launch area at Enfield Dam.

The best time to see eagles is mid-morning and the best months are January and February. However, weather conditions are always an important factor and you may see lots of eagles on a March or December afternoon.

While Bald Eagles are in Connecticut, they are extremely vulnerable to the actions of birders and others. Their winter quarters are tiny remnants of the wilderness that was theirs until we chopped it up with roads, factories and homes. If we wish to continue to enjoy their presence, we must take pains to avoid actions that might disturb or

threaten them. In the long term, the continued existence of Bald Eagles in Connecticut will depend on our ability to protect the habitat they need while they are here. Several organizations, including the State Department of Environmental Protection, are striving to do this, and they need and deserve our support.

Sunset Ridge, Norfolk, CT 06058

FOOD STORAGE BY AMERICAN CROWS IN WINTER

LAWRENCE KILHAM

Except for isolated instances (George and Kimmel 1977, Hess 1978), little has been written on the food caching behavior of American Crows (*Corvus brachyrhynchos*). My studies include one of caching during the nesting season in Florida (Kilham 1984) and the present one on a group of three crows on a farm in Lyme, New Hampshire during November and December of 1982-83 (observation time 150 hours).

Food cached was from carcasses or viscera of sheep, calves, turkeys, and hens that became available at irregular intervals. I made my observations from the vicinity of farm buildings at distances of 150-200 m. It was difficult at such distances to see exactly what the crows were doing when they flew repeatedly from animal remains to other parts of the pasture and returned, making as many as 8 trips in 10 minutes on one day and 20 in 45 minutes on another. I was able to make checks on days of light snow when tracks made it easy to locate where a scrap was hidden. The crows usually walked 5-7 m after alighting before hiding food at a tuft of grass. Two crows, for example, kept flying north 10-30 m from calf remains on 13 December. Noting two places with 8×50 binoculars, I later found a piece of fat in one and a piece of stomach wall in another, each 2-3 cm long. Both were well concealed in the center of clumps of thick curly grass. On the following morning the crows were storing in the same areas as well as in others 100-120 m beyond. The crows occasionally ($n = 11$) carried scraps in their bills, but most carrying was done in the sublingual pouch, as indicated by the bulge in their throats.

When crows were storing, they sometimes ($n = 12$) flew to trees along a woodland border, returning in 1-2 min. Although I could not see through the branches, it seemed likely that the crows were storing food. I twice watched crows in December fly to a tree, start searching, then remove an item that took 5-8 minutes to consume.

Not all days were favorable for feeding and storing. On 28 November I dragged a sheep carcass onto the frozen pasture and cut away some skin and abdominal wall. The crows came to the sheep for only 15 min on the first day and not at all on the second. On the second night coyotes (*Canis latrans*) removed all the viscera. On the next morning the crows worked steadily on the scattered remains from 0700 to 0935, flying to store repeatedly. This and other experiences suggested that a carcass worked on by coyotes is more available to the crows. On the third night the coyotes removed almost all traces of the sheep. The crows came to their storage areas to feed for the next three mornings. On the last of these, 5 December, the pasture was covered with 20-22 cm of fresh snow. When the three arrived from their roost at 0730, one

flew directly to a storage area, 15 m from where the sheep had been, walked a meter, dug through the snow, uncovered a scrap and fed on it for 5 min. A crow in another place recovered an item with equal promptitude. When I visited these sites I found that the crows, in digging, had scattered grass blades and small leaves over the snow.

American Crows in Florida (Kilham 1984) stored on the ground as well as in treés, but often covered their stores with debris. In both sites caching appeared to be of short duration, a way, primarily, of making the most of a surplus before it was lost to food competitors. In New Hampshire, caching was possibly essential in winter when food supplies were irregular. George and Kimmel (1977) noted storage of a surplus, when three crows killed and cached 79 of 100 laboratory mice dumped on the field in February. American Crows are cooperative breeders holding group territories (Kilham 1984). Northwestern Crows (*Corvus caurinus*) are also territorial cooperative breeders (Verbeek and Butler 1981) that cache food (James and Verbeek 1983). Because most avian species that store food are territorial (e.g. Thick-billed Nutcracker *Nucifraga caryocatactes* [Swanberg 1951] and Red-headed Woodpecker *Melanerpes erythrocephalus* [Kilham 1959]) territoriality may be essential to the protection of stores.

Literature Cited

George, W.G. and T. Kimmel. 1977. A slaughter of mice by Common Crows. Auk 94:782-783.

Hess, G.K. 1978. Possible food storing by a Common Crow. Delmarva Ornithol. 13:21.

James, P.C. and N.A.M. Verbeek. 1983. The food storage behavior of the Northwestern Crow. Behavior 85: 276-291.

Kilham, L. 1959. Territorial behavior of wintering Red-headed Woodpeckers. Wilson Bull. 70:347-358.

—— 1984. Foraging and food storing of American Crow in Florida. Florida Field Nat. 12:25-31.

Swanberg, O. 1951. Food Storage, territory and song in the Thick-billed Nutcracker. Proc. 10th Int. Ornithol. Congress 10:545-553.

Verbeek, N.A.M. and R.W. Butler. 1981. Cooperative breeding of the Northwestern Crow (*Corvus caurinus*) in British Columbia. Ibis 123:183-189.

Lyme, New Hampshire 03768.

CONNECTICUT FIELD NOTES

Summer: June 1 - July 31, 1984

Dennis E. Varza

June started with peak spring movements of the high arctic nesting shorebirds such as Black-bellied Plover and Semipalmated Sandpiper, the end of the passage of boreal nesters like Yellow-bellied Flycatcher, Swainson's Thrush, and Mourning Warbler, and the dispersal of non-breeding individuals of local species like Orchard Oriole and American Redstart. At the end of June wandering non-breeders (from several climatic regions) included Kentucky Warbler, Northern Waterthrush, White-crowned Sparrow, Oldsquaw, and Horned Grebe. At the end of July there were aggregations of post-breeding and non-breeding herons, shorebirds, gulls, terns, swallows,

and blackbirds. At the same time local nesting warblers began their initial migratory movements.

Loons Through Terns

At Greenwich Pt. a summering Horned Grebe, present all season (m.ob.), was joined by a Red-throated Loon June 22-24 (DB). A pair of Pied-billed Grebes with four young at Lordship (DV) constituted the first confirmed nesting since the Connecticut Breeding Bird Atlas began; the pair present at Sharon did not produce young. Summering waterfowl included 7 Brant at Greenwich Pt. July 7 (MFN), 3 Brant at Milford Pt. July 26 (MS), an American Wigeon in Lordship July 28-30, 3 Oldsquaw in New Haven Harbor July 17-30 (m.ob.), and a Red-breasted Merganser at Greenwich Pt. July 9 (DB).

A rare spring Western Sandpiper was found in a large flock of Semipalmated Sandpipers at Milford Pt. June 7 (DV), and a very late Least Sandpiper was there June 14 (DV). Presumably on their way south, 6 Semipalmated Sandpipers were at Milford Pt. June 30 (MS) and 3 Least Sandpipers were at Harkness St. Pk. July 11 (JB). Other early shorebirds included 7 Lesser Yellowlegs and 15 Short-billed Dowitchers at Harkness St. Pk. July 2 (JB). There were two reports of Bonaparte's Gulls, one at Milford Pt. June 6 and one at Greenwich Pt. July 2 (DB). The tern migration sneaked by most birders. Large flocks of terns at Milford Pt. during the last half of July included a Forster's Tern on July 17 (DV).

Cuckoos Through Finches

The shortage of cuckoos continued through the summer, making the Black-billed Cuckoo in Fairfield July 17 (DV) a good find. A transient Common Barn-Owl was seen in Old Greenwich July 10 (MT). Willow Flycatcher was reported across the state, making it the most common breeding *Empidonax*. Its sibling species the Alder Flycatcher was reported only from Litchfield June 10 (DV). Uncommon for an inland site, two nests of Carolina Wren were found in Brooklyn and Mansfield (GC). A late Swainson's Thrush was observed in Middlebury June 6 (MS).

David Sibley checked out a population of Golden-winged Warblers nesting along River Road in Cornwall and found the following: 8 ♂ Golden-winged Warblers (5 with some Blue-winged characteristics), 12 ♂ Blue-winged Warblers (4 with some Golden-winged characteristics), and three Brewster's Warblers. A non-breeding Nashville Warbler was observed in Burlington July 10 (JK). From Kent to Storrs many *Dendroica* warblers were reported into mid-June, including Blackburnian, Blackpoll, and Yellow-rumped. Single singing Northern Waterthrushes were observed in Greenwich, Southbury, and Burlington. In Hartford a Prothonotary Warbler was singing on territory for a week beginning June 17 (JK, RR, et al.). Kentucky Warblers, another typically southern species, were observed with no hint of nesting in Greenwich, Fairfield, and Salem during June. A Hooded Warbler was banded in Hampton June 30 (MB, GC), the first indication of possible breeding in that region. Finally there was a ♂ Mourning Warbler singing on territory for the second year in a row in Danbury June 3 (PB). A White-crowned Sparrow in full plumage was seen in Woodbury on July 17 (RN) and on June 15 there were two widely separated reports of Pine Siskin, 2 in Woodbury (RN), and one at Storrs (GC).

Contributors: James Blair, Doris Bova, Polly Brody, Milan Bull, George Clark, Greenwich June Count, Buzz Devine, Townsend Dickinson, Jay Kaplan, Frank Mantlik, Russ Naylor, Mianus Field Notes, many observers (m.ob.), Ron Rosa, David Sibley, Mark Szantyr, Michael Terry, Dennis Varza, Connie Wood.

BOOK REVIEW

Field Guide to the Birds of North America. National Geographic Society, 1983. Published by the National Geographic Society, Washington, D.C. 464 pp. ISBN 0-87044-507-3. $13.95 plus $3.00 shipping from National Geographic Society, Dep. 100, Washington, DC 20036.

Ornithological texts and guides seem to be published in spurts. In 1983 alone, three field guides to the birds of North America were published — the second edition of *Birds of North America* (C.S. Robbins et al.), the new *Audubon Master Guide to Bird Finding* (J. Farrand, ed.), and the new National Geographic Society's *Field Guide to the Birds of North America*. The near simultaneous publication of the guides is mute testimony to the breadth of the field guide market and to the intensity of the competition to capture it. Indeed the competition has led to three fine guides.

The National Geographic Society guide is perhaps the best field guide to North American birds. The guide includes all species known to breed in North America, as well as those species seen in North America at least three times in the past five years or five times since 1900, introduced species with established breeding populations, and 10 species of waterfowl that commonly escape from zoos and private collections. The guide thus treats 809 species, 806 of which are illustrated (Northwestern Crow, Red-breasted Flycatcher, and Golden-crowned Warbler are not). On the page facing the illustrations of each species, the guide gives a short account of the species' field marks, habits, and habitat, as well as a map of its geographic distribution. The common and scientific names are from the current edition of the American Ornithologists' Union's "Check-list of North American Birds" (1983). The common names used in the previous edition of the A.O.U. check-list (1957) are listed in the species accounts and are cross-referenced in the index. The guide is a sturdy, well-bound volume with a soft, water-resistant cover, good paper, and fine color reproduction.

The most impressive feature of the guide is the large number of illustrations it offers. Plumages that differ according to sex, age, season, or geographic locality are illustrated as the rule. For instance, there are seven illustrations of Horned Lark (encompassing five subspecies, two ages, and both sexes), while Snow Bunting is illustrated eight times. It is not at all uncommon to find four or five illustrations per species. The plethora of illustrations is the major innovation of the guide and goes a long way toward acknowledging in graphic form the variation that so often pleases (and occasionally confuses) us in the field. The wealth of illustrations, produced in just three years, was made possible by the use of 13 artists. The style and quality of the artwork therefore varies, but I find myself less bothered by the differences in style the more I use the book. There is an occasional poor plate (like the cuckoos and, worse, the perched Common Raven), but even these are usable, if not esthetically pleasing.

Another fine feature is the inclusion of the most up-to-date information on field

identification of many difficult groups. An occasional group lacks such information (e.g., the pipits), but these are exceptions, not the rule. The excellent textual material on distinguishing similar species is reflected in the illustrations — even when such is not the case (as in several of the kingbirds on p. 278, whose differences are more pronounced than illustrated), the text provides the field observer with the pertinent distinguishing marks.

Although the species accounts include the important field marks of each species, the style of writing often fails to convey that certain marks are critical to the proper identification of a species. Occasionally such critical marks are buried in lengthy description. This will not hinder the intermediate or advanced observer, but a beginner might find the species accounts difficult to use. Another drawback is the relative paucity of habitat depictions. The illustrations typically contain bits of habitat, a pleasing touch that compliments the illustrated species, but full habitats, such as those frequently portrayed in *Birds of North America*, would have conveyed visually the important sense of where to find particular species. The volume measures 5 × 8 inches (12.7 × 20.3 cm), slightly too large to fit easily into one's back pocket, and the maps are often too small, especially for species with continent-wide distributions. However, these are relatively minor criticisms of an otherwise excellent field guide, and I highly recommend the National Geographic Society's *Field Guide to the Birds of North America* for birders of all levels of ability. If I had to buy only one of the new field guides, the National Geographic Society guide would be my choice.

Anthony H. Bledsoe

NOTES AND NEWS

The periodical *British Birds* has chosen the National Geographic Society's *Field Guide to the Birds of North America* as the Best Bird Book of 1984.

* * *

Least Terns (*Sterna antillarum*) are being color-banded on Long Island this summer. Adult birds will carry three color bands and the usual aluminum FWS band; chicks will carry a single striped color band and a FWS band. Report sightings to Seatuck Research Program, Box 31, Islip, N.Y. 11751 or tel.(516) 581-6908.

* * *

Seven captive Whooping Cranes (*Grus americana*) at Patuxent Wildlife Research Center, Laurel, Maryland contracted eastern equinine encephalitis between mid-September and early November 1984 and died. The birds died quickly without clinical signs of the illness. The rest of the captive flock may be vaccinated against the disease, caused by a virus transmitted by the mosquito *Culiseta melanura*.

* * *

The XIX International Ornithological Congress will be held June 22-29, 1986 in Ottawa, Ontario, Canada. For information, write the Secretary-General, Henri Ouellet, National Museum of Natural Sciences, Ottawa, Ontario, Canada K1A OM8.

* * *

Biologists of the U.S. Fish and Wildlife Service observed 11 Kirtland's Warblers (*Dendroica kirtlandii*) on Caribbean Islands in early 1985 — 5 in the Bahamas, 5 in the

Turks and Caicos, and 1 on Hispaniola. Ornithologists and birders visiting Caribbean Islands should note the possibility of the occurrence of Kirtland's Warblers, particularly in dry coppice vegetation resembling Sonoran desert habitat. Send records of winter observations to Craig Faanes, U.S. FWS, School of Forest Resources, University of Georgia, Athens, GA 30602.

* * *

The Fish and Wildlife Service is currently assessing the status of Ivory-billed Woodpecker (*Campephilus principalis*) to determine if it is extinct and thus should be removed from the Federal list of endangered and threatened species. Information about the current status of the species should be sent by August 8, 1985 to Regional Director U.S. FWS, P.O. Box 1306, Albuquerque, NM 87103.

* * *

The Common Barn-Owl (*Tyto alba*) nests uncommonly in Connecticut. For a survey of the Connecticut populations of Common Barn-Owl, send information about its breeding status in Connecticut to George Zepko, Barn-Owl Nesting Project, Box 966, Middletown, CT 06457 (203-347-1133).

* * *

The National Geographic Society televises a weekly cable television series, Explorer, on Sundays from 5-8 PM on the Nickelodeon network. Each week the series presents 5-10 films (shorts or full-length) most never seen on U.S. television.

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The Connecticut Warbler is a quarterly publication devoted to the advancement of the study of birds. It is published by the Connecticut Ornithological Association. Address all correspondence to 314 Unquowa Road, Fairfield, CT 06430.

The Connecticut Audubon Society
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THE CONNECTICUT WARBLER

A Journal of Connecticut Ornithology

Volume V Number 2 April 1985 Pages 14-26

The Connecticut Warbler is published quarterly (January, April, July, and October) by the Connecticut Ornithological Association (COA). Membership to COA is based on a calendar year, with membership renewable in January. New members of COA receive all four issues of *The Connecticut Warbler* for that year. Make checks payable to The Connecticut Ornithological Association, and mail checks to 314 Unquowa Road, Fairfield, CT 06430.

Membership Fees

Member	$10.00	Contributing	$20.00
Family	$15.00	Sustaining	$30.00

Founder $300.00, payable in three annual installments and conferring life membership.

The editors invite submission of articles, notes, black and white photographs and line drawings for publication in *The Connecticut Warbler*. Manuscripts should be typewritten, double-spaced and on one side of the sheet only, with ample margins. The style of manuscripts should follow the general usage in recent issues.

Cover Photograph: Barnacle Goose (far right), Richardson's Canada Goose (far left), and two Barnacle Goose X Canada Goose hybrids (center) in Southbury, Connecticut November 25, 1984. Photograph by Frank W. Mantlik.

PRESIDENT'S MESSAGE

During May, 1985 a flurry of letters and news items in *The New York Times* expressed concern about the "creeping decline" of wildlife species in this country and elsewhere. I was pleased to see this concern articulated by the editors of my local newspaper, *The Hour*, in Norwalk. We are seeing a timely restatement of the alert sounded by Rachel Carson's *Silent Spring* in the early 1960's.

Such public concerns are always vaguely felt and expressed, and are often put down as unscientific by some who don't like such concerns raised. And, true enough, there are so many factors involved, and the reactions of species to habitat changes and pollution are so different, that it is difficult to document the decline of wildlife species except in piecemeal fashion. It took ten years to document Rachel Carson's concerns and to begin the task — still unfinished — of regulating the use of chemicals more carefully. We now know, for example, that several of our summer resident birds require large, undisturbed blocks of woodland in which to nest. Along our shorelines the Piping Plover and the Least Tern can barely hold out against disturbance of their beach nesting sites. Many other species are finding their wintering grounds made over by the unrest that currently rocks Central America. A few bird species are actually increasing their ranges at present, but many more are losing ground. In the second volume of *The Connecticut Warbler*, Fred Sibley provided a "blue list" of Connecticut bird species whose status we must watch.

The very uncertainty about the decline of so many of the planet's species calls for a determined effort to fill the gaps in our knowledge of what is indeed happening to us and our environment. We need to forestall premature reactions by the general public and can do this by clarifying which species have adequate populations, and which are in decline — and why. We also need to speed the recognition of real hazards already impinging on particular species, so that corrective action may be initiated in good time.

No group is better situated to help gather the necessary information on bird populations in our State than the membership, some 15,000 strong, of the several Audubon Societies. The Audubon Council of Connecticut is currently hard at work completing an atlas of the breeding birds of our State. This field study, in which some 1400 people have participated, will provide sound baseline data on the distributional status of our birdlife by 1986. We can build on it in many ways in succeeding years.

All of us need a regular medium of exchange for this new flood of information, where the facts can be reported, assessed, and argued over if necessary. Science moves ahead by inviting criticism from all qualified students when a new proposition about reality is offered. So far as our State's birdlife is concerned, that exchange medium is now *The Connecticut* Warbler. The COA was formed to provide the interface between the scientific community and the public interested in birds. The interface is essential in clarifying the import of information about those bird species which may be caught in the net of the creeping decline we are all properly concerned about.

We hope, therefore, that all of the fifteen or so Audubon groups will share actively in the growth of the COA and its journal, *The Connecticut Warbler*, both as subscribers and contributors, and then as ambassadors to their communities and to that large majority of

Connecticut citizens who are not yet involved in making the modest annual contributions necessary to keep such ventures going. Working together we can soon make the Nutmeg State a leader in rallying the citizenry to the cause of nature protection, where birds shall continue to provide that litmus test of the quality of the environment we all share.

Roland C. Clement
President
Connecticut Ornithological Association

COA'S FIRST ANNUAL MEETING

The sixty or more members and guests who gathered on May 11, 1985 at Trail Wood—the late Edwin Way Teale's farm in Hampton, Conn., now a sanctuary of the Connecticut Audubon Society—were unanimous in declaring this first annual meeting of COA a most pleasant combination of field work and business. Nellie Teale was hostess and delighted in having everyone sign her guest book. As outgoing secretary Julio de la Torre later reported in the minutes of the meeting, "The setting, the halcyon weather, and a convivial crowd blended to produce a most rewarding day and a memorable milestone in the history of our organization."

After introductions at 10:30 AM, ecologist Anton Damman of the University of Connecticut (Storrs) faculty led a woodland walk; John McDonald, the University's librarian, led short bird walks; and a bird-banding crew organized by Carl Trichka, George Clark, Shirley Davis, and Winnie Burkett provided birds in the hand for those who had never practiced this art.

After an *al fresco* lunch, a short business meeting heard COA Treasurer Robert Fletcher and Assistant Treasurer Carl Trichka give an interim accounting of COA finances. Membership Committee chairman Stephen Broker reported on his attempts to broaden support for COA. President Roland Clement, who chaired the meeting, then outlined the events of the past year, with emphasis on the problems of incorporating COA, and on changing the editorial arrangements for COA's journal, *The Connecticut Warbler*. Joe Zeranski then proposed minor revisions of the By-laws on behalf of the committee he chaired for this purpose, and these were approved. Stuart Mitchell's Nominating Committee proposed continuing most officers and directors, except that Winnie Burkett of Storrs should replace Julio de la Torre as secretary, while he becomes a director. This was approved, and Stephen Broker, George Clark, Philip Schaeffer, and Fred Sibley were added to the Board of Directors.

After the business meeting Anthony Bledsoe discussed the interesting problems involved in the only warbler species that hybridize in Connecticut, the Blue-winged and Golden-winged warblers, and their hybrids, the so-called "Brewster's" and "Lawrence's" warblers. He invited the bird-watching community to help keep track of the fate of this hybridization, in which the Golden-wings are retreating northward as the Blue-wings expand into New England from the south.

Julio de la Torre
Secretary
The Connecticut Ornithological Association

A BARNACLE GOOSE IN SOUTHBURY, WITH COMMENTS ABOUT THE STATUS OF BARNACLE GOOSE IN NORTH AMERICA

MARK S. SZANTYR

Controversy surrounds the occurrence of several species of waterfowl in North America, and records of such species as Tufted Duck and Barnacle Goose always seem to be in question. Certainly the large number of private waterfowl collections and the likelihood that birds may be lost from such collections give good reason to doubt extralimital records of "popular" avicultural waterfowl. Thus, when Russ Naylor, a *Branta* enthusiast, reported a Barnacle Goose (*Branta leucopsis*) accompanied by a very small Canada Goose (*B. canadensis*) and two hybrid young on a farm pond in Southbury, most observers in the region dismissed the birds as escapees. In this article, I describe the circumstances of occurrence of these birds and discuss the status of Barnacle Goose in North America.

The Barnacle Goose is a small Old World goose that nests on the eastern coast of Greenland and on the islands of Spitzbergen and Novaya Zemlya in the Arctic Ocean. It is closely related to the Canada Goose, although it is more similar to the Brant (*B. bernicla*) in habits and appearance. Barnacle Geese forage primarily on mud flats but also graze in grasslands and agricultural fields. They winter from northern Europe south to the British Isles and have been recorded in North America from Baffin Island south and west along the eastern and central flyways.

On 22 November 1984, Russ Naylor discovered a Barnacle Goose on a pond at the Southbury Training Academy, Southbury, New Haven Co., Connecticut. The pond is about three acres in size and is bordered on two sides by lawns and on the other two sides by scrubby second growth. Cornfields abound in the vicinity, and in the past years the fields have proved attractive to large groups of Canada Geese. These geese include both local breeders and wild migrants from breeding populations to the north. The geese normally stay through until freezing of ponds forces them southward.

At 0700 on 24 November 1984, Dennis Varza, Ray Schwartz and I observed the birds on the pond. Naylor suggested that the Barnacle Goose, the small Canada Goose, and the two hybrids were a family group and our observations suggested the same. The four birds stayed together, amidst about 750 Canada Geese, for the duration of our observation, and were regularly seen by others arriving at and departing from the pond together. The proportions of the neck and bill, and the overall size of the small Canada Goose indicated it was either the Cackling (*B.c. minima*) or Richardson's (*B.c. hutchinsii*) race. Because the small Canada Goose was so light in color, it was most likely *B.c. hutchinsii*, a very small race that nests on the coastal tundra of Southampton Island, southwest Baffin Island, and parts of Ellesmere Island and the Melville and Boothia peninsulas, and winters in Texas and Mexico (Bellrose 1976). Descriptions of the Barnacle Goose, Richardson's Canada Goose, and the two hybrids are on file with the Rare Records Committee of the Connecticut Ornithological Association.

From 25-30 November, the geese remained at the pond, leaving only to feed in the nearby cornfields. During this period, many people saw the family group. Birders familiar with the Richardson's race and its call noted 8 to 12 other Richardson's Canada Geese in the flock. On 1 December 1984, the family group was observed on a private farm pond 8 km north on Squires Road in Roxbury. In the following days the geese moved between this pond and the Southbury pond. They were last seen on 10 January 1985 by Russ Naylor.

Are any members of the family group wild or did they escape from captivity? The Barnacle Goose may have joined a flock of Richardson's Canada Geese in the arctic, mated with one of them, and moved south with them during their fall migration. Several facts lend credence to this idea. The Barnacle Goose occurred along a major flyway at the "correct" time of year for Barnacle Goose "vagrants" (see below) and at a well-known migration point. It was mated to an individual of a subspecies of Canada Goose that breeds close to the Greenland population of Barnacle Goose. It acted like a wild bird, avoided humans, and was fully flighted. None of these facts alone gives conclusive proof of the origin of the Barnacle Goose. However, taken together, they argue for an arctic origin. It is remarkable that an identical group of geese — a Barnacle Goose, a Richardson's Canada Goose, and two hybrids with the same individual markings as the Connecticut birds — was sighted in Rochester, New York during March 1985 (Clay Taylor, pers. comm.). If this was the same group it would indicate they were engaging in the regular migration typical of wild birds.

The Southbury sighting prompted an investigation of other records of Barnacle Goose in North America. David A. Sibley provided a list of records gleaned from regional checklists, bold-faced entries in *American Birds*, and other sources. I have added several additional records for a total of 72 sightings of 89 individuals in 20 states, 7 Canadian provinces, and Greenland. Those records with exact dates are plotted in Fig. 1 according to date of initial sighting. The peaks in October-November and March-April coincide with the main migration periods of wild geese in North America. All of the records come from major flyways, with the greatest number being reported from the Atlantic and Mississippi flyways.

Ryff (1984) suggested that Barnacle Geese south of the Maritime Provinces of Canada be considered as escaped aviary birds and that the origins of even the Maritime Province birds be questioned. His suggestions were based in part on the supposition that an Atlantic crossing by Barnacle Geese is highly unlikely. However, at least one such crossing has occurred: a Barnacle Goose banded as an adult on Spitsbergen in the Old World arctic in July 1977 was shot by a hunter at Ladle Cove near Fogo Island on the northeast coast of Newfoundland in October 1981 (Runde 1984). The bird was accompanied by two other Barnacle Geese (Stuart A. Tingley, pers. comm. to David A. Sibley).

The Newfoundland record and the pattern of records depicted in Fig. 1 suggest that many North American Barnacle Geese are of wild origin. However, many North American occurrences have never been documented beyond a passing comment, because observers have not considered Barnacle Geese in North America as wild. Enough questions have been raised to warrant a full study of North American records

and of the possibility of North American nesting. Perhaps more fully documented records will help fill in the puzzle of the status of Barnacle Goose in North America.

ACKNOWLEDGMENTS

I wish to thank Ed Hagen and the members of the Western Connecticut Bird Club for their data and assistance in monitoring the birds' activities. I owe special thanks to Russ Naylor for finding the bird and submitting his daily notes on the behavior of the goose for citation in this article. Thanks also to Larry Balch and Dan Williams for information on a Barnacle Goose which occurred in early 1984 in Rockford, Illinois; to Anthony H. Bledsoe for bringing to my attention the banding recovery in Newfoundland; and to Jim Harmon and the staff of the Tishomingo National Wildlife Refuge in Oklahoma for information on 6 Barnacle Geese that spent time there in the late 1970's.

LITERATURE CITED

Bellrose, F.C., 1976, Ducks, geese and swans of North America. Harrisburg, Pennsylvania, Stackpole Books.

Ryff, A.J. 1984. The long sea flights: A precise tradition. Birding 16:146-154.

Runde, O.J. 1984. Bird-ringing report 1981, Stavanger Museum. Sterna 17:129-155.

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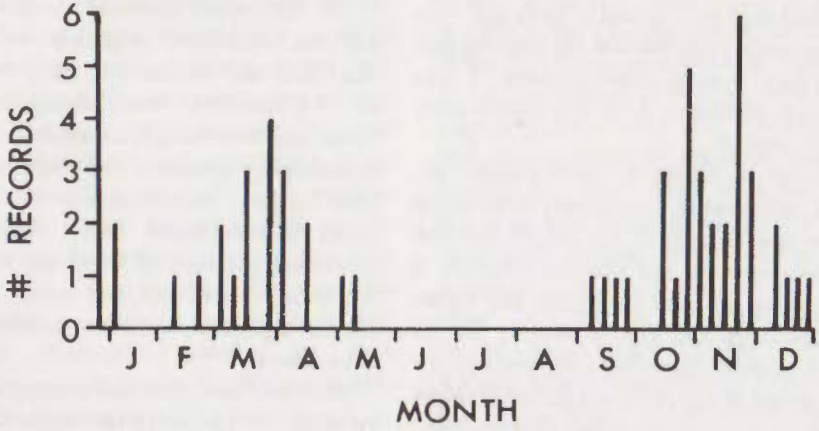

Figure 1. Histogram of Barnacle Goose records from North America, plotted according to date of initial sighting. Only records with exact dates are plotted. Each month is divided into 5 intervals. The height of each line indicates the number of records for that interval.

DUST-BATHING BY A GREAT CRESTED FLYCATCHER

RUTH LÖF

On 12 June 1984, shortly after noon in bright sunlight, I observed at a distance of 80 feet a Great Crested Flycatcher (*Myiarchus crinitus*) dusting itself in my vegetable garden at Storrs, Connecticut. The bird visited the garden for about five minutes and dusted at least three times in dry, loose, tilled, and mulched soil that was raked the previous week. The soil was not dusty, and at a distance no dust was seen in the air. During each dusting the bird flew to the ground from a garden stake and, while flapping its wings, turned and twisted from side to side in one spot, making a slight indentation. Each dusting occurred at the same spot and lasted no more than 15 seconds. During one dusting the bird stopped, spread a wing,and was momentarily still. Because the bird flapped its wings steadily when dusting, I was unable to determine if the bird turned completely around.

George A. Clark, Jr. (pers. comm.) reports that dusting is frequently observed in a few species such as the House Sparrow (*Passer domesticus*) but that the behavior is unrecorded for most passerines. My report is apparently the first of dusting in the Great Crested Flycatcher, and perhaps the first record of such behavior for any member of the New World flycatchers (Tyrannidae).

74 Willington Hill Rd., Storrs, CT 06268

Editor's note. Dusting, like bathing and sunning, is a behavior that maintains the surface of the body in good condition by removing moisture, excess preen oil, and external parasites from the skin and feathers. The behavior often involves related activities such as preening, bathing and sunning. All birds employ behaviors designed to keep the surface of the body in good condition, but the details of the behaviors and their functions vary from species to species. Like Ruth Löf, other readers of *The Connecticut Warbler* can contribute to our knowledge of bird behavior by paying attention to unusual behaviors and reporting them.

CONNECTICUT FIELD NOTES

FALL: AUGUST 1 — NOVEMBER 30, 1984

DENNIS E. VARZA

The fall season included many rarities and an excellent migration of both shorebirds and landbirds in early September. For waterfowl enthusiasts, a Barnacle Goose and two Canada x Barnacle hybrids in Southbury sparked a lively debate about their origin. Hawk-watchers enjoyed a grand Broad-winged Hawk migration, increasing numbers of Peregrine Falcons, and record numbers of both eagles. To top off the raptors a Gyrfalcon turned up in New Haven.

Shorebird specialists had the opportunity to study 36 species of shorebirds this fall including American Avocet and Marbled Godwit. The first wave of vireos and warblers occurred August 20-23, after which many of the state's nesting species became scarce. The second and largest of the fall

waves occurred September 1-3, when over 25 species of warblers were reported. A third wave occurred September 6-9 with smaller movements September 28-29 and October 6-8. Many vireos left the state with the second wave of warblers September 1-3. Sparrows provided plenty of excitement, with Lark, Clay-colored, and Henslow's sparrows and large numbers of Lincoln's and White-crowned sparrows. Other highlights included Ash-throated Flycatcher (the first report for the state), Lesser Black-backed Gull, Black-legged Kittiwake, Chuck-will's-widow, Western Tanager, and a troupe of Common Ravens.

Loons Through Herons

An unusual inland record of a Red-throated Loon came from Lake Congamond on the Massachusetts border October 29 to November 4 (SK). Summering Common Loons were seen through August with migrants arriving mid-September and peaking October 21-30. The Stratford pair of Pied-billed Grebes and their young stayed to mid-October, while migrants arrived mid-September. A Horned Grebe spent the first half of August off Greenwich Pt., two months before the first winter bird arrived in Stratford October 14 (DV). A remarkable flight of 500 Horned Grebes was observed on November 25 along the shore from Westport to Stratford. The same areas the next day did not have a single bird! Single Red-necked Grebes on Lake Congamond November 7 (SK) and at Milford Pt. November 4 (DV) were the only reports. Double-crested Cormorants lingered through November. A Great Cormorant off Greenwich Pt. September 25 (MFN) was early; the next ones arrived October 13. The few American Bittern sightings occurred in late September and early October. No Least Bitterns were reported. Is anyone seeing them? Great and Snowy egrets stayed until early November. A Little Blue Heron lingered at Greenwich Pt. until October 1 and a late Cattle Egret worked the grassy lawns of Hammonasset November 4-11.

Waterfowl Through Falcons

Small numbers of Snow Geese arrived in early October, with a major flight October 20-30. Brant arrived October 27-29 with large flocks reported all along the shore and a spectacular 1500 seen in two hours passing over Stratford October 29 (DV). A Brant, rare inland, was observed in Great Pond State Forest, Simsbury November 4-12 (JK et al.). The most controversial report was a **Barnacle Goose** in Southbury (RN et al.). The bird, apparently mated to a Canada Goose and accompanied by two hybrid young, was first seen November 22 and stayed through the report period. Greater Scaup were scarce except for a flock of 2500 at the Thimble Islands October 31 (MB). An Oldsquaw at Stratford September 23 and an American Wigeon in Stratford August 8 (DV) were early. Hundreds of Oldsquaw were found along the coast November 25. Inland there were one Black Scoter on Lake Congamond October 5 and three there October 29 (SK). On Nepaug Reservoir there were 40 October 20, 14 October 28 (JTT, JoTT, MH), and one White-winged Scoter October 21-23 (JK). A heavy White-winged Scoter influx October 28-31 yielded reports across the state and over 2000 birds at the Thimble Islands October 31 (MB). Scoters became scarce and local in November. Ruddy Ducks were seen across the state from October 30 to November 25.

Osprey continued their multi-year increase, with Lighthouse Pt. almost doubling its 1983 count. In southern New England a record 46 Bald Eagles and 14 Golden Eagles were reported this fall. Northern Harrier, Sharp-shinned Hawk, Cooper's Hawk, and Peregrine Falcon were more numerous this year than last, with Lighthouse Pt. recording 29 Peregrines. The hawk migration started slowly but exploded September 16-17 when over 48,000 Broad-winged Hawks were reported across the state, possibly the largest movement ever of this species in Connecticut. Rough-legged Hawks were again scarce, with 10 birds at Lighthouse Pt. and on November 19 one feeding on a rabbit at Hammonasset. The rarest raptor of the season was a gray-phase Gyrfalcon at New Haven Harbor November 11-18 (DV,RS et al.).

Shorebirds Through Skimmer

Many shorebird species peaked from early to mid-August. September produced a great variety of birds in low numbers, and October marked the departure of most shorebirds. Lesser Golden-Plovers were found in small numbers from early September to mid-October. Three very late Semipalmated Plovers stayed in the Milford - New Haven area through November, while Piping Plover was last reported September 23 at Milford Pt. (DV). Single American Avocets at Silver Sands State Park, Milford September 4-6 (DV et al.) and Madison October 6 (NP) were unusual. Willets were regular in the Stratford - Milford area; the last was reported September 23 at Milford Pt. (SK). Up to 3 Upland Sandpipers were at Stratford August 25 to September 3 (DV), and one was at Watertown September 16 (MS). Eleven Hudsonian Godwits, a rare but regular fall migrant, were reported; singles were at Milford Pt. September 4-5 (m.ob.), October 8 (RE), October 18 (FM), and November 3 (FG). One at Hammonasset September 15 (m.ob.) was followed by 6 October 20 with 2 staying until November 5 (m.ob.). One Marbled Godwit was at Milford Pt. September 5 (DV). Western Sandpipers arrived at Milford Pt. August 27, peaked at 20 birds in early September, and stayed until late October. On the Naugatuck River in Oxford October 6, a flock of shorebirds contained 12 Western Sandpipers, 2 White-rumped Sandpipers, and 8 Pectoral Sandpipers (BD,MS). A single Baird's Sandpiper was observed at Milford Pt. August 28 to September 5 (JF et al.). An early Stilt Sandpiper at Stratford August 5 and two September 1-5 at Silver Sands State Park were the only reports (DV). The occurrence of Stilt Sandpipers in Connecticut depends on the availability of shallow pools in secluded marshes. When such habitat is available (as in Stratford in the mid-seventies) up to a dozen birds can be found at a time. Only two Buff-breasted Sandpipers were reported, one in North Greenwich September 5-6 with a Lesser Golden-Plover (GZ,TBa) and one at Hammonasset October 5 (NP et al.). A Ruff was at Hammonasset September 20 (CTa). Single Long-billed Dowitchers were found at Milford Pt. August 21 (DV) and Killingworth October 17 (NP). Two Wilson's Phalaropes were in the Milford Pt. - Silver Sands area September 1-10 (m.ob.). Single ***Lesser Black-backed Gulls*** were seen September 15 at Hammonasset (NP, CTa), September 19 at Milford Pt. (NP), and October 13 near Greenwich Pt. (MFN). A ***Black-legged Kittiwake*** was at New Haven Harbor November 20 (NP). Single Caspian Terns were reported from

Lighthouse Pt. September 23 (m.ob.) and Hammonasset October 27 (JM). The only Black Tern was seen August 26 at Sandy Pt., West Haven (RE), and the sole Black Skimmer occurred at Milford Pt. August 31 to September 2 (m.ob.).

Owls Through Woodpeckers

Long-eared Owls were scarce this fall; one was at Lighthouse Pt. October 6 (AB) and another at Hammonasset October 8. Snowy Owls were absent and Short-eared Owls were very scarce. Common Nighthawk flights occurred August 13 to September 10, with a peak August 23-26, when observers reported numbers in the thousands. A **Chuck-will's-widow** was seen in Branford September 18 (NP), and a Whip-poor-will was at Lighthouse Park October 22 (AB et al.). Scattered reports of Red-headed Woodpeckers included one September 3 in West Hartford (JTT, JoTT) and another November 1 in Suffield (SK).

Flycatchers Through Pipits

There were scattered reports of Olive-sided Flycatchers across the state the first three weeks of September. A late Least Flycatcher, the only *Empidonax* species to be expected after mid-September, was seen at Hammonasset October 7 (AB,DV). The first Connecticut report of **Ash-throated Flycatcher** came from Bethany October 6 (BD,MS,DV). Single Western Kingbirds were found at New Haven Airport September 27 (NP) and Greenwich Pt. October 31 to November 5 (m.ob.). A late Tree Swallow was in Woodbury November 10 (RN). A Cliff Swallow October 8 in Suffield (SK) and one October 4 at Hammonasset (DV) were the only reports. The population of Common Ravens in Massachusetts appears to be expanding into Connecticut. A **Common Raven** at Larsen Sanctuary Hawk Watch, Fairfield September 13 (CTr) was followed by reports of up to five birds November 2-5 at Barkhamsted Reservoir, Salisbury. A Boreal Chickadee was found October 17 at Chatfield Hollow Park in Killingworth (NP). Large numbers of Golden-crowned Kinglets arrived in early October with an early pair at Goshen September 6 (MS,DV). Nearly all contributers commented on how abundant they were this fall. Late thrushes included a Veery at Hammonasset October 27 (BD,MS) and a Swainson's Thrush in Canton November 26 to December 5 (JK). A large flock of 200 Water Pipits was in Middlebury October 21 (WCBC).

Vireos Through Finches

Philadelphia Vireos and large numbers of Red-eyed Vireos pushed through the state September 6-9. Two Orange-crowned Warblers were reported, an early one August 21 at Milford Pt. (DV) and a second September 12 in Ledyard (PB). Mourning Warblers were seen September 1-3 only. Connecticut Warblers were seen from September 30 to October 9. Late were an American Redstart October 14 in Greenwich, a Black-throated Blue Warbler the same day in Ledyard (PB), a Yellow-breasted Chat at Hammonasset November 7 (RS,DV), and a Black-throated Green Warbler November 9 in New Haven (AB). A late Scarlet Tanager was at Storrs October 4 (SD). A **Western Tanager** was reported in Greenwich November 24 (DB,JBo). Two Rose-breasted Grosbeaks were in Southbury October 17 (RN). A **Blue Grosbeak** was in Greenwich October 14 (TBa,JZ). Several Dickcissels

were reported from Greenwich to Branford October 25 to November 5. At least two **Clay-colored Sparrows** were at Hammonasset from October 27 to November 3 (DV,RS et al.). One was banded October 28 (CTr). Two Lark Sparrows were in the same area October 27-29, and another was in North Guilford October 11 (NP). A **Henslow's Sparrow** was seen at Neck Road on the Madison - Guilford line October 11 (NP). A Grasshopper Sparrow was reported at Hammonasset September 23 (RD). Vesper Sparrows, less frequent this fall than last, occurred October 7 to November 22 with most records from October 21-28. Lincoln's Sparrows were more common than usual, with some fields having up to six birds at once September 21 to October 10. White-crowned Sparrows made an impressive showing this fall. They arrived September 30, and from October 5-28 certain areas had up to a dozen birds at a time. A small movement of Lapland Longspurs and Snow Buntings occurred in mid-October with the main movement peaking on November 10.

A late Northern Oriole was in Woodbury November 1 (RN). The "winter finch" migration started out well in mid-September, with a Pine Grosbeak in Fairfield September 13 (DV) and small flocks of Red and White-winged crossbills at the same time. After that things went downhill; even Purple Finches and American Goldfinches weren't around in the usual numbers. Evening Grosbeaks and Pine Siskins appeared sporadically from late September on, but were rare by the end of the period.

Contributors: James Bair, Tom Baptist, Carol Bedworth, Anthony Bledsoe, Peter Bono, Doris and John Bova, Milan Bull, Tom Burke, Winnie Burkett, George Clark, New Haven Bird Club, Western Connecticut Bird Club, Neil Currie, Shirley Davis, Buzz and Debbie Devine, Robert Dewire, Townsend Dickinson, Richard English, Andrew Farnsworth, John Farrand, Frank Gallo, Mike Hays, Jay Kaplan, Seth Kellog, Betty Kleiner, Ruth Löf, Frank Mantlik, Jim Mockalis, Russ Naylor, Mianus Field Notes, m.ob. = many observers, Alison Oliveri, Noble Proctor, Fred Purnell, Tom Rochovansky, Phil Rusch, Ray Schwartz, Vicki Slingo, Mark Szantyr, Clay Taylor, Carl Trichka, Dr. John Trover-Trend, Jonathan Trover-Trend (JoTT), Dennis Varza, Connie Wood, George Zepko, Joe Zeranski.

CONNECTICUT BIRDS —BLUE-WINGED AND GOLDEN-WINGED WARBLERS

ANTHONY H. BLEDSOE

Since the late 1800's, naturalists in Connecticut have had the opportunity to observe the interactions between Blue-winged (*Vermivora pinus*) and Golden-winged (*V. chrysoptera*) warblers. Connecticut ornithologists such as L.B. Bishop and J.H. Sagé figured prominently in the study of these interactions at the turn of the century. Their work in part led to the discovery that "Brewster's" and "Lawrence's" warblers are hybrids between *V. pinus* and *V. chrysoptera*.

Connecticut continues to play a major role in the ongoing studies of the hybridization between Blue-winged and Golden-winged warblers, and observers in the state

continue to have the benefit of observing such interactions firsthand.

HISTORICAL DISTRIBUTION

The status of the *V. pinus* - *V. chrysoptera* complex in Connecticut has changed markedly in the last 150 years. The Blue-winged Warbler became established in Connecticut sometime in the mid-1800's (Gill 1980), probably from populations in the lower Hudson River Valley. By 1880, Blue-wings were common at the mouth of the Connecticut River and uncommon to rare elsewhere in southern Connecticut (Merriam 1877). The coastal populations increased rapidly, and by 1890 the species was common along most of the shoreline (Bishop 1889), including Bridgeport (Averill 1892, *contra* Bishop 1889). Around 1890, Blue-wings spread rapidly up the Connecticut River to Portland, where they were common by 1900 (Sage and Bishop 1913). Blue-wings reached Massachusetts along the Connecticut River by 1925 (Bagg and Eliot 1937) and were "almost common" along the lower third of the Connecticut River in Massachusetts by 1955 (Griscom and Snyder 1955). Along the Naugatuck River, Blue-wings were common at Seymour by 1889 (Eames 1889). They spread upriver from there and colonized the hills of northwest and north-central Connecticut, apparently in 1930-1950 (Gill 1980). At about the same time, they increased in the hills of northeast Connecticut.

Before the mid-1800's, the Golden-winged Warbler was a rare migrant in Connecticut (Lindsey 1843). It was first collected in the state in 1875 and was first recorded breeding in 1876 at Suffield (Merriam 1877). At that time, Merriam (1877:14) considered it a local, "rather rare summer resident." In the 1890's Golden-wings increased markedly at some localities, such as Portland (Sage 1893) and New Britain (Bagg and Eliot 1937). These increases were short-lived — by 1909 Golden-wings were rare in New Britain (Bagg and Eliot 1937) and by 1913 only "small numbers" were recorded in Portland (Sage and Bishop 1913). At the turn of the century, Golden-wings were rare breeders elsewhere — in New Haven (Burr 1908), "southern Connecticut" (Bishop 1905), and Litchfield (Woodruff 1906). Since then, Golden-wings have bred in very small numbers locally in the northern two-thirds of Connecticut. In the early 1960's, they increased locally at Thomaston (Gill 1980) and, apparently, near Storrs (Manter 1965). These increases, like those at the turn of the century, were ephemeral, and Golden-wings are now rare, local breeders in the Thomaston and Storrs regions.

As Blue-winged Warblers spread and came into contact with local populations of Golden-wings, the two species hybridized. The main hybrid types, "Brewster's" and "Lawrence's" warblers, were frequently observed along the coast and the Connecticut River Valley in the late 1800's. Fifty years later, Golden-wings and hybrids were virtually absent at these localities. The sequence of initial contact, hybridization, and subsequent decrease in the abundance of Golden-wings and the hybrids is typical of the course of interactions between Blue-winged and Golden-winged warblers. Gill (1980) studied the history of interaction in Connecticut and described 5 stages: stage 1 — mostly Golden-wings and a few Blue-wings; stage 2 — equal numbers of Blue-wings and Golden-wings and a few hybrids (mostly "Brewster's"); stage 3 — many

Blue-wings, few Golden-wings, a range of hybrid combinations and the appearance of the "Lawrence's" type; stage 4 — introgressed Blue-wings, no Golden-wings, and a few hybrids; and stage 5 — Blue-wings with some variability in wing-bar color.

The series of stages takes roughly 50 years and results in the replacement of Golden-wings by Blue-wings. Nearly all Connecticut localities are now at stage 5. The Litchfield, Kent, and Sharon populations are at stage 3 (pers. obs.; David Sibley, pers. comm.).

CURRENT DISTRIBUTION

Blue-wings migrate commonly throughout Connecticut and nest commonly to abundantly in appropriate habitat in southern Connecticut and along the Connecticut and Naugatuck River valleys, and commonly to uncommonly throughout the rest of the state.

Blue-winged Warblers can be found in suitable habitat almost anywhere in Connecticut, particularly during spring migration (late April - late May) and early in the nesting season (mid - late May), when territorial males sing a distinctive, buzzy song, *bee-buzzzz*. Some specific locations are: East Rock Park, New Haven; Birdcraft Museum, Fairfield; Durham Meadows, Durham; Devil's Hopyard State Park, East Haddam; and Old Saybrook and Old Lyme at the mouth of the Connecticut River.

Blue-wings nest in successional habitats such as abandoned farm fields, young second-growth forests, and open edges of streams, rivers, and marshes. The abandonment of farms in Connecticut in the late 1800's and the subsequent succession from old fields to second-growth forests coincided with the spread of Blue-wings in Connecticut (Gill 1980).

Golden-wings are rare in migration and nest in very small numbers at scattered sites in northwest Connecticut. Golden-wings nest sporadically in very small numbers elsewhere in northern Connecticut. The Golden-wing's preference for successional areas with few trees limits it to fields that have been abandoned within the last 30 years (Confer and Knapp 1979). Golden-wings have the potential for rapid but short-lived increases, both as breeders (see above) and as migrants (Bagg and Eliot 1937).

Golden-winged Warblers can be found nesting regularly only at a few sites — River Road in Kent, Miles Sanctuary on West Cornwall Road in Sharon, and White Memorial Sanctuary in Litchfield. The typical Golden-wing song is thinner and less buzzy than the Blue-wing song, and consists of a thin *bee* followed by three *buzzz* notes. Blue-wings occasionally sing a similar song, and hybrids can sing either typical parental song, an atypical song, or a combination of typical and atypical song components.

ACKNOWLEDGMENTS

The Connecticut Breeding Bird Atlas kindly provided breeding season records of Golden-winged Warbler from 1982-1984. I thank David A. Sibley for his descriptions of the Sharon population in June 1984. I am grateful especially to Frank B. Gill for stimulating my interest in Blue-winged and Golden-winged warblers and for his discussions and suggestions about their hybridization.

LITERATURE CITED

Averill, C.K., Jr. 1892. List of birds found in the vicinity of Bridgeport, Connecticut. Bridgeport, Connecticut, Bridgeport Scientific Society.

Bagg, A.C. and S.A. Eliot, Jr. 1937. Birds of the Connecticut Valley in Massachusetts. Northhampton, Massachusetts, Buckingham and Brewer.

Bishop, L.B. 1889. *Helminthophila pinus, H. chrysoptera*, and *H. lawrencei* in Connecticut in the spring of 1888. Auk 6:192-193.

——. 1905. The status of *Helminthophila leucobronchialis* and *H. lawrencei*. Auk 22:21-24.

Burr, F.F. 1908. List of the birds of the New Haven region. New Haven, Connecticut. Publ. New Haven Bird Club, Bull. No. 1.

Confer, J.L. and K. Knapp. 1979. The changing proportions of Blue-winged and Golden-winged warblers in Tompkins County and their habitat selection. Kingbird 29:8-14.

Eames, E.H. 1889. Notes on the Blue-winged Warbler and its allies (*Helminthophila pinus, H. leucobronchialis, H. lawrencei*, and *H. chrysoptera*) in Connecticut. Auk 6:305-310.

Gill, F.B. 1980. Historical aspects of hybridization between Blue-winged and Golden-winged Warblers. Auk 97:1-18.

Griscom, L. and D.E. Snyder. 1955. The birds of Massachusetts. Salem, Massachusetts, Peabody Museum.

Lindsey, J.A. 1843. A catalogue of the birds of Connecticut, arranged according to their natural families. Amer. J. Sci. Arts 44:249-274.

Manter, J.A. 1965. Birds of Storrs, Connecticut and vicinity. Storrs, Connecticut, Natchaugh Ornithological Society.

Merriam, C.H. 1877. A review of the birds of Connecticut. Trans. Connecticut Acad. 4:1-165.

Sage, J.H. 1893. Notes on *Helminthophila chrysoptera, pinus, leucobronchialis*, and *lawrencei* in Connecticut. Auk 10:208-209.

——, and L.B. Bishop. 1913. The birds of Connecticut. Bull. Connecticut State Geol. Nat. Hist. Survey No. 20.

Woodruff, E.S. 1906. A list of the birds of Litchfield, Connecticut. Litchfield Enquirer 81:3. (Original not seen.)

Peabody Museum, Yale University, New Haven, CT 06511

NOTES AND NEWS

Sixty-six AMERICAN KESTRELS (*Falco sparverius*) were marked while on winter territories in south Florida during December 1984 and January 1985. The marking consists of an imped central tail feather that extends about one inch beyond the other tail feathers, is yellow-orange, and bears a two-digit number. These birds of course scattered northward in spring, and should you see one in Connecticut please note the time, place, and, if possible, the two-digit number on the feather, and send the information to: John Smallwood, Dept. of Zoology, 1735 Neil Ave., Columbus, OH 43210.

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The Connecticut Warbler is a quarterly publication devoted to the advancement of the study of birds. It is published by the Connecticut Ornithological Association. Address all correspondence to 314 Unquowa Road, Fairfield, CT 06430.

The Connecticut Audubon Society
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Permit No. 95

THE CONNECTICUT WARBLER

A Journal of Connecticut Ornithology

Volume V Number 3 July 1985 Pages 27-39

CONNECTICUT ORNITHOLOGICAL ASSOCIATION

THE CONNECTICUT WARBLER

The Connecticut Warbler is published quarterly (January, April, July, and October) by the Connecticut Ornithological Association (COA). Membership to COA is based on a calendar year, with membership renewable in January. New members of COA receive all four issues of *The Connecticut Warbler* for that year. Make checks payable to The Connecticut Ornithological Association, and mail checks to 314 Unquowa Road, Fairfield, CT 06430.

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The editors invite submission of articles, notes, black and white photographs and line drawings for publication in *The Connecticut Warbler*. Manuscripts sould be typewritten, double-spaced and on one side of the sheet only, with ample margins. The style of manuscripts should follow the general usage in recent issues.

Cover: John H. Dick's Connecticut Warbler sketch (see notes and news section).

THE EFFECTS OF MUTE SWANS ON NATIVE WATERFOWL

MARIA O'BRIEN AND
ROBERT A. ASKINS

Mute Swans (*Cygnus olor*) were introduced into the United States from Europe at least as early as 1900 (Long 1981), but they did not become established in southern New England until the 1950's, when captive birds apparently escaped from estates in Newport (Palmer 1976). Since then swan populations have increased rapidly in Rhode Island and Connecticut. In 1965 no Mute Swans were recorded on the Connecticut mid-winter waterfowl survey conducted by the Connecticut Department of Environmental Protection (Anon. 1983). By 1970 over 200 swans were counted in the state and 1400 swans were recorded in 1984. Because Mute Swans are aggressive, reproduce rapidly, have a low mortality rate, and ingest large amounts of aquatic vegetation, their effect on resident and wintering waterfowl has been a cause of concern (Reese 1975, 1980).

Like many resident and wintering ducks in Connecticut, Mute Swans are primarily vegetarians (Berglund et al. 1963). Mute Swans not only feed on the same type of food needed by ducks, but they feed on vegetation throughout the year because they do not migrate. On the basis of a comparison of the diets of Mute Swans and various species of ducks, however, Willey and Halla (1972) concluded that feeding behavior of swans probably does not affect ducks adversely (although aggressive behavior by swans during the breeding season might).

Previous comparisons of the diets of Mute Swans and ducks were based on analyses of stomach contents. In contrast we have focused on feeding behavior because two species can use the same type of food and not compete if they consistently feed in different parts of the environment. Our observations of feeding techniques and habitat utilization by 4 species of waterfowl suggest swans and ducks depend on different food sources.

METHODS

Mute Swans were studied at three coves along the Thames River in Quaker Hill, Connecticut (Smith Cove and small coves north and south of Mamacoke Island) from September to November, 1982, and from February to May, 1983. The coves are part of an estuary with tidal differences of approximately 0.5 m. Four species of ducks were studied for comparison with swans: Mallard (*Anas platyrhynchos*), American Black Duck (*Anas rubripes*), American Wigeon (*Anas americana*), and Canvasback (*Aythya valisineria*). Other species such as Hooded Merganser (*Lophodytes cucullatus*) and Greater Scaup (*Aythya marila*) were not included in the study because they do not rely heavily on plant food (Bellrose 1976) and thus are not likely to compete with swans for food.

A vegetation analysis using five east to west transect lines was conducted in Northern Mamacoke Cove in the fall prior to observations. Vegetation samples were taken every 5 m with a benthic grab sampler and depth was recorded. Another transect line was run on the southern portion of Smith Cove.

Individual waterfowl were observed for 2-5 minutes to determine the primary feeding technique and the feeding distance from shore. Feeding techniques were classified into four categories: (1) Dabbling; Food ob-

tained from the water surface or off rocks without submergence of the body. (2) Neck-Plunging; Food obtained below the surface by submergence of the head and neck. (3) Tipping; Food obtained from deeper water by upending with submergence of head, neck and forebody. (4) Diving; Food obtained by diving below the surface.

Feeding areas were divided into 4 categories based upon distance from water's edge: 0-1 m, 1-5 m, 5-10 m, and >10 m. All distances were measured from the water's edge (rather than the shore) to compensate for tidal fluctuations.

Any threat displays or aggressive behavior shown by Mute Swans toward ducks or other swans were noted.

Results

Approximately 8 Black Ducks and 24 American Wigeon were present during both seasons, while Mallards increased from 8 in the fall to 15 in the spring. A flock of more than 500 Canvasbacks arrived in February, decreased to 0 the first few days of March, after which 24 returned and remained through the first part of April.

The 20-30 Mute Swans present in September increased to 130 by November, but were back down to 30 by February. In March, 12-14 individuals, including 2 pairs, remained. It was evident from their aggressive behavior toward other swans that the two pairs had established breeding territories.

The vegetation analysis showed the entire bottom of Northern Mamacoke Cove supported a dense carpet of sea lettuce (*Ulva lactuca*). The Smith Cove transect recorded sea lettuce out to 15 m from shore after which there was no bottom vegetation. The depth of the water increased steadily from the shore along all of the transects; 15 m from shore it reached 1.5-2 m at high tide.

In both seasons the feeding areas and feeding techniques of swans were significantly different from those used by any of the duck species (chi-square test; $p<0.001$ in all cases). Swans usually fed 5-10 m from shore using a neck-plunging technique (Fig. 1 & 2). In both seasons all the dabbling ducks fed within 5 m of shore primarily by dabbling and neck-plunging, although American Wigeon were observed feeding on floating vegetation approximately 20 m from shore (Fig. 2). Canvasbacks only used diving as a feeding technique and fed 5-10 m from shore when the cove was ice free. When most of the study area was covered with ice, Canvasbacks fed along the edge of the ice, at one time 70-100 m from shore. In contrast, swans and dabbling ducks fed between the ice and shore (1-5 m from the water's edge) where a small amount of open water remained.

Discussion

The feeding techniques and feeding areas used by swans are distinctly different from those used by any of the ducks. Thus, despite the large winter concentrations of Mute Swans in the coves adjacent to Mamacoke Island, there was little competition for food between swans and ducks. Both swans and ducks fed primarily on sea lettuce, but the swans usually foraged further from shore and fed by neck-plunging. This permitted them to reach to a depth of 1.2 m (Berglund et al. 1963) and obtain food unavailable to dabbling ducks.

Canvasbacks tended to feed further from shore than swans, but when they fed in shallow water they may have used the same food supply. Even then food competition was probably limited. Canvasbacks are

more likely to dig plants out of the mud when they dive (Perry, 1982), while swans often only nip off the shoots, leaving the roots intact (Berglund et al. 1963). Furthermore, invertebrates (especially molluscs) are a major component of the diet of Canvasbacks in some regions (Perry, 1982).

Berglund et al. (1963) concluded tha Mute Swans have little effect on aquatic vegetation in southeastern Sweden because plant productivity is high and the food supply is large. Willey and Halla (1972) argued that the situation is similar in Rhode Island, even on small ponds with large concentrations of wintering swans. They concluded that competition between swans and ducks was insignificant because there was no shortage of food. Although sea lettuce was abundant in our study area, we can not conclude from the single vegetation survey that food is always so abundant that waterfowl never compete for food. However, even if food is in short supply, swans may not compete with ducks because they usually feed in deeper water than dabbling ducks and shallower water than Canvasbacks. Some competition could occur when ice forces swans to feed in shallow water or when the same vegetation zone is used by swans and ducks during different periods of the tide.

Willey and Halla (1972) suggested the aggressiveness of swans during the breeding season may interfere with nesting attempts by geese and ducks. Stone and Marsters (1970) reported that territorial Mute Swans

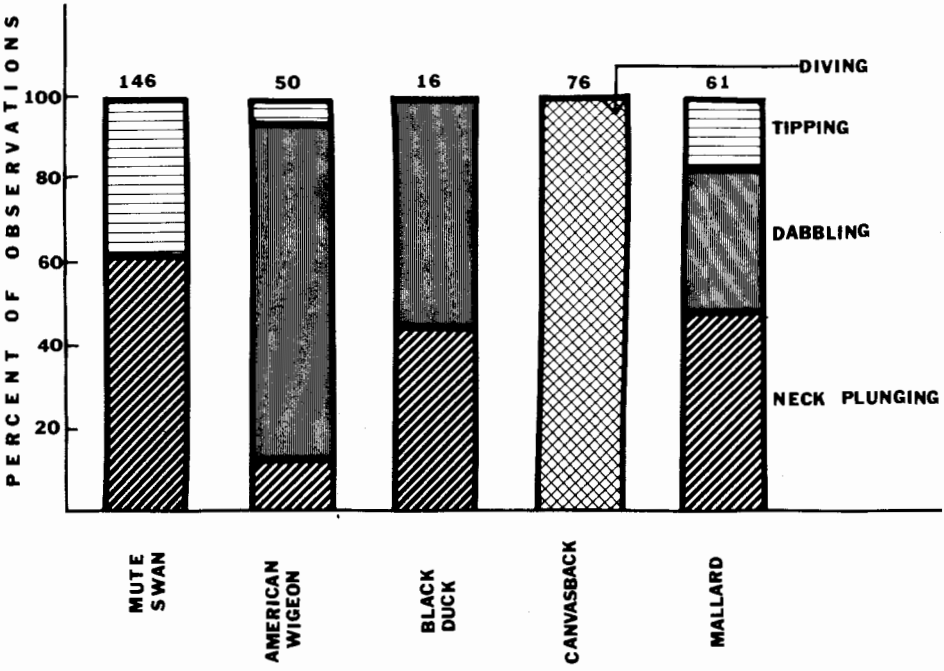

Figure 1. Primary foraging techniques of five species of waterfowl. Sample sizes are shown above the bars.

killed a large number of ducks and geese in a zoo, but all of the waterfowl were pinioned and were confined to a small enclosure. Swans apparently are not normally this aggressive under more natural circumstances. From an extensive study of Mute Swans in Great Britain, Eltringham (1963) concluded that attacks on other species are rare. Likewise, during our extended observations of both territorial and non-territorial swans, we recorded no instances of aggressive behavior toward ducks. Also, Ann Balsamo (pers. comm.) observed no aggression against other species of birds in a 14 week study of courtship and territorial behavior of 5 pairs of Mute Swans on the Thames River. Both Eltringham (1963) and Willey and Halla (1972) recorded waterfowl nesting within a few meters of Mute Swan nests without any signs of aggressive behavior.

Our study near Mamacoke Island suggests Mute Swans have relatively little effect on wintering and resident ducks. Competition for food between swans and ducks may be limited by an abundance of food as well as differences in feeding areas and feeding methods. However, the steady increase in Mute Swan populations makes it imperative to continue monitoring the effect of swans on native waterfowl.

Acknowledgments

We are grateful to Thomas Loureiro for help with field observations, Karen Askins and Bart Hoskins for help with the illustrations, and Greg Chasko for valuable com-

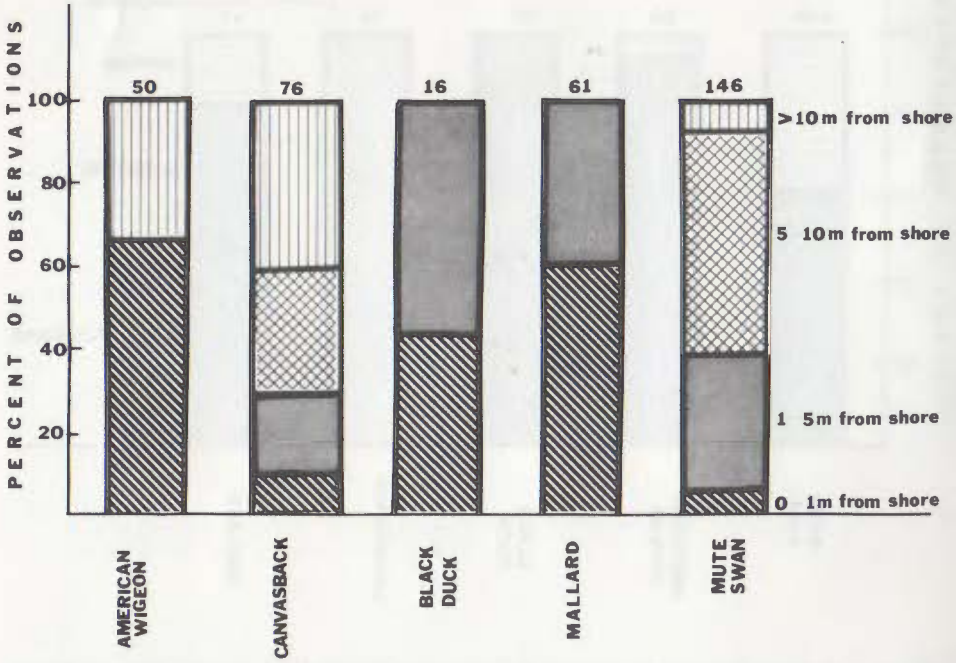

Figure 2. Primary feeding areas of five species of waterfowl. Sample sizes are shown above the bars.

ments on drafts of this paper. Much of the field work was done in the Connecticut Arboretum.

LITERATURE CITED

Anonymous. 1983. Midwinter waterfowl survey. Region 5. U.S. F&WS, Dept. of Interior, Newton Corner, Massacusetts.

Bellrose, F.C. 1976. Ducks, geese, and swans of North America. Stackpole Books, Harrisburg, Pennsylvania.

Berglund, B.E., K. Curry-Lindahl, H. Luther, V. Olsson, W. Rodhe and G. Sellerburg. 1963. The ecological significance of the Mute Swan (*Cygnus olor*) in southeastern Sweden. Acta Vertebratica 2:161-288.

Eltringham, S.K. 1963. The British population of the Mute Swan in 1961. Bird Study 10:10-28.

Long., J.L. 1981. Introduced birds of the world. Universe Books, New York, NY.

Palmer, R.S. 1976. Handbook of North American birds. Vol. 2. Yale University Press, New Haven, CT.

Perry, M.C. 1982. Distribution and food habits of Canvasback in the Northeast. Transactions of the 39th Northeast Fish and Wildlife Conference, 13-15 April 1982. Cherry Hill, New Jersey.

Reese, J. G. 1975. Productivity and management of feral Mute Swans in the Chesapeake Bay. Journal of Wildlife Management 39:280-286.

———. 1980. The demography of European Mute Swans in the Chesapeake Bay. Auk 97:449-463.

Stone, W.B. and A.D. Marsters. 1970. Aggression among captive Mute Swans. New York Fish and Game Journal. 17:51-53.

Willey, C. and B. Halla. 1972. Mute Swans of Rhode Island. Rhode Island Department of Natural Resources, Division of Fish and Wildlife. Pamphlet No. 8.

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THE NATCHAUG ORNITHOLOGICAL SOCIETY

DOLORES T. HILDING

The Natchaug Ornithological Society (NOS) of Mansfield, Connecticut, began as an independent group for the study of birds on 26 June 1956. Jerauld Manter, Professor Emeritus of Entomology, and James Slater, Professor of Biology, both of the University of Connecticut, and two experienced ornithologists, Frank McCamey and the late Richard May, along with eleven other persons, selected the Society's name. They also dedicated the Society to the study, observation, sharing of sightings, and establishment of a record of the birds of Mansfield and the nearby towns of Coventry, Tolland, Willington, Ashford, Chaplin, Windham, and Columbia. Subsequently the NOS has expanded its coverage to the town of Union. Storrs, the part of Mansfield in which the University of Connecticut is located, has been an area of special interest to the NOS.

The Society's emphasis from the beginning, and throughout all twenty-eight years, has been on the accurate reporting and recording of where and when particular species have been seen, and, more recently, on nesting, feeding, and other behavioral activities. A board of three members reviews unusual sightings, and one board

member is to be called to verify sightings of rare birds. Our three curators, Margaret Meigs Skipper, Ruth Canfield, and, since 1962, Shirley Davis, have kept yearly records of members' observations and have distributed copies of reports for May Counts and Christmas Counts.

The NOS records were incorporated in two editions of Jerauld Manter's *Birds of Storrs, Connecticut, and Vicinity* (1965, 1975), which was published by the NOS. The book is a significant publication and has some of the most detailed records for any limited region within Connecticut. Mr. Manter has lived in Storrs since 1912 and has kept bird records to the present. A compact checklist of the birds of the Storrs area by Dr. Robert Craig was published by the NOS in 1978. More than 250 species have been recorded in the NOS area.

The Society meets the first Friday evening of each month from October through May at the Unitarian Meeting House in Storrs. Either a member or a guest presents a program. Field trips to local areas, neighboring states, and the shoreline are led by members from September through June.

The membership of upward of one hundred persons comprises townspeople within fifteen to twenty miles, high school students, university undergraduate and graduate students, and university staff, largely from the University of Connecticut and some from Eastern Connecticut State University.

The NOS remains an independent organization but is affiliated with the National Audubon Society and the Connecticut Audubon Society (CAS). Members actively participate in programs of the Connecticut Ornithological Association, Mansfield Conservation Commission, Friends of Trail Wood at the CAS Edwin Way Teale Sanctuary, Joshua's Tract Conservation and Historic Trust, American Littoral Society, Sierra Club, and other ornithological and conservation organizations. NOS members participate in the Connecticut Breeding Bird Atlas project, the U.S. Fish and Wildlife Service roadside surveys of breeding birds, Christmas Counts, and the Hawk Watch.

Bird-banding was introduced to NOS members by Frank McCamey in 1957. He instructed and supervised about ten members as banders. Many of the data obtained through this activity were included in his doctoral dissertation on the population biology of the Black-capped Chickadee (*Parus atricapillus*). The master permit for banding was subsequently held by Ruth Löf, who, with her husband John, transferred the banding information to a computer in 1963. Today, banding continues at the Löfs' station and elsewhere, with George Clark, Professor of Ornithology at University of Connecticut, holding the master permit. He and Shirley Davis have been the principal banders at the Löfs' station in recent years with help from Ruth Löf, NOS members, and university students.

22 Southwood Rd., Storrs, Connecticut 06268

CONNECTICUT FIELD NOTES

Winter: December 1, 1984 — February 28, 1985

DENNIS E. VARZA

The winter season started mild, then turned colder in January and continued cold into mid-February. The mild weather let

many species that normally leave or die in November to survive into December. Highlights of the winter included a probable Mew Gull, and the second record of Lark Bunting. Other records include two Eurasian Wigeons, two Golden Eagles, numerous white-winged gulls, one Loggerhead and one Northern Shrike, and a Yellow-headed Blackbird. Winter vagrants included Eastern Phoebe, Lincoln's Sparrow, Northern Orioles, and 8 species of warblers. For more details on Christmas Bird Count sightings see *The Connecticut Warbler* 5:2-4.

December was unusually warm. There were 10 days with temperatures over 50° F, 15 days with mean temperatures over 40° F, and only 3 days with mean temperatures below freezing. All temperature readings are from Sikorsky Memorial Airport in Stratford. This warm period was responsible for many warblers and other insect eaters surviving to the Christmas Bird Counts.

Major cold fronts occurred only on December 7 and December 24 (the latter accompanied by snow). The first two days of January were warm (50° F), but then temperatures dropped and 50° F was not reached again until February 19. Between January 3 and February 10 there were only 4 days with mean temperatures above freezing.

January 14-18 saw the major snow storm of the winter followed by the lowest temperature of the season (−3° F) on January 21. Any surviving lingerers were wiped out by this combination.

A second major storm and cold spell occurred February 2-9, followed by a rapid warming trend accompanied by rain. Mean temperatures went from 14° F on February 9 to 39° F on the 13th. This cleared the bays of ice, opened the marshes, and produced the first spring flocks of blackbirds.

Loons Through Waterfowl

After the record number of Double-crested Cormorants on the CBCs, it is not surprising this species was recorded through February. Two American Bitterns seen on the Stratford CBC remained into early January (MS). The ***Barnacle Goose*** found in November was last seen January 10 (m.ob.). Individual Snow Geese were found across the state including one bird in Storrs, December 3 to March (m.ob.) and one immature at Oyster River, West Haven. The Eurasian subspecies of ***Green-winged Teal*** was seen at Gulf Pond, Milford in a flock of Green-winged Teals, January 30 to February 10. This may be the same individual seen there last year. Northern Pintails were fairly common with every area reporting one or two birds. Two Eurasian Wigeons were reported, one in Bridgeport Harbor (DV), December 23 to February 13 and the other at Merwin Pt. Milford (AB,SB) December 20 to March. Seaduck numbers were down the whole season, while fresh water species, such as Ring-necked Duck, Common Merganser, and Hooded Merganser were more common.

Hawks Through Terns

Twenty wintering Bald Eagles were counted on a state-wide survey December 15 (SM). An immature ***Golden Eagle*** in Essex in December was followed by an adult in the same area from mid-January to March (CT). Northern Harriers were widespread but in low numbers. Sharp-shinned Hawks were considered more common this winter. Rough-legged Hawks were scarce and all non-CBC records came from the Connecticut River area. Storrs had a pair of Red-shouldered Hawks, possible early mi-

grants, on February 24 (GC,WB). The Peregrine Falcon reported on the Hartford CBC stayed through January.

Three ***Semipalmated Plovers*** stayed through December in the New Haven Harbor area (RS). A Little Gull spent the winter in New Haven Harbor (m.ob.). This was a good winter for white-winged gulls. Greenwich had 1 Iceland Gull February 18-22 (TBa,JZ), Bridgeport had 1 Iceland and 1 Glaucous Gull December 23 to March (DV), New Haven had 4 Iceland and 6 Glaucous gulls December 20 to March, Stonington had 1 Glaucous Gull mid-December to March (RD), and Hartford had 1 Glaucous Gull from mid-December to March. The Lesser Black-backed Gull seen the past four winters on the Greenwich - New York border returned again. A possible ***Mew Gull*** in West Haven would be the first confirmed record for the state (NC et al.). In Westport a Common Tern on Compo Beach December 10 (MB) was unusually late.

Owls Through Warblers

Most owls were well represented on CBCs but a few species were scarce. The only Snowy Owl reported was at Sandy Pt., West Haven December 15-20 (GL,ML). Saw-whet Owls and Short-eared Owls were much scarcer this winter. The Long-eared Owl that wintered in Hammonasset (m.ob.) was the only one reported.

The normally uncommon Yellow-bellied Sapsucker was reported across the state all season. Red-headed Woodpeckers were reported in Roxbury for several weeks in December (NC) and in Simsbury (JK) February 27. Red-bellied Woodpeckers, regular in the 1960's only in southwestern Connecticut are now reported regularly state-wide. Common Flicker, sometimes a rare winter resident, was common everywhere this winter.

Two Eastern Phoebes were seen on CBCs plus one in New Haven in late December (DV,DS,RS) and another in Storrs January 31 (GC). Chickadees and Red-breasted Nuthatches were considered scarce by many observers. House Wren reports included one in Middlebury December 14 (MS,BD), one in Stratford December 16-29 (DV) and one in Norwalk January 27 (RC). Cedar Waxwings and Golden-crowned Kinglets remained plentiful through the period. Ruby-crowned Kinglets, normally rare after December, were reported by several observers. A lingering Swainson's Thrush in Canton was last seen December 5 (JK et al.). A Northern Shrike in Lyme mid-January (NP) and a Loggerhead Shrike in North Haven all December (m.ob.) were the sole shrike reports.

December's warbler list was very impressive with 9 species reported on CBCs. In addition a Palm Warbler was seen in Stratford December 13(DV), a Northern Waterthrush in Milford December 30 to January 2(DV), and a Yellow-breasted Chat in Milford December 31 (DV,RS).

Sparrows Through Finches

Two Dickcissels in Darien all December were seen by many observers. Up to 4 Ipswich Sparrows stayed through January on Long Beach in Stratford (DV). An immature male ***Lark Bunting*** in the company of several Snow Buntings was found in Beacon Falls February 22-23 (BD, et al), the only rarity during the winter doldrums. Dark-eyed Juncos continued to be common throughout the period. A small movement of Snow Buntings occurred February 22-25, but both these and Lapland Longspur were

scarce from mid-December on. A Yellow-headed Blackbird, found on the Hartford CBC, remained in the area through January. Blackbird flocks were regular all period with the major spring movement starting February 20. Winter finches continued to be scarce with scattered reports of only a few species (Evening Grosbeaks, Pine Siskins, and Purple Finches) mainly in the northern half of the state.

Contributers: Tom Baptist, Anthony Bledsoe, Milan Bull, Tom Burke, Winnie Burkett, George Clark, Roland Clement, New Haven Bird Club, Western Connecticut Bird Club, Maury Covington, Neil Currie, Buzz and Debbie Devine, Robert Dewire, Angela Dimmitt, Rick Helprin, Jay Kaplan, Betty Kleiner, Frank Mantlik, Stuart Mitchell, Russ Naylor, Mianus Field Notes, m.ob. = many observers, Noble Proctor, Ray Schwartz, David Sibley, Fred Sibley, Mark Szantyr, Clay Taylor, Dennis Varza, Joe Zeranski.

CONNECTICUT BIRDS

◆

RED-BELLIED WOODPECKER

JOANNE A. LUPPI

I first became interested in the Red-bellied Woodpecker (*Melanerpes carolinus*) when a male appeared at our feeder in Portland during December 1974. A little research revealed that the species occurs primarily in the southeastern United States and that it was considered uncommon in Connecticut. My interest was renewed when the first Salmon River Christmas Count recorded a Red-bellied Woodpecker in 1975. Since then a Red-bellied Woodpecker has visited our feeder every winter (2 since 1977) and in 1983 12 were seen on the Salmon River count. In this paper I discuss the recent changes in the status of Red-bellied Woodpecker and its current range expansion northward.

HISTORY PRIOR TO 1945

Linsley (1843), Merriam (1877), Sage and Bishop (1913), Forbush (1927), Bagg and Eliot (1937), Chapman (1937) and Cruickshank (1942) list only 4 Connecticut records of Red-bellied Woodpecker before 1900 and 1 after the turn of the century. Eaton (1914) describes the Red-bellied Woodpecker as "common on Long Island and in the lower Hudson Valley 50 years ago." Cruickshank (1942) listed it as a resident on Long Island until about 1850. He reported only 9 sightings in the New York City-Long Island-northern New Jersey area since 1900. In Massachusetts on 15 December 1945 one was sighted at a feeder in Swampscott (*Records of New England Birds* 1945) and the editor remarked ". . . the northernmost record for the eastern United States . . . the sixth for Massachusetts . . . the eleventh for New England (second in the twentieth century)."

EXPANSION SINCE 1945

During the 1950's *The Records of New England Birds* published four records for Connecticut (two from Westport and one each from Farmington and Manchester) and two records from Massachusetts. Baird and Emery (1959) cited records from Newburyport, Massachusetts, and Tamworth, New Hampshire. Most of these sightings were at feeders and usually the birds were

present for an extended period. The standard pattern seems to be sightings of single birds, then establishment of a feeder bird, and finally a resident pair. One wonders if suet feeders have played a role in the range extension of this species.

In the 1960's *Audubon Field Notes* and *The Records of New England Birds* listed 10 more Connecticut records, mostly coastal. The Westport Christmas Count recorded the species in 1961, Greenwich-Stamford in 1962, Hartford in 1964. This decade was characterized by a very gradual buildup in Connecticut, although south of us Christmas Count totals increased steadily as illustrated by Baltimore, Maryland, and Rehoboth, Delaware.

In 1971 the first Connecticut nesting was reported in Fairfield County (Boyajian 1971) and three pairs were reported breeding on Long Island. During the 1970's every year brought new Christmas Count records, new northward extensions, and new breeding records. Davis Finch (1976) reported; "Along the Conn. shore, which the species has colonized in the last decade, 'it was reported doing well', breeding at least as far east as Madison (Noble Proctor)." Peter Vickery (1979) quotes David Sibley as saying; "Along coastal Conn. Redbellied Woodpeckers have apparently increased to the point where they are considered common and 10-15 are not unusual." Buckley and Davis (1973) report the species continues to increase as a breeding bird on Long Island and in New Jersey. By the end of the decade the species was no longer news in the Hudson-Delaware reporting area and nesting was reported in all five New York City boroughs (Paxton et al 1979). Vickery (1977) reports what are probably the first nesting records for Massachusetts.

Present Status

The species continues to spread in New England and continues to increase in numbers in Connecticut and states to the south. We can expect further increases in numbers and a spread into the higher elevations of Connecticut where the species is still rare. The range maps in the major field guides are only a little out of date, but the range information given in *The Woodpeckers of the World* (Short 1983) is misleading. Short states, "Quite frequently, but irregularly, occurs and breeds well north of this range . . ." (southern New Jersey). As shown below the species is regular and resident in Connecticut and still expanding its range. There is some local seasonal movement and there are more sightings in the fall than at other seasons. The fall increase may be due to young birds dispersing.

There are 15 Christmas Counts in Connecticut that have been in existence for more than 10 years and Red-bellied Woodpeckers were recorded on all but the Hartford and Hidden Valley counts in 1984. There were a record 93 individuals recorded on the 1984 count with 66 on 6 coastal counts, 17 on 4 central Connecticut counts and 10 on 3 northern counts. Westport, with 1 in 1961, reported 12 in 1984 and Greenwich reported 1 in 1962 and 31 in 1984. Red-bellied Woodpecker is still rare on counts away from the coast and away from major river valleys. The Connecticut Breeding Bird Atlas project has records of probable or positive nesting from 59 blocks and possible nesting from another 38. Only at higher elevation or along the northern border is the species rare or absent. The northwest corner of the state has the fewest reports.

Where to Find Red-Bellied Woodpeckers

Even in southern states, where the species is abundant, it is surprising how few good looks one gets at Red-bellied Woodpeckers. The distinctive call, once learned, makes it easier to detect the presence of the species. The birds are usually shy, move frequently in feeding and often inhabit dense woods. Any hardwood forest, particularly a wet bottomland forest, in the southern half of the state probably has Red-bellied Woodpeckers. If you do not know someone who has one at a feeder, or do not know a local contact who can give you precise directions to a good site, try Hurd State Park near Haddam Neck. The species is common here, the habitat is typical, and in a few hours birding you should have no trouble finding one or more individuals.

Acknowledgments

I wish to thank the Connecticut Breeding Bird Atlas Project for the information on breeding Red-bellied Woodpeckers in Connecticut.

Literature Cited

Bagg, A.D. and S.A. Eliot, Jr. 1937. Birds of Connecticut Valley in Massachusetts. Todd, Boston, Massachusetts.

Baird, J. and R.P. Emery. 1959. Winter season, December 1, 1958 — March 31, 1959; Northern Maritime Region. Audubon Field Notes 13:275-277.

Boyajian, N.R. 1971. The spring migration, April 1, 1971 to May 31, 1971; Hudson-St. Lawrence Region. Amer. Birds 25:710-716.

Buckley, P.A. and T.H. Davis. 1973. The nesting season, June 1—July 31, 1973; Hudson—St. Lawrence Region. Amer. Birds 27:845-852.

Chapman, F.M. 1937. Handbook of birds of eastern North America. Appleton-Century, N.Y.

Cruickshank, A.D. 1942. Birds around New York City. American Museum of Natural History, N.Y.

Eaton, E.H. 1914. Birds of New York. Part 2, New York; Univ. State of New York.

Finch, D. 1976. The spring migration, April 1—May 31, 1976; Northeastern Maritime Region. Amer. Birds 30:811-815.

Forbush, E.H. 1927. Birds of Massachusetts and other New England states. Mass. Dept. Agriculture.

Linsley, J.H. 1843. A catalogue of the birds of Connecticut, arranged according to their natural families. Yale Natural History Society, New Haven, CT.

Merriam, C.H. 1877. A review of the birds of Connecticut, with remarks on their habits. Tuttle, Morehouse, and Taylor, New Haven, CT.

Paxton, R.O., P.W. Smith and D.A. Cutler 1979. The spring migration, March 1—May 31, 1979; Hudson-Delaware Region. Amer. Birds 33:754-758.

Sage, J.H. and L.B. Bishop 1913. The birds of Connecticut. Bull. Conn. State Geol. Nat. Hist. Survey 20.

Short, L.L., Jr. 1983. The woodpeckers of the world. Delaware Mus. Nat. Hist., Greenville, Delaware.

Vickery, P. 1977. The nesting season, June 1—July 31,1977; Northeast Maritime Region. Amer. Birds 31:1110-1114.

———. 1979. The spring migration,

March 1—May 31, 1979; Northeast Maritime Region. Amer. Birds 31: 751-753.

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BOOK REVIEW

The Encyclopedia of Birds: Edited by C.M. Perrins and A.L.A. Middleton, 1985. Published by Facts on File Publications, New York, NY. xxxi + 447 pp. ISBN 0-8160-1150-8. $35.00.

To satisfy the recent surge of interest in birds, ornithological publications have flooded the book market. Very few of these, however, present accurate summaries of the world's avifauna. As a result, the serious amateur faces a frustrating search for a good account of the world's birds.

The Encyclopedia of Birds offers just such an account. Its introduction presents a concise, accurate description of the major features of avian biology in simple prose that conveys a clear picture of what makes birds distinctive. The panel "The body plan of birds" is particularly impressive, with simple, clear drawings of a bird's external features, the unique skeletal and respiratory systems of birds, and other distinctive characteristics.

Following the introduction, 66 chapters written by 87 contributors and illustrated by 12 artists address the diversity of birds. Each chapter reviews a family or several families of birds. An information panel for each family accompanies the text and presents a map of the family's geographic distribution and a summary of its habitats, dimensions, plumage, voice, nest, eggs and diet. The text elaborates on the information in the panels and describes interesting aspects of the family's natural history, often including the results of recent research. The chapters are well written and liberally illustrated. The quality of the photographs and drawings is uniformly good.

A book of this size and scope is bound to contain errors. For instance, a few photographs are mis-labeled: on page 411 the male Yellow Warbler (*Dendroica petechia*) is labeled as a female. Also, certain maps are poorly arranged. The map of the distribution of creeper-like birds (p. 393) inexplicably lumps the ranges of the three families. This is unfortunate, because recent DNA-DNA hybridization studies indicate that these families are not close relatives — they look similar only because they have independently evolved similar feeding habits.

The Encyclopedia of Birds fares well when compared with the few good popular accounts of the world's avifauna currently available. It contains more information and illustrations than, for instance, Oliver Austin's *Birds of the World*, recently republished by Golden Press after years of being out of print.

One wonders whether the editors might not have produced an even more informative volume by listing all of the species in each family, as does Facts on File Publications' *The Encyclopedia of Mammals*. The editors might also have used South American contributors for the accounts of the primarily South American groups such as the tinamous, which are poorly covered.

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NOTES AND NEWS

NEW ENGLAND HAWK WATCH CONFERENCE: The New England Hawk Watch (NEHW) will hold its 1986 confer-

ence on March 22-23 in Northampton, Massachusetts at the Colonial Hilton Inn near Mt. Tom and the Quabbin Resevoir.

The conference will explore various techniques for studying hawk migration for both beginning hawk watchers and experienced field researchers. Small group discussions will be emphasized. Specific themes for the conference include: Eagle and Peregrine migration in New England, aging and sexing migrating raptors, hawk watching in schools, weather and migration, and use of personal computers to record and analyze migration data.

The principal speaker will be Peter Dunne, Director of the Cape May Bird Observatory. Other speakers include Edward Mair (Author of *A Field Guide to Personal Computers for Bird-Watchers*), and Brian Wheeler (illustrator of a forthcoming Peterson Field Guide on the hawks of North America).

Information on registration may be obtained from HAWKS, P.O. Box 212, Portland, CT 06480.

* * *

FOUNDERS: The opportunity to be counted as a Founding Member of the Connecticut Ornithological Association will end on December 31, 1985. If you have been thinking of joining and thereby gaining a foothold in the history of Connecticut ornithology, send your check for $300 now (or $100 now and the rest in two annual payments). All Founding Members will be listed in the January 1986 issue, as a special acknowledgment of their contribution.

* * *

CONNECTICUT WARBLER LOGO: In 1957, *The Warblers of North America*, by Ludlow Griscom, Alexander Sprunt, Jr., and a long list of contributors, was attractively illustrated by John Henry Dick of Meggett, South Carolina. Earlier this year, Karen Clarke of the Ostrom Enders Collection at Trinity College, Hartford, suggested that John Henry Dick's line drawing of the CONNECTICUT WARBLER (*Oporornis agilis*) from page 206 would make a good logo for the Connecticut Ornithological Association. We wrote Mr. Dick and promptly received his permission to use this drawing. The publishers of the book, Devin-Adair of 6 North Water Street, Greenwich, CT 06830, also approved the use. We are grateful to artist and publisher for agreeing so quickly and graciously to our use of this drawing. John Henry Dick's Connecticut Warbler appears on the cover of this issue and will also be the basis of a COA decal.

* * *

OSPREYS: Julie Victoria, who recently joined the State's non-game program, reports that Connecticut Ospreys fledged a record 72 young this year. This is a 60% increase over last year's record production. If you have comments, suggestions, or questions about the Osprey program you can contact Julie or Rita Maroncelli at Sessions Woods WMA, P.O. Box 1238, Burlington, CT 06013 (phone 584-9830).

* * *

LEAST TERNS: They had a very successful year in Connecticut with the Sandy Point colony in West Haven containing over 1000 pairs — a 3-4 fold increase over last year. Over 1000 chicks were banded and 300 adults trapped by Ray Schwartz and his assistants. Despite a week of cold weather and high tides in late June and early July, large numbers of young fledged and Sandy Point was judged the most successful colony on Long Island Sound.

CONTENTS

The Connecticut Warbler is a quarterly publication devoted to the advancement of the study of birds. It is published by the Connecticut Ornithological Association. Address all correspondence to 314 Unquowa Road, Fairfield, CT 06430.

The Connecticut Audubon Society
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Permit No. 95

THE CONNECTICUT WARBLER

A Journal of Connecticut Ornithology

Volume V Number 4 October 1985 Pages 40-52

The Connecticut Warbler is published quarterly (January, April, July, and October) by the Connecticut Ornithological Association (COA). Membership to COA is based on a calendar year, with membership renewable in January. New members of COA receive all four issues of *The Connecticut Warbler* for that year. Make checks payable to The Connecticut Ornithological Association, and mail checks to 314 Unquowa Road, Fairfield, CT 06430.

Membership Fees

Member	$10.00	Contributing	$20.00
Family	$15.00	Sustaining	$30.00

Founder $300.00, payable in three annual installments and conferring life membership.

The editors invite submission of articles, notes, black and white photographs and line drawings for publication in *The Connecticut Warbler*. Manuscripts sould be typewritten, double-spaced and on one side of the sheet only, with ample margins. The style of manuscripts should follow the general usage in recent issues.

Cover Photograph: Purple Gallinule *(Porphyrula martinica)* photographed in Guilford, Connecticut on 26 June 1985 by Ray Schwartz.

THE 1983 COLONIAL SEABIRD SURVEY

FRED C. SIBLEY & RAY SCHWARTZ

Since 1977 all the gull, tern, and heron colonies along the Connecticut coast have been censused every three years on or slightly after June 1 (Erwin & Korschgen, 1979, Rozsa, 1980, Sibley, 1983). The censusing was done from a helicopter in 1977 and on the ground since. All nests were counted in all colonies except Chimon and Ram Island where the dense vegetation made an exact count impossible. Tern surveys have been conducted every year and data from the 1984 and 1985 surveys are included here.

RESULTS

Over 70 islands and sandbars were checked in 1983. Sixty of these sites were occupied by breeding gulls and/or terns. In the following discussion the shoreline has been divided into three sections: eastern (Stonington to Westbrook) with 20 sites, central (Madison to Branford) with 21 sites, and western (New Haven to Greenwich) with 19 sites.

HERRING GULL: This is the most common breeding bird on the offshore islands with a total population of 2417 pairs in 1983. A 20 percent drop from 1977 is the result of an apparent decline on Chimon Island in the western section. Even the decline on Chimon Island should be judged with caution; estimates are difficult in the heavy vegetation and have been made by different people each year.

Individual islands present some insight into the population dynamics of this species. In the eastern section the population on Ram Island has increased from 80 pairs to 250 pairs in 6 years as disturbance of the colony has decreased (see heron section). In the central section, the Goose Island population has faded from 153 pairs in 1977 to 72 in 1980 and 37 this year as the island has continued to erode.

The Herring Gull population is not suffering in Connecticut. There are 37 active colonies and any rock above the high storm tide level is a potential nest site. Five colonies contain more than 100 pairs: Ram Island near Mystic (250), Long Ledge near Rocky Neck (102), Spectacle Island near Branford (183), Chimon Island (1,000) and Grassy Island (250), [both in the Norwalk Islands.]

GREAT BLACK-BACKED GULL: This is not a common nester in the Sound but one or more pairs nested at 26 colonies in 1983. The total population of 129 pairs is down 20 percent from 1977, the result of declines in the western section. The largest colonies are on Grassy Island (25) and Chimon Island (13) in the Norwalk group, Goose Island off Madison (12), and Ram Island near Mystic (13).

This species nests earlier than any of the other species. By June 1 most eggs are hatched. In contrast only 5 percent of Herring Gull eggs are hatched by June 1.

COMMON TERN: The Falkner Island colony is still the only large colony in the state. It continues to be protected by resident researchers during the nesting season and the population has increased slightly each year (1300 in 1983). We still believe the limiting factor is the availability of nest sites (Sibley, 1981), and the nesting at small colonies elsewhere in the Sound is more a reflection of overflow from Falkner than of nesting success at these outlying colonies.

Away from Falkner Island there were 15 colonies and 536 pairs (479 in 1977, 589 in 1980). Of 18 sites used since 1977 only two were successful in all three count years, another 7 were used in all 3 years but fledged no young, 4 (2 unsuccessful) were used in 1 or 2 count years, and the last 4 were discovered in 1983 (2 successful). This is consistent with the view that most small colonies are composed of birds that could not nest on Falkner Island and indicates that few such colonies are self-sustaining. Appendix one lists all colonies of Common and Roseate Terns in Connecticut.

In 1984 and 1985 gulls had replaced breeding terns on Lyddy Island near Mystic and White Island in New London Harbor. Once established, gulls exclude terns or prevent them fledging young. Some corrective measures should be considered.

ROSEATE TERN: As with Common Terns, Falkner Island is the major nesting site (96 pairs). Tuxis Island, off Madison, was an important site in 1980 with 33 pairs (see appendix). Almost any Common Tern colony could serve as a site for Roseate Terns, but only seven pairs were found on three islands in 1983 (down from 49 in 1980 and 14 in 1977).

LEAST TERN: These were surveyed on June 1 but subsequent surveys indicate that numbers double by mid-June. Counts taken June 1 at Menunketesuck (57) and Sandy Point (20) were followed by counts in early July of 100 nests and 60 nests respectively. The numbers presented for June 1 surveys are inadequate but the only comparative figures we have.

The six sites used in 1983 include three not used in 1980. The 7 sites used in 1980 include 4 not used in 1983. The total Connecticut count of 131 pairs in 1977, 100 pairs in 1980 and 130 pairs in 1983 suggest no change in population but the limitations of the data preclude any confidence in this conclusion. (Note: The 1985 mid-June count tallied over 1000 pairs with most of them at Sandy Point in West Haven).

The frequent shifting of nesting sites may be in response to predation. Ray Schwartz found few birds fledging at Milford in 1982 and the terns have since abandoned the site. Julie Zickefoose reported the Menunketesuck colony in Westbrook lost most of its chicks to Black-crowned Night Herons in 1983 and 1984. The terns virtually abandoned this site in 1985.

HERONS: The numbers of nesting herons continue to increase. In 1977 there were 490 pairs of 8 species on Chimon Island. In 1983 the Norwalk Islands were home for 728 pairs and another 67 pairs nested on Ram Island, near Mystic.

Black-crowned Night Herons have increased slightly in the Norwalk Islands (425) and have colonized Ram Island (40). Yellow-crowned Night Heron (3) and Little Blue Heron (4) are still rare. Great Egrets have remained steady at 23 pairs. Cattle Egrets have shot up from 4 to 20 pairs and Glossy Ibis from 10 to 23 pairs. Snowy Egrets have increased the most (25 to 225 in the Norwalk group) with an additional 20 pairs on Ram Island.

Ram Island's northern half has reverted to natural vegetation (shrubs and vines) and receives almost no human use. Its gull population has tripled in 6 years, Black-crowned Night Heron colonized the island in 1982, Snowy Egrets in 1983, American Oystercatcher in 1983, and Glossy Ibis in 1984. The quick regrowth of vegetation and the utilization of this new habitat is encouraging and indicates that other islands could potentially support breeding waterbirds if left undisturbed.

OTHER SPECIES: Double-crested Cormorants first nested in Connecticut in 1979 in the Norwalk Islands. In 1983 one pair nested there on East White Rock, and 13 pairs nested on Goose Island off Madison. In 1985 the population on Goose Island numbered over 50 pairs. American Oystercatchers continued to increase with numerous pairs in the Norwalk Islands by 1985 and a few pairs between Mystic and Stonington. Green-backed Heron, Mute Swan, Canada Goose, American Black Duck, Mallard, Spotted Sandpipers and several species of passerines also nested on Connecticut's islands.

CONCLUSIONS AND SUMMARY

Since 1977 three new species have colonized the offshore islands (Double-crested Cormorant, American Oystercatcher [Dewire, 1980], and Black Skimmer [Baptist, 1982]), all species of herons have increased, gull populations have declined some 20 percent, and tern populations have remained fairly stable.

Research on Connecticut breeding waterbirds has increased from practically none in 1977. There are now research projects with full time seasonal warden/researchers on Chimon Island and Falkner Island. Two groups are working on Least Terns. Numerous volunteers are involved in all these projects, and the Connecticut Department of Environmental Protection participates in annual tern surveys and triannual surveys of all seabirds. Chimon and Falkner islands are now part of the Connecticut Coastal National Wildlife Refuge. The Connecticut Ornithological Association is coordinating the annual tern survey. The Nature Conservancy has conducted a Piping Plover survey for 3 years.

Since the waterbirds of Long Island Sound do not recognize state boundaries, Connecticut surveys should be coordinated with counts in Rhode Island and New York. We also recommend that surveys of Least Terns be made on June 20 rather than June 1.

ACKNOWLEDGMENTS

We wish to thank the Connecticut Audubon Society (Peter Marra and Milan Bull), Connecticut DEP (Rita Maroncelli and Greg Chasco), Nature Conservancy (Julie Zickefoose), Falkner Island Project (Scott Hopkins), Andy Griswold, and Clay Taylor for help with the 1983 survey.

LITERATURE CITED

Baptist, T.R. 1982. First state breeding record of Black Skimmer. Conn. Warbler 2:47-48.

Dewire, R.C. 1981. A new nesting species for Connecticut. Conn. Warbler 1: 52-53.

Erwin, M.R. and C.E. Korschgen. 1979. Coastal waterbird colonies: Maine to Virginia, 1977. An atlas showing colony locations and species composition. U.S. Fish & Wildlife Service, Biological Services Program, FWS/OBS - 79/08.

Rozsa, R. 1980. Connecticut colonial waterbird survey, 1980. Coastal Area Management, Connecticut Department of Environmental Protection. Mimeograph.

Sibley, F.C. 1981. Common Terns in Connecticut, a progress report. Conn. Warbler 1:18-24.

Sibley, F.C. 1983. Connecticut colonial waterbird survey, 1983. Peabody Museum, New Haven, Connecticut Mimeograph.

APPENDIX I

All the Common and Roseate Tern colonies used since 1977 are listed here with ap-

proximate number of pairs in 1983 and present status. Islands are listed from east to west. Islands marked ** fledged young from fewer than 10 percent of the nests. Rock I. (64 Common and 10 Roseate terns in 1980, 0 in 1983); Lyddy I. ** (54 Common, replaced by gulls 1985); Black Rock ** (14 Common); Hobb's Island (3 Common); White I. (17 Common, replaced by gulls 1985); Shore Rock (139 Common and 4 Roseate); Waterford I. (48 Common and 1 Roseate, in 1980 much larger numbers); Wigwam Rock (5 Common); North Brother (9 Common, back to 30 pairs in 1985); Duck Island (8 Common, 20 plus in 1985); Gull Rock (10 Common); Tuxis I. ** (33 Roseate and 43 Common were present in 1980. Rat predation starting in 1983 reduced and then eliminated tern nesting): Falkner Island (1300 Common, 96 Roseate); Frisbie I. (83 Common, also a Roseate in 1984); Big Mermaid (44 Common, also a Roseate in 1985); Umbrella Is. (13 Common in 1980, not used since); Long Beach I. ** (6 Common); Bluff I. ** (64 Common); Diving I. ** (2 Common).

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PURPLE GALLINULE; THE DECEPTIVE VAGRANT: ITS OCCURRENCE IN CONNECTICUT

FRANK GALLO

Rails, coots, and gallinules, members of the family Rallidae, with their short rounded wings, stout bodies and seemingly awkward flight, would appear to be unlikely vagrant candidates, yet as a group, they are found worldwide.

The Purple Gallinule (*Porphyrula martinica*), a Bufflehead (*Bucephala albeola*) - sized rallid, is no exception to the family rule. As an adult its long yellow legs and feet, bright green back, and brilliant purple-blue head and underparts make it quite distinct from the adult Common Moorhen (*Gallinula chloropus*) with its gray plumage and white side stripe. The Purple Gallinule's yellow-tipped red bill, topped by a blue frontal shield and conspicuous white undertail coverts are also diagnostic. As an immature it is light brown with a white throat, and lacks the white side stripe and face pattern of the immature Common Moorhen. Purple Gallinules have appeared in such out of the way places as Tristan da Cunha and Ascension Island in the south Atlantic, Newfoundland, and Quebec (Ripley, 1977), thus supporting their family's reputation.

These records seem even more remarkable when one considers that their normal breeding range is Neotropical: from South Carolina to Texas, south to northern Argentina and Chile (and including the West Indies). They are resident throughout most of their range, withdrawing only from the more northerly sections in winter (Ripley 1977, Bent 1926).

There is little wonder then, given the Purple Gallinule's vagrant tendencies, that at least 21 records exist for Connecticut since 1855, with 5 sightings in the past 7 years. There was a similar trend in the late twenties and thirties with 5 sightings in 6 years. One can only wonder about the frequency of occurrence during the forties and fifties when there were few observers and few records kept. It would be interesting to

compare dates and relative rates of occurrence with other New England states.

The most recent sighting in Connecticut was of an adult bird 25 June 1985 that remained until 28 July 1985. As recorded with other vagrants, the bird appeared in a somewhat unusual place: the back yard and small fresh water pond of Pat and John Littel of Guilford, Connecticut. The pond, partially encircled by shrubs and a tangle of vegetation and filled with aquatic plants, abuts a fresh water marsh on one end and the lawn on the other. When alarmed, the Gallinule would retreat to the jewel-weed-lined stream that feeds the pond and divides the marsh (pers. com. Littels).

Its actions were typical of any Purple Gallinule, spending much of its time rummaging methodically under and around the pond vegetation for aquatic insects, animals and plants. In this effort it would deliberately and delicately, with a Mourning Dove or chicken-like strut, head scanning from side to side, carefully place one foot in front of the other, all the while rhythmically bobbing its tail. When the bird was excited, its tail action became more rapid and jerky. Quite nimble, it barely depressed the vegetation on which it walked and although methodic in its search for food, was quite a swift runner, racing into the tall grass when threatened, only to reappear with its familiar strutting gait when the danger abated. It also diligently pursued its wanted food, racing out across the pond's surface plants to snap up a tadpole or other aquatic morsel.

When not feeding in the pond, the gallinule often spent time feeding on mulberries on the adjacent lawn, or from the mulberry tree (*Morus sp.*) itself (pers. com. Littels). In fact, it spent almost as much time on the lawn as on the pond edge.

Nightly it would saunter across the lawn to a stone wall on which it would alight for a short time before flying off to roost in a vine-entangled tree some 30 yards from the pond. Traversing the lawn, it would often pass in close proximity to people or to the Littels' dog.

According to the Littels, it was especially tolerant of them and their dog, having become accustomed to their presence near the pond while they did yard or garden work, and to the dog from its frequent trips to bathe or drink in the pond. This accustomizing behavior has also been noted by others (Ripley 1977).

On one such evening excursion the Purple Gallinule was seen to alight, not on the wall, but on the mast of the Littels' small sailboat, which was lying adjacent to the house and quite close to the delighted onlookers.

On another interesting occasion, the Purple Gallinule, chased by a strange dog, flew off and did not return for over an hour. Having left in a direction opposite to its normal escape route, the Littels feared it would not reappear. They were surprised then to see the gallinule return, not by flying to the pond as it usually did, but by walking in from the road adjacent to their house. The gallinule crossed their lawn directly in front of their dog, which was tied beneath the porch, to the pond some 20 yards away. Neither the dog nor the Purple Gallinule appeared to show the slightest interest in the other.

On 20 July 1985 the Purple Gallinule left the pond 15-20 minutes later than usual, not heading off to roost until after dark. The bird did not return the following day but was heard by the Littels for a few days thereafter. It was last heard 28 July 1985. According to the Littels, the bird was present at least a week (possibly two) before it was reported, making its actual ar-

Table I. *Connecticut Sightings of Purple Gallinules by Month*

April	3*	August	1
May	5*	September	1
June	5*	October	2 (total of 3 birds)
		undated	4

A * following the number indicates one record extended into the next month.

rival date between 15-20 June. It was definitely present 21 June (Pat Littel). The Littels were unsure of the bird's identity until vegetation which had obscured their view had been cleared from around the pond. With a clear view they were able to identify and report it. The bird remained in the area through all the work around the pond.

Purple Gallinules have appeared frequently in the Northeast with dates for every month of the year except December, January and February, but with most occurring from April through June and in October (Cooke 1914, Bent 1926, Palmer 1949). Massachusetts, for instance, had 32 records from 1837 to 1954: 2 in March, 8 in April, 7 in May, 5 in June, 2 in July, 1 in September, 4 in October, 1 in November and 2 without dates (Bailey 1955). Of the 16 records listed for New York (Bull 1964), 8 have no date, 4 were in April, 3 in May, 1 in June and interestingly, none were recorded in August or September.

In Connecticut, records exist from 16 April to 7 October with the majority of the sightings in May and June (Table I and II). The Purple Gallinule should be looked for in other months, particularly April and October. Places such as Stamford, Fairfield, and South Windsor each have two or more sightings and may deserve special atten-

Table II. *Records of Purple Gallinule in Connecticut*

Date	Locality	Number and (if known) sex (*specimen)	Reference(s)
1855	near Middletown	1*	Merriam 1877
1877	Stamford	1*	Sage & Bishop 1913
Spring 1884	Stamford	1*	Sage and Bishop 1913
26 June 1903	Bridgeport	1* M	Sage and Bishop 1913
prior 1919	Bridgeport	1*	YPM # 956
16 April 1920	Stratford	1	Packer 1920
30 May to 10 June 1922	South Windsor	1	Griswold 1935, Hartford Aud. Soc. 1964
11 October 1924	Hadlyme	1* M	YPM # 955
28 May 1926	Stratford	1*	Saunders 1933
19 June 1928	Stratford	1*	BCM # 1381
5 May 1932	Fairfield	1	Saunders 1933
10-17 Sept. 1932	South Windsor	1	Hartford Aud. Soc. 1964
9 August 1934	South Windsor	1	Hartford Aud. Soc. 1964
9 October 1934	South Windsor	2	Griswold 1935
24 June 1960	Wethersfield	1*	Nichols 1960
22 April 1963	Fairfield	1*	Noble Proctor and Dennis Varza, pers. comm.
22 April to 31 May 1977	Madison	1	Vickery 1977
6 May 1979	Groton	1	Vickery 1979
23 May 1980	Pawcatuck	1	Noble Proctor, pers. comm.
19 June 1981	Guilford	1* F	YPM # 96201
25 June to 28 July 1985	Guilford	1	Gallo 1985

YPM = Yale Peabody Museum, New Haven, CT
BCM = Birdcraft Museum, Fairfield, CT

tion. The last two Connecticut sightings are from Guilford. In 1981, a female was found dead within a mile of the Littels' house, which may or may not be a coincidence with the 1985 sighting.

It is extremely likely that Purple Gallinules occur more regularly in the state than is suspected. This is suggested by the number of sightings despite the difficulty of observing them in their chosen haunts. As it is, they have occurred almost annually during certain periods with only serendipity or guns as the traditional methods for finding them. With deliberate searching, who knows what the annual tally could be. A May or June rail search in Connecticut may be beneficial to this end.

In any event, the next time you are out playing tapes to attract rails and you accidently play the call of the Purple Gallinule, do not shut the tape off! Better still, go out purposely taping for them and prove to the rest of us it can be done.

Literature Cited

Bailey, W. 1955. Birds in Massachusetts. When and where to find them. College Press, South Lancaster, Mass.

Bent, A.C. 1926. Life histories of North American marsh birds. U.S. Nat. Mus. Bull. 135.

Bull, J. 1964. Birds of the New York City area. Harper and Row, New York, N.Y.

Cooke, W.W. 1914. Distribution and migration of North American rails and their allies. U.S. Dept. Ag. Bull. 128.

Finch, D.W. 1970. Regional reports, the nesting season, June 1, 1970 — August 15, 1970, Northeastern Maritime Region. Aud. Field Notes 24:662.

Gallo, F. 1985. Purple Gallinule; the deceptive vagrant: its occurrence in Connecticut. Conn. Warbler, in press.

Griswold, G.T. 1935. Purple Gallinule (*Ionornis martinicia*) in Connecticut. Auk 52:80.

Hartford Audubon Society. 1964. Check list and records of the birds seen in the vicinity of Hartford, Connecticut. Hartford Aud. Soc., West Hartford, Conn.

Merriam, C.H. 1877. A review of the birds of Connecticut. Tuttle, Morehouse and Taylor, New Haven, Conn.

Nichols, C.K. 1960. Regional reports, spring migration, April 1 to May 31, 1960, Hudson – St. Lawrence Region. Aud. Field Notes 14:371.

Packer, C.W. 1920. Purple Gallinule in Connecticut. Bird Lore 22:160.

Palmer. R.S. 1949. Maine birds. Bull. of Mus. Comp. Zool. 102

Ripley, D.S. 1977. Rails of the world. David Godine, Boston, Mass.

Sage, J.H. and L.B. Bishop. 1913. The birds of Connecticut. Bull. Conn. State Geol. Nat. Hist. Survey. 20.

Saunders, A.A. 1933. The Purple Gallinule in Connecticut. Auk 50:99.

Vickery, P.D. 1977. The spring migration, April 1 — May 31, 1977, Northeastern Maritime Region. Am. Birds 31:973.

Vickery, P.D. 1977. The spring migration, April 1 — May 31, 1977, Northeastern Maritime Region. Am. Birds 31:974.

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EASTERN SCREECH OWL (*OTUS ASIO*) MORTALITY IN SOUTHERN CONNECTICUT

ARNOLD DEVINE AND
DWIGHT G. SMITH

The Eastern Screech Owl is the most common owl in the mosiac of habitats found in southern Connecticut. As with most species of raptors, non-breeding season mortality of adults remains largely unknown but a considerable number appear to be destroyed by vehicles (Schorger 1954, Stupka 1953, Sutton 1927, Van Camp and Henny 1975). Herein we report our observations of road killed Screech Owls collected over a ten year (1975-85) interval.

METHODS

We collected 84 dead Screech Owls from the roadways of New Haven and Fairfield counties and found partial remains of 35 additional individuals. As much of the following information was recorded as possible: weight, wing length (flattened), tail length, sex, color phase, body fat, and stomach contents.

RESULTS AND DISCUSSION

All road kills were found between 20 September and 29 April except for one on 26 July. Most dead Screech Owls were found from October through March and the highest number of individuals was recorded in March. Sutton (1927) and Van Camp and Henny (1975) also noted increased mortality during the winter months.

The apparent seasonality of Screech Owl mortality along roads may reflect seasonal behavioral differences. Screech Owls range widely during winter months but have a much restricted home range during spring and summer months when food is more abundant (Smith and Gilbert 1984; Van Camp and Henny 1975). Additionally, studies by Smith and Gilbert (1984) have shown Screech Owls often range more extensively immediately prior to breeding (late February and early March in southern Connecticut), possibly in search of the most suitable nesting sites. Nesting begins in mid-March and early April when Screech Owls restrict their movements to a comparatively small area in the vicinity of the nest site. Thus Screech Owl mortality is highest during non-nesting periods.

The sex ratio of 84 birds was not significantly different from 1:1 suggesting the sexes are equally vulnerable.

The color phase of 84 birds was 65% gray, 27% red and 7% intermediate. Of over 225 live Screech Owls observed 66% were gray, 30% red and 4% intermediate. Allowing for the difficulty of determining intermediates in the field at night the samples are identical.

Wing and tail measurements of 61 road killed Screech Owls did not differ significantly from a museum sample of 435 owls. Body weight of 17 males and 12 females was generally less than for museum birds and highly variable. Males ranged from 121-177 g in weight while females varied from 125-249 g. The lowest weights were owls that were unable to fly and were starving when found. Highest weights were from specimens collected in April.

Excluding the starved owls, stomach analysis of 32 owls showed that 42% were empty, 45% had one prey item, and 13% had two or more prey items. During the

winter months only shrews, mice and small birds were found in the stomach samples. The stomach of a Screech Owl killed on 14 March contained a House Sparrow *(Passer domesticus)* and remains of three spiders *(Aranea)*. This is our earliest record of invertebrate prey, although we have observed Screech Owls apparently preying on invertebrates in every month of the year except January and February.

Several authors (e.g., Sutton 1927) have suggested that Screech Owls are frequently killed by vehicles while hunting on and alongside roads. Our observations suggest that Screech Owls are more frequently killed by vehicles because of their peculiar flight pattern, which consists of dropping low and flying about 1 m above the ground, rather than being struck while hunting on roads. Our field notes over a combined 20 years indicate 12 cases of near misses and 2 hits on Screech Owls flying low across roads compared to only four instances when the owl could definitely be considered hunting on the roads.

The road kill birds appear to represent a random sample of the general population. More work is needed to explain the absence of mortality along roads from May through August. Interestingly, 4 Northern Sawwhet Owls *(Aegolius funereus)* were the only other owl road kills we found.

Literature Cited

Schorger, A.W. 1954. Color phases of the Screech Owl between Madison, Wisconsin, and Freeport, Illinois. Auk 71:205.

Smith, D.G., and R. Gilbert, 1984. Eastern Screech Owl home range and use of suburban habitats in Southern Connecticut. J. Field Ornithology 55:322-329.

Stupka, A. 1953. Some notes relating to the mortality of Screech Owls in Great Smokey Mountains National Park. Migrant 24:3-5.

Sutton, G.M. 1927. Mortality among Screech Owls of Pennsylvania. Auk 44:563-564.

Van Camp, L.F. and C.J. Henny. 1975. The Screech Owl: its life history and population ecology in northern Ohio. U.S. Dept. Int., Fish and Wildlife Serv., North Amer. Fauna 71.

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GREAT HORNED OWL FEEDING ON SUCKER

Arnold Devine and Elston Stevens

The large size of the Great Horned Owl (*Bubo virginianus*) and its use of a diverse range of habitats permit it to capture a wide variety of prey. Mammals and birds are the predominant prey, but reptiles, amphibians, fish, insects and other invertebrates are also eaten (Bent 1938, Craighead and Craighead 1956, Errington et al. 1940, Earhart and Johnson 1970). Fish are a minor component of the diet, although Bent (1938) lists dace (Cyprinidae), bullhead (*Ictalurus*), goldfish (*Carassius*), eel (*Anguilla*) and perch (*Perca*) as food items, and Errington et al. (1940) list sunfish (*Lepomis*), bass (*Micropterus*), carp (*Cyprinus*), creek chub (*Semotilus*), sucker (*Catostomus*), and buffalofish (*Ictiobus*) from Iowa and Wisconsin. This article reports an instance of a Great Horned Owl feeding on a white sucker (*Catostomus commersoni*).

At 0545 on 5 July 1982, Stevens was aroused by persistent calling from a small flock of American Crows (*Corvus brachy-*

rhynchos) harassing a Great Horned Owl. After locating the owl, perched on a branch about 5 m above Little River in Oxford, Connecticut, he called Devine. We observed the owl with 8x30 binoculars from a distance of 25 m. We noted it held a white sucker some 50 cm long in its talons and appeared to be wet on the belly feathers. The owl leisurely picked at the fish while being mobbed by the crows but shifted several times between its original perch and two other nearby trees before flying upstream at 0905. In following the owl, we accidently flushed it and caused it to drop the fish. Approximately one-third of the anterior end of the fish had been eaten.

Errington et al. (1940) found remains of lower vertebrates (fish, reptiles, and amphibians) in only 2.4 percent of over 4000 pellets and stomachs examined and these remains were mostly of snakes, salamanders and frogs. Yet at two study sites (Madison, Wisconsin and Ogden, Iowa) fish remains occurred in 6 and 30 percent of the pellets respectively. The Little River, in the area the owl was first seen, is a slow moving, sandy bottom stream about 0.5 m deep. Large suckers are common in this area of the river and we assume the fish was captured from the water and not picked up dead. We assume this individual was a opportunist taking advantage of a local feeding situation like those at the two study sites referred to by Errington et al.

Literature Cited

Bent, A.C. 1938. Life histories of North American birds of prey. Pt. 2. U.S. Nat. Mus. Bull. No 170. 466 pp.

Craighead, J.J. and F.C., Jr. 1956. Hawks, owls and wildlife. Stackpole Co., Harrisburg, Pa., and Wildlife Management Institute, Washington, D.C.

Earhart, C.M. and N.K. Johnson. 1970. Size dimorphism and food habits of North American owls. Condor 72: 251-264.

Errington, P.L., F. Hamerstrom, and F.N. Hamerstrom, Jr. 1940. The Great Horned Owl and its prey in north-central United States. Ag. Exp. Sta., Iowa State College of Agr. and Mechanic Arts. Res. Bull. 277:759-850.

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CONNECTICUT FIELD NOTES

Spring: March 1 — May 31, 1985

Dennis Varza

Spring migration is always exciting with waves and waves of migrants, the ever-present chance of rarities, and the magnificent weather. Unfortunately, 1985 will not be long remembered. There were waves of migrants, but no single spectacular movement of birds, no massive invasions of numbers or species, no morning to talk about next year. The weather, much warmer and dryer than usual, may have been the most enjoyable feature of the season. Rarities included Eurasian Wigeon, Barrow's Goldeneye, American Avocet, Sedge Wren, Orange-crowned and Prothonotary Warbler, Summer Tanager, Blue Grosbeak, and Yellow-headed Blackbird.

March started with the northward movement of waterfowl. Flocks of ducks filled the marshes, while offshore there were large rafts of Greater Scaup and other wintering sea ducks. Birders found moderate numbers of Horned Larks, Snow Buntings and

Lapland Longspur on the beaches. A warm front March 11-13 brought many new birds to the state and the flock of Bonaparte's Gulls at Oyster River in West Haven peaked and contained Common Black-headed Gull and Little Gull. The second major warm front of the spring March 25-29, brought large flocks of migrating Snow Geese.

By early April most egrets, herons and Glossy Ibis had arrived and were found close to their nesting areas; Osprey became regular and Cooper's Hawk were the commonest accipiter. New species brought in by a warm front April 4-6 included Broad-winged Hawk, Tree and Northern Rough-winged Swallow, Pine and Palm Warbler, Louisiana Waterthrush and Chipping Sparrow.

The first big warbler wave, April 26-29, brought a large number of new species to the state and a secondary wave, May 4-6, brought additional migrants. Along the coast there were moderate numbers of shorebirds — Ruddy Turnstones, Red Knot, Semipalmated and White-rumped Sandpiper. The May 10-16 front brought warbler concentrations to their peak along with the species of the spruce forest — Olive-sided Flycatcher, Swainson's and Gray-cheeked Thrush, Canada Warbler and Lincoln Sparrow. Flocks of Brant were seen offshore. In late May, shorebird numbers peaked. The warbler migration ended, although the first Mourning Warblers were beginning to pass through Connecticut.

Loons Through Hawks

The last Great Cormorant for the season was seen at Greenwich Point on April 26 (MFN). There was a pair of inland Double-crested Cormorants in South Windsor April 11 (PD), and a Horned Grebe in Suffield April 13 (SK). The earliest egrets reported were a Great Egret and 2 Snowy Egrets at Sherwood Island State Park March 23 (RE). The only Tricolored Heron reported was at Milford Pt. May 8 (RE). The Snow Goose that spent the winter at Oyster River, West Haven was last seen May 2 (MS). An exceptionally early Common Tern was at Gulf Pond, Milford from March 23 to April 13. A Eurasian Wigeon was seen at Station 43, S. Windsor March 3 to 9 (PD). There were two groups of Northern Shovelers reported, a pair at Milford Point March 26 to April 18, and four birds at Station 43 April 4 (PD). Seaducks reported inland included an Oldsquaw on the Nepaug Reservoir, Canton April 26 (PC), and a White-winged Scoter in Suffield March 30 (SK). A pair of Barrow's Goldeneyes were observed in New Haven Harbor March 21-23 (DS). The first Osprey report was of a bird on the nesting platform in Rocky Neck State Park March 17 (fide RD). An adult and juvenile Bald Eagle were spotted in Goodwin State Forest March 5 (GC). A flight of 200 Broad-winged Hawks was seen in Bloomfield April 2 (PD) signaling the arrival of spring. Two Peregrine Falcons were reported, one March 17 in Prospect (BD), the other at Milford Point April 18 (FG).

Rails Through Terns

The first Piping Plover arrived at Milford Point March 11 (DS), and 6 American Oystercatcher arrived in Norwalk April 5 (MB). An American Avocet, rare at any season and almost never seen in spring, was found at Greenwich Point on May 15 (JZ). An early Short-billed Dowitcher was observed at Milford Point April 18 (DV). Upland Sandpipers returned to Hartford April 26 (RiC). The shorebird migration at Milford Point included a Sharp-tailed Sandpiper May 18 (BD et al.), numerous White-rumped Sandpipers in groups of 20-30

birds (May 20 on), 3 Western Sandpipers May 22 (RE) and a Baird's Sandpiper May 26 (SP). At Old Saybrook there were two Common Black-headed Gulls and a Little Gull on March 13, while at Oyster River in West Haven there was a Common Black-headed Gull from March 23 to April 6 and a Little Gull March 30 to April 7. An inland Glaucous Gull was seen on the Nepaug Reservoir April 4 (JK), while an albino Ring-billed Gull at Sandy Point, West Haven confused many gull watchers in April. The Caspian Tern at Sherwood Island State Park May 16 (EH,CW), was the only one reported.

Owls Through Warblers

A Long-eared Owl was seen at the Guilford Sluice on March 10 (BD,MS), the only report. An early Eastern Kingbird was found in Canton on April 22 (JK). Acadian Flycatchers were reported in more areas this spring than ever before with many observers commenting on their abundance. A Sedge Wren was reported from East Haven May 11 (NP) and a second from Southern Connecticut State University campus May 15 (PM). An early Philadelphia Vireo was sighted May 12 in Branford (NP). An Orange-crowned Warbler, a rare spring migrant, was observed in Greenwich April 28 (TB,JZ) and a Prothonotary Warbler was found the same day (NP) in Guilford. There were three reports of Kentucky Warbler: one at Stony Creek May 11 (NP), one at Greenwich May 14 (TB,JZ), and one at West Rock, New Haven (AB,SB).

Tanagers Through Finches

There were three Summer Tanagers reported this spring: one in Branford May 6 (NP), one in Greenwich May 19 (TB,JZ), and one in Groton June 7 (BKu). Three Blue Grosbeaks were reported as well: one in Avon May 8-10 (JK), one at West Rock, New Haven May 19 (AB,SB) and one in Milford May 25-27 (DV,MS). The last Tree Sparrow and Ipswich Sparrow reported were one each in Stratford April 13 (DV). The most talked about sparrrow activity was the large number of White-crowned Sparrows across the state May 5-10. Some feeders had groups of 10-20 birds at a time. Another late sparrow record was a pair of Lapland Longspurs in Stratford May 8 (DV). Two Yellow-headed Blackbirds were reported, both present since February. One was in S. Windsor until the first week of March (PD) and the other was at a Milford feeder until April 25 (MB,et al.). An early Northern Oriole was in Woodbridge April 7 (CW). American Goldfinch, considered uncommon this winter, was very common this spring.

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NOTES AND NEWS

BALD EAGLE STATUS REPORT (Stuart Mitchell): Recently, an agreement was signed by Northeast Utilities, the Connecticut Wildlife Bureau and the Bald Eagle Study Group to develop a public viewing shelter at the Shepaug Dam wintering site in Southbury, Connecticut. The shelter will contain biological information about the eagles and allow the public an opportunity to view these magnificent creatures.

The viewing site will be manned by personnel from Northeast Utilities or the Connecticut Wildlife Bureau during normal hours of operation. During the season, a study will be conducted by the Wildlife Bureau to determine if the operation of the shelter represents any harassment or interferes with the eagles' normal behavioral patterns.

There is a great deal of concern regarding the operational plan for the shelter. Studies conducted by the Bald Eagle Study Group, Larry Fischer, Steven Faccio and Howard Russock and the 1983 assessment by Fran Gramlich of the Bald Eagle Recovery Team would suggest that the site is too close to the eagles' feeding area. Assurances have been given that the shelter will be modified or eliminated if harassment occurs.

Concerning a second wintering site, a meeting attended by a coalition of conservation groups and individuals and officials of the Dexter Corporation and the Windsor Locks Canal Co. was held recently. Efforts will be made to reduce harassment of the eagles at the Enfield Rapids site. It is hoped human activity along the canal tow path will be eliminated by erecting gates and new signs, and through enforcement by the Department of Environmental Protection.

The Bald Eagle Study Group will continue to operate winter feeding stations to insure that the wintering eagle population has a supplemental food supply, to identify banded eagles and to record biological observations.

Noble Proctor reported our first banded eagle of the 85-86 season at Lake Guillard, October 28th. A colored leg band indicated this was a 1982 sub-adult from Maine. The author maintains a file on all color markings used on eagles. Reports of any sightings of marked eagles would be appreciated.

* * *

OWL MASCOT: In late October, 1985, owls were the subject of a press release by Southern Connecticut State University. In the past, Dr. Noble Proctor, associate professor of biology at the University, had been approached by SCSU students and faculty who hoped to aquire an owl as a mascot (school teams are known as "The Owls"). Feeling it was inappropriate to keep a wild bird for display purposes, Noble Proctor suggested that the University "adopt" an injured owl, rehabilitate it and when ready, release it to the wild. SCSU President Michael Adanti approved and SCSU will assume the cost of caring for an owl and will redesign its own, on-campus facilities to accommodate the owl until its release. When one owl has been rehabilitated another will be adopted.

Raptor rehabilitators have always refused to take their birds to schools for stressful, non-educational activities such as pep rallies or athletic events. The adoption program is an ethical and beneficial alternative to the concept of live wildlife mascots.

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The Connecticut Warbler is a quarterly publication devoted to the advancement of the study of birds. It is published by the Connecticut Ornithological Association. Address all correspondence to 314 Unquowa Road, Fairfield, CT 06430.

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