

THE CONNECTICUT WARBLER

A Journal of Connecticut Ornithology



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ABOUT OUR COVER

Pileated Woodpecker (*Dryocopus pileatus*)

by Brian Kleiman

Brian Kleinman, our cover artist for this issue, has contributed artwork for several previous issues of The Connecticut Warbler.

Brian, 24, has a degree in Biology, and is currently employed at the Science Center of Connecticut as the animal curator. He is also currently illustrating a booklet for the Canton Land Trust. In past summers he has taught 'wildlife art' at Roaring Brook Nature Center in Canton.

NINTH REPORT OF THE AVIAN RECORDS COMMITTEE OF CONNECTICUT

Greg Hanisek and Mark Szantyr

The ninth report of The Avian Records Committee of Connecticut (ARCC) of the Connecticut Ornithological Association (COA) summarizes the efforts of volunteer observers/submitters from around the state who took time to help bolster the state's ornithological records. Current members, in addition to the authors, are Richard Soffer, Christopher Wood, Arnold Devine, Julian Hough, John Gaskell, Jay Kaplan, David Tripp and David Provencher. Also voting on the records in this report were Polly Brody and Frank Mantlik, whose terms have now expired. Although the committee's work carries an air of judgment that can prove daunting to potential submitters, the members prefer to emphasize the historical and educational benefits of record-keeping. All submissions, regardless of the committee's action, become a part of the state's permanent ornithological record. The committee provides a judgment on the adequacy of evidence submitted but can neither verify nor invalidate individual records. Anyone who observes and carefully documents the occurrence of a species on the state Review List, or a species not previously recorded in the state, is urged to submit a written report, along with sketches and/or photographs when possible. Original field notes, taken during the observation and describing the bird in detail, are greatly desired, even when photographs have been obtained. All reports, along with members' comments on each record, are archived at the Connecticut State Museum of Natural History at the University of Connecticut in Storrs. For a review of the committee and its operation, see Bevier (1996).

HIGHLIGHTS

This report contains 24 records of 22 species reviewed by the ARCC. One additional record was reviewed only at the genus level. The committee accepted 70% of all records reported here. The records are primarily from 1997 through 1999. Significant records in this report include: the state's second record of Golden-crowned Sparrow, its third records of Franklin's Gull and Cory's Shearwater; its fourth record of Rufous Hummingbird, and its fifth record of Townsend's Solitaire. A record of Great Gray Owl is the eighth, but only the second in the past half-century. Also notewor-

thy was an effort, led by Szantyr, to forge a working relationship between ARCC and the state's well-organized cadre of bird rehabilitators. As a result of this initiative two significant records were obtained, involving a Purple Gallinule and the Rufous Hummingbird. Both birds were taken to rehabilitators in moribund condition and subsequently died. Photos of the specimens were obtained in both cases.

STATE LIST AND REVIEW LIST

The state list remains at 401 species. The most recently published (October 1997) state list contains 399 species and is available from the COA (314 Unquowa Road, Fairfield, CT 06430). The committee depends on observers to submit their reports of species on the Review List - these are species marked with an asterisk on the COA Field Checklist - and any species new to the state. Submit written reports along with photographs and any other documentary material to the current ARCC Secretary, Mark Szantyr (address below).

FORMAT

This report continues the format of previous reports. In the case of accepted records, only observers who submitted reports are listed, with the original finder listed first and followed by an asterisk. Observers who submitted a photograph are acknowledged with † following their names. Hyphenated numbers (e.g., 98-11) following the observers are ARCC file numbers. The species are listed in order according to the A.O.U. Check-list (1998). Records of particular species are listed chronologically. Months of the year are shortened to their first three letters.

ACCEPTED RECORDS

CORY'S SHEARWATER (*Calonectris diomedea*). A single bird was observed on 7 Jul 1997 from the observation deck at Meig's Point in Hammonasset Beach State Park, Madison (Steve Rogers*, Jim Rogers, Jeff Rogers 97-29). Although the observation was short, the observers provided a description of the bird, as well as a sketch of its dorsal and ventral surfaces. Two of the observers had experience with pelagic species, one extensively so, in both the Atlantic and Pacific oceans, which added weight to the report. Tubenoses are seldom encountered inside Long Island Sound, and all observations should be thoroughly documented.

HARLEQUIN DUCK

(*Histrionicus histrionicus*). A sub-adult male was present near Shippan Point in Stamford from 13 Dec 1998 through at least 25 Jan 1999 (Patrick Dugan*, Frank Mantlik† 99-29). It was seen by numerous observers and photographed. Although historically rare within Long Island Sound, this species has occurred with increased frequency in the past five years.



Harlequin Duck - male, Stamford, CT
Photo by Frank Mantlik, 13 January 1999

PURPLE GALLINULE (*Porphyryla martinica*).



A juvenile was brought into the Wild Wings wildlife rehabilitation center in Stamford on 17 Dec 1998 (Meredith Sampson 99-06). It had been found walking in a yard in a Stamford neighborhood. It died almost immediately, and photographs of the specimen were submitted for documentation. Although resident in the southeast USA, Purple Gallinules are known for long-distance vagrancy and for appearances in unexpected places at any time of year.

Purple Gallinule - juvenile, Stamford, CT
Photo by Meredith Sampson, 17 December 1998

SANDHILL CRANE (*Grus canadensis*). A single bird flew over the Lighthouse Point hawk watch in New Haven on 20 Oct 1998 (Ron Bell*, Anki Hamback 99-04). A single bird was seen soaring over the Sandy Hook section of Newtown on 19 Nov 1998 (Polly Brody* 99-08). In both instances observers submitted sketches and addressed the problem of separating Sandhill Crane from Common Crane, a species that has occurred in North America as both a documented escape and a probable wild vagrant. Because of an increase in sightings in recent years, a trend noted throughout the Northeast, the committee has removed this species from the review list and no longer solicits documentation of sightings.

AMERICAN AVOCET (*Recurvirostra americana*). This distinctive shorebird was found in the tidal lagoon at Sandy Point in West Haven on 18 Aug 1998 (Jay Kaplan*, Brian Kleinman† 99-11). It was photographed and was seen by a few observers the following day. Although many eastern records of American Avocet occur in late fall, this observation follows the pattern of most recent Connecticut records occurring during the peak shorebird migration in late summer.



RUFF (*Philomachus pugnax*). An adult male in its spectacular breeding plumage was discovered 29 Jun 1999 in a saltmarsh pool in Stratford (Elaine Nye*, Frank Mantlik†, Greg Hanisek 99-24). The bird was seen by numerous observers and photographed that day but could not be relocated thereafter. The date is unusual, since most recent records in the Northeast have occurred from mid-March to mid-April.

Ruff - male, Stratford, CT
Photo by Paul Fusco, 29 June 1999

CURLEW SANDPIPER (*Calidris ferruginea*). A juvenile was present 8-13 October 1998 in Old Lyme (Ted Hendrickson*, Mark Szantyr†, Dave Provencher, Greg Hanisek 99-14). The bird was very cooperative, appearing for several days on a small stretch of beach with a mixed flock of sandpipers, providing direct comparison with several species. It was sketched and photographed. The bird was identified as a juvenile by the presence of a buffy breast, white belly and crisply edged feathers of the upper parts and wings. Almost all North American records involve adult birds, but it is interesting to note that this is the second juvenile recorded in Connecticut.



Curlew Sandpiper - juvenile, Old Lyme, CT
 Photo by Mark Szantyr, 13 October 1998

FRANKLIN'S GULL (*Larus pipixcan*). An adult was found standing in a large flock of Laughing Gulls on 15 Nov 1998, at the mouth of the Oyster River on the Milford-West Haven town line (Linda Donohue*, Frank Mantlik† 99-28). It represents a third state record. The original observers alerted other birders, but the gull flushed before other observers arrived and could not be relocated. Photographs were obtained, however. This appearance occurred during an unprecedented flight of Franklin's Gulls into the Northeast, with more than 40 recorded in New Jersey. Alerted to the events in New Jersey, Connecticut observers were out looking for Franklin's Gulls the day this one was found.



Franklin's Gull - adult winter, Milford/West Haven
Photo by Frank Mantlik, 15 November 1998

GREAT GRAY OWL (*Strix nebulosa*) A single bird was observed 7 and 11 Feb 1996 at Rocky Neck State Park in the Niantic section of East Lyme (Raymond L. Jacobsen*), and therein lies a fascinating tale. The observer, a casual birder who had seen few owls in the wild, consulted a field guide after the first sighting. He narrowed down his choices to Barred Owl and Great Gray Owl, then eliminated the latter because of the stated range. However, he returned to the site with his wife a few days later, when they noticed field marks consistent with a Great Gray Owl, including yellow eyes. The observer submitted a complete description that convinced the committee of the identification. The only other record in more than 50 years occurred in January 1996, less than 20 miles west at Hammonasset Beach State Park.

SELASPHORUS HUMMINGBIRD SP. The bird, which visited a hummingbird feeder in Guilford from 17 Oct to 11 Nov 1998 (Lisa Courtney*, Dori Sosensky, Mark Szantyr†, Dave Provencher, Julian Hough 99-15), was photographed and sketched. The extensive amount of rufous in its plumage identified it as a member of the genus *Selasphorus*, probably an immature male. Identification of immature or female *Selasphorus* hummingbirds as either Rufous or Allen's requires use of critical tail measurements best taken on specimens in the hand, so the identification was left at the genus level. Rufous is by far the more likely species in Connecticut, but Allen's has been recorded in the East. In addition, increased awareness of the tendency of several western hummingbird spe-

cies to reach the east coast in fall and winter dictates that nothing be taken for granted when dealing with this family. The committee does not normally act on sightings identified only to genus. It is our opinion that if it is possible to identify a bird to species in the field, and only circumstances of the observation have prevented this, then the bird was not seen well enough to be identified positively. There are certain species groups, however, that cannot be safely separated to species in the field with confidence, even under the best conditions. The genus *Selasphorus* is one such situation. The committee will review such generic identifications.

RUFOUS HUMMINGBIRD (*Selasphorus rufus*). A specimen, believed to be an adult female, was obtained from a rehabilitator on 6 January 1999 (Mark Szantyr*† 99-18). The bird had died in captivity after having been picked up in a weakened condition in late October or early November 1998 in Glastonbury. In the hand, the bird could be measured, aged and sexed and identified positively as *rufus*.

NORTHERN WHEATEAR (*Oenanthe oenanthe*). An adult male in basic plumage was found on 19 Sep 1998 during a field trip to Sherwood Island State Park in Westport as part of a COA Fall Field Day (Charles Barnard*, Julian Hough†, Polly Brody 99-16).



Northern Wheatear - male, Sherwood Island State Park, Westport, CT

Photo by Julian Hough, September 1998

It was present until at least 23 Sep. The dates fall within the typical pattern of early fall appearances by this species, primarily along the coast. Wheatears seen in eastern North America are believed to belong to the Greenland race *leucorhoa*, which is bigger, brighter and longer winged than the nominate race breeding in Europe. However, individual birds are probably not safely assigned to race in the field. The presence

of black lores and mottled ear coverts allowed aging of the bird as an adult, and the presence of black on the ear coverts indicated it was a male (Hough, 1997).

TOWNSEND'S SOLITAIRE (*Myadestes townsendi*). A bird seen on 7 Nov 1998 near Bantam Lake in Litchfield represents a fifth state record (Buzz Devine* 99-19). This thrush from the northwestern mountains has a long history of appearances in the Northeast during late fall and early winter. This individual, which was seen briefly amid a heavy movements of robins and other typical November migrants, was carefully described with reference to similar species such as Northern Mockingbird.

YELLOW-THROATED WARBLER (*Dendroica dominica*). A single bird was present for several weeks at Chatfield Hollow State Park in Killingworth, where it was seen by numerous observers (Patrick Dugan† 97-19). No one submitted written documentation, but a single photo taken on 20 Apr 1997 was submitted. The photos clearly identify the bird as to species, but the color of the lores can not be clearly seen. Two races occur in our region, the more western white-lored *albilora*, often called Sycamore Warbler for its preference for nesting in these large riparian trees, and the yellow-lored *dominica* of the South. Interestingly, the western bird is expanding its range to the east and has become established in northern New Jersey. The only Yellow-throated Warbler identified to race in the field in Connecticut has been *albilora* (see field notes for Winter 1999/2000 Season, CW20-3 in preparation). Sightings of this species have been increasing, with records at all seasons, and the committee has removed it from the review list.

GOLDEN-CROWNED SPARROW (*Zonotrichia atricapilla*). The second record for Connecticut involves an immature seen at Crook Horn Road in Southbury on 24-25 Oct 1998 (Buzz Devine*, Chris Wood, Tom Kilroy 99-13). Several observers submitted detailed notes and sketches. Numerous others searched for the bird for more than a week after the initial observations, and while some possible sightings were reported, no additional written documentation was submitted.

BOAT-TAILED GRACKLE (*Quiscalus major*) A male was seen on 3 Apr 1999 at the Great Meadows in Stratford, part of Stewart B. McKinney National Wildlife Refuge (Charles Barnard* 99-23). The bird was found at a place where the species has occurred regu-

larly in recent years and where evidence of breeding has been detected in the past. However, no females were noted in 1999.

RECORDS NOT ACCEPTED, identification questionable.

YELLOW RAIL (*Coturnicops noveboracensis*). A bird of this species was reported from Hammonasset Beach State Park in Madison on 25 Mar 1998 (99-02). While at a likely location for such an occurrence, the observer admits to having less than ideal views of a bird in flight. Certain details of the observation suggest a correct identification but important characters that clinch it were not noted. The observer and others attempted to relocate the bird but were unsuccessful.

WHITE-WINGED TERN (*Chilidonias leucopterus*). A bird in definitive alternate plumage was reported off Milford Point in Milford on 20 May 1999 (99-26). This record was very difficult for the committee. This Old World species is a rare bird in all of North America, with annual occurrences on this continent, but not predictably from any one location (with the possible exception of the greater Delmarva area). Remarkably, it has nested once, paired to a Black Tern (*Chilidonias niger*), in Quebec and produced young. Records of this species span from early May to late September, with July and August being peak months of occurrence, coinciding with the build-up of southbound Black Terns. This record fits well into the expected time of occurrence, and the observer carefully noted features that suggest a correct identification. Descriptions of a few key characters, including details of upper and under wing and of the rump and tail, were troubling to the committee. Likewise, the fact that the observer admits to being relatively inexperienced with this genus in alternate plumage left some room for uncertainty. These facts combined with the rarity of the species in North America would not allow the committee to accept this as a first Connecticut record. Unfortunately, subsequent searches for the bird on Long Island Sound were fruitless.

The "marsh terns," that is, the small terns of the genus *Chilidonias*, are exciting birds. At times, the various species in this genus can be quite difficult to differentiate with certainty. This identification problem is well covered in Olsen and Larsson's *Terns of Europe and North America* (1995).

EURASIAN COLLARED-DOVE (*Streptopelia decaocto*). A diligent observer reported a bird thought to be of this species from Woodbury on 31 Aug 1998 (99-10a). This bird was associating with Mourning Doves (*Zenaida macroura*) and coming to a bird feeder. The observer, experienced with a wide variety of exotic avifauna, believed that certain characters of this bird eliminated Ringed Turtle-Dove (*Streptopelia risoria*), a popular cage bird, from contention. The bird was relocated and photographed by a member of this committee. The photos and a written report were subsequently submitted to the committee. Details of both reports were evaluated and it was determined that the bird in question was indeed Ringed Turtle-Dove based on several key characteristics. In the meantime, the original observer retracted his original identification after further study of the bird and re-submitted a report as Ringed Turtle-Dove (99-10b). The action on this re-submittal is detailed elsewhere in this report.

Eurasian Collared Dove is an Old World species that was introduced to the Bahamas in the early 1970's. The species is very prolific in its Old World range and likewise thrived in the Bahamas and its population burgeoned. In 1986, this species was identified from south Florida, causing a stir in the birding community. It seems that prior to this identification, it was assumed that all doves of this genus in Florida were Ringed Turtle-Doves, the more expected exotic cage species that had become established there earlier. Investigation revealed that by far the largest element of the population of feral *Streptopelia* doves in this area were Eurasian Collared Doves. Based on our previous discussions about this species' hardiness, it seems likely that this population originated from the Bahamas. Since then, the species population in the New World has grown dramatically and reports of the species have come from far and wide in North America, with the most recent expansion seemingly coming from areas to the north and west of its Florida point of origin. It is likely that this species will occur in Connecticut, and anyone interested in more information regarding the history and identification of this species should consult the excellent article by P. William Smith in *American Birds* (1987).

BEWICK'S WREN (*Thryomanes bewickii*). The committee received an enticing report of a bird thought to be this species frequenting an overgrown back yard in Uncasville during the first few weeks of Jul 1998 (99-03). During the original period of observation, two members of this committee had occasion to visit this

yard and, with the original observer, study the bird in question at some length. These two committee members submitted details of their observations to the committee during the evaluation of this record. While the original observer kept very extensive notes and should be commended for the diligence and commitment made to the study of this bird, all characters suggest that the bird was actually a washed out or pale immature Carolina Wren (*Thryothorus ludovicianus*).

Bewick's Wren is a rare vagrant to eastern North America. It has become even more uncommon since the eastern portion of its population has suffered dramatic decline. For a discussion of the fine points in identifying this species, especially on how to separate it from the more expected Carolina Wren, see Szantyr (1999).

YELLOW-HEADED BLACKBIRD (*Xanthocephalus xanthocephalus*). A bird of this species was reported from Canton on 8 May 1997 (97-18). The committee believes that the circumstances of this very brief observation do not allow for confident identification of this species and therefore takes a conservative stance in not accepting it.

Yellow-headed Blackbird has become regular in Connecticut during both spring and fall migration and because of this, the committee has decided to remove this species from our review list. However, please forward any sighting information on Yellow-headed Blackbird to Greg Hanisek, Field Notes Editor for the Connecticut Warbler, 175 Circuit Ave., Waterbury, CT 06708. Information on this species is still of general interest and such reports often influence a species placement or removal from the review list of the Avian Records Committee of Connecticut.

RECORDS NOT ACCEPTED, origin questionable.

GRAYLAG GOOSE (*Anser anser*). A bird of this species was reported from the Ellington/Tolland area on 7 Feb 1999 (99-20). While Graylag Goose is the source species of many of the domestic "barnyard" geese often noted in the company of migrant waterfowl and therefore usually overlooked by birdwatchers, this individual and a few others in recent history are trim, "svelte," wild-looking birds and not the large, pot-bellied, "fat, dumb, and happy" birds associated with domestic conditions. However, wild-type Graylag Geese are widely kept in waterfowl collections and it

seems that Connecticut occurrences of this bird are centered near known waterfowl collections. Observers are still requested to document occurrences of "exotic" waterfowl as patterns of natural occurrence may someday be established and these pieces of information will be key in determining a species' status in Connecticut.

RINGED TURTLE-DOVE (*Streptopelia risoria*). A bird initially identified as a Eurasian Collared-Dove (*Streptopelia decaocto*) on 31 Aug 1998 (99-10a) was subsequently re-identified as this species (99-10b). This species is commonly held in captivity and there is no evidence of natural occurrence. See the account for Eurasian Collared-Dove elsewhere in this report for further discussion.

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CONTRIBUTORS

The committee greatly appreciates the time and effort expended by the following people who submitted reports or photographs of rarities: Charles Barnard, Ron Bell, Polly Brody, Donna Brooks, Patrick Comins, Lisa Courtney, Buzz Devine, Linda Donohue, Patrick Dugan, Carl Ekroth, Anki Hamback, Julian Hough, Greg Hanisek, Ted Hendrickson, Raymond L. Jacobsen, Jay Kaplan, Brian Kleinman, Tom Kilroy, Russ Naylor, Frank Mantlik, Elaine Nye, Noble S. Proctor, Dave Provencher, Charlie Rafford, Cynthia Rice, Jeff Rogers, Jim Rogers, Steve Rogers, Meredith Sampson, Dori Sosensky, Mark Szantyr, and Chris Wood.

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CONNECTICUT'S 1999 FALL HAWK MIGRATION

Neil Currie

During the fall of 1999 Connecticut's hawk watchers saw and counted over 48,000 hawks and spent over 1300 hours doing this (Table 1). Although these numbers are smaller than in most previous years, there were many exciting days at Connecticut's lookouts. The first migrating hawks passed to the west at Lighthouse Point, New Haven, on August 23 when 12 Ospreys and three other hawks were counted. At Quaker Ridge, in Greenwich, opening day for hawk watchers was August 25 when 10 hawks passed, seven of them Broad-winged Hawks. Four days later at Lighthouse the flight of August 29 was a record for that date with a surprising 389 migrating hawks. Of this total 69 were Ospreys, 111 were Sharp-shinned Hawks, 41 were Broadwings, and 127 were American Kestrels.

Although they never reached Connecticut, two hurricanes, Dennis and Floyd, influenced the migration here early in the fall season. From August 24 to September 4 Dennis hung over Cape Hatteras in North Carolina. Then, on September 5 the storm moved northwest over Virginia and on into western Pennsylvania. By the ninth Dennis had died out. Winds in Connecticut, as Dennis passed by west of us were from the south and southeast, the direction also influenced by a high pressure system sitting northeast of us over the Gulf of Maine. Besides winds unfavorable for migration there was rain on several of these days. During that period, September 6 through September 10, the combined hawk count at Lighthouse Point and Quaker Ridge was only 34 hawks.

By September 11 it was time to be seeing Broadwings, especially at inland lookouts. With Dennis gone, a cold front followed by northwest winds, moved through New England on the night of the tenth. Only small numbers of Broadwings appeared over inland lookouts, but at Quaker Ridge, the tip of Connecticut's migration funnel, 320 hawks passed, followed by 815 the next day. The combined count of Broadwings at Quaker Ridge those two days was 848 (Table 2). During the next three days winds turned to the south and southeast, again stalling the migration.

On September 15 Floyd was just off Cape Canaveral in Florida. The next day Floyd was over Cape Hatteras and during the next few days moved out to sea and quickly north into the maritime

provinces of Canada. At the same time still another cold front was stalled across New York state, helping to produce rain and fog across Connecticut. On the seventeenth, Floyd to the northeast and the passing front combined to produce very strong (40 to 50 miles per hour) northwest winds in our area. Apparently the wind was too strong for the hawks that day as they were not migrating.

Finally on Saturday the 18th on lighter winds hawks were moving. At inland lookouts good numbers were passing, but again not the large numbers watchers were hoping for (See Table 2). However, to the southwest at Quaker Ridge, and at Butler Sanctuary in Mount Kisco, and at Hook Mountain in Nyack, New York thousands of Broadwings were moving to the southwest (7384 at Quaker Ridge). As evidenced by the 2480 Broadwings counted that day at Maltby Lakes just northwest of New Haven, the birds were spread out over a wide front. Somehow most of them got by the inland sites unobserved, passing between lookouts, or lost from sight high against the blue sky. At Lighthouse Point that day, September 18, the migration was the heaviest so far, 523 hawks, including 125 Broadwings (Table 2). Most lookouts recorded large flights again the next day, but southerly winds on September 20 and 21 once more reduced migration numbers. One more big day remained for Broadwings. On September 23 large numbers of them were again on the move, several hundred at Johnnycake Farm, at Chestnut Hill, and at Good Hill in Woodbury. At a new lookout, Osborne Hill in Sandy Hook, a remarkable flight of 2781 Broadwings passed late in the afternoon, and at Quaker Ridge over 1000 were counted (Table 2).

After September 23 at inland sites the season was over for watchers, but at Lighthouse Point and Quaker Ridge migration and hawk watching continued into November. At Quaker Ridge there was a steady flow of migrants throughout October with diminishing numbers in November. At Lighthouse Point in October over half the daily counts were in the hundreds, and in November where the watch continued until the end of the month the total count was 1489 (Tables 3 and 4).

The fall season produced many highlights. The flight at Lighthouse on August 29 was a record for that date. Again at Lighthouse over 1200 hawks were migrating on both October 7 and 11. On each of those days over 700 Sharpshins passed. At a new site in Sandy Hook over 4000 hawks, mostly Broadwings, were counted. At the Middle School in Torrington, a new site also, over 1200 Broadwings were observed on September 18. The fall count of 77 Bald Eagles at Quaker Ridge was the second highest ever and was

the fourth year in a row in which over 60 were observed there. Also the count of eight Golden Eagles there was part of a large movement of Golden Eagles throughout the eastern states this fall. Lighthouse Point recorded a record 52 Bald Eagles and a record 969 Red-tailed Hawks. These were some of the highlights of the 1999 fall migration.

There were also noteworthy happenings and accomplishments. After twenty years at Whippoorwill Hill in Newtown, Polly Brody retired from counting hawks there, taking busman's holidays at Lighthouse and Quaker. Both Phyllis Kitchen and Edith Wells completed twenty years at their lookout on Beelzebub Road in South Windsor. They regularly outdid the other inland lookouts in coverage hours, often with smaller numbers of hawks seen than at other lookouts (Table 5). And after many years as the head counter at Quaker Ridge Brian O'Toole was also a retiree.

Thanks to all the counters listed below for contributing to this report. I believe all who do this, do it for the love of seeing the great number of hawks and eagles as they pass, and probably would not expect to be thanked. However, we owe special thanks to a few individuals. To Matt Popp and to Ron Bell for all the work they do in organizing and managing the watches at Quaker Ridge (Matt) and at Lighthouse Point (Ron). Thanks to Ron for providing the weather data for this report. Thanks also to David Fiske (who along with his wife Anne, watches the hawks at Maltby Lakes) for the hours he spent doing the Ground Positioning Survey of all the lookouts in Connecticut for the Hawks Aloft Worldwide Atlas of hawk watching sites.

COMPILERS AND COUNTERS

The following birders were in charge of counting and identifying at Connecticut's lookouts during the fall of 1999: Lois Aldi, Ralph Amodie, Renee Baade, Bill Banks, Tom Baptist, Charlie Barnard, Dan Barvir, Trudy Battaly, Ray Belding, Ron Bell, Polly Brody, Paul Carrier, Barbara Cole, Rich Connors, Neil and Mary Ann Currie, Fritz Davis, Paul Desjardins, Patrick Dugan, Cynthia Ehlinger, Dick English, Mike Fedor, Larry Fischer, David and Anne Fiske, Steve Foisey, Joyce Grohoski, Frank Guida, Tony Hager, Greg Hanisek, Eric Hotetz, Bart Kamp, Seth Kellogg, Paul Kennedy, Phyllis Kitchen, Damon Larabe, Donna Rose Manwaring, Tom Mason, Jim McBride, Steve Oresman, Brian O'Toole, Drew Panko, Janet Petricone, Matt Popp, Stephen Potter, Allan and Betty Root, Jerry Ross, Meredith Sampson, Fred Schroeder, Dori Sosensky, Tony Tortora, Mike Usai, Bill Wallace, Edith Welles, Joe Zeranski, and Jim Zipp.

1999 HAWK WATCH SITE LOCATIONS

Booth Hill - West Hartland
 Beelzebub Road - South Windsor
 Taine Mountain - Burlington
 Johnnycake Farm - Burlington
 Middle School - Torrington
 Chestnut Hill - Litchfield
 Good Hill - Woodbury
 Heritage Village - Southbury
 Osborne Hill - Sandy Hook

Huntington State Park - Redding
 Aspetuck Orchards, Easton
 Litchfield Turnpike, Bethany
 East Rock Park - New Haven
 East Shore Park - New Haven
 Lighthouse Point - New Haven
 Maltby Lakes - Orange
 Cove Island - Stamford
 Quaker Ridge - Greenwich



Figure 1. 1999 Hawk Flight Lookout Sites

Table 1: Connecticut- All Lookouts-Fall 1999

SITES	Tot. Hrs.	SPECIES																Total			
		BV	TV	OS	BE	NH	SS	CH	NG	RS	BW	SW	RT	RL	GE	AK	ML		PG	UR	
Booth Hill, West Hartland	17			8		1	27				774					5	3		3	821	
Beelzebub Road, South Windsor	29			9		1	6				136					3			6	161	
Taine Mountain, Burlington	17			13	1	1	15				551							2	3	586	
Johnnycake Farm, Burlington	27			63	7	6	32	8		2	1587					36			3	1744	
Middle School, Torrington	12			12	4		2	7			1256			3		2			7	1293	
Chestnut Hill, Litchfield	34			14	5	5	25	1		1	949					6	5		5	1016	
Good Hill, Woodbury	35			8	5		18	1			1342					2				1376	
Heritage Village, Southbury	5			7		1	7	2	1		252			4		11			1	286	
Osborne Hill, Sandy Hook	43			48	6	18	83	4	1		4045					38	1	1	14	4261	
Huntington State Park, Redding	27	2		18	2	8	50	4	1		856			5		33	2	1	1	981	
Aspetuck Orchards, Easton				1	1		3	1		1	18			3		8				39	
Litchfield Turnpike, Bethany	5	3	11	7	1		12	4		1	126			2		8	1			173	
East Rock Park, New Haven	3			8	1	2	5	4		1	3			2		5				31	
East Shore Park, New Haven	12		35	33		5	624	47	1	1	3			24		184	3		14	974	
Lighthouse Point, New Haven	548		198	1474	52	628	6056	847	25	68	352			969	5	2	2152	402	50	197	13477
Maltby Lakes, Orange	68		13	221	28	17	166	9		2	3314			8		107	4	6	18	3913	
Cove Island Park, Stamford	21		22	162	10	11	162	31	2	4	14			52	1	0	119	34	10	2	636
Quaker Ridge, Greenwich	471		382	633	77	145	2282	321	17	137	10938			346	2	8	804	63	13	110	16278
Total	1374	5	661	2739	200	849	9575	1291	48	218	26516	0	1418	8	10	3523	518	83	384	48046	

SPECIES ABBREVIATIONS

BV - Black Vulture
 TV - Turkey Vulture
 OS - Osprey
 BE - Bald Eagle
 NH - Northern Harrier

SS - Sharp-shinned Hawk
 CH - Cooper's hawk
 NG - Northern Goshawk
 RS - Red-shouldered hawk

BW - Broad-winged hawk
 SW - Swainson's Hawk
 RT - Red-tailed Hawk
 RL - Rough-legged Hawk

GE - Golden Eagle
 AK - American Kestrel
 ML - Merlin
 PG - Peregrine Falcon
 UR - unidentified raptor

Table 2: Broad-winged Hawk Flights - Fall 1999

SITES*	September 1999																			Oct.	Total					
	pre-1	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		99				
Booth Hill		13	7						320	434																774
Beelzebub Road							1	24	103	1			7													136
Taine Mountain		11	29					110	393	8																551
Johnnycake Farm	0	6	64					5	343	1			382	402			384									1587
Middle School		26						1230																		1256
Chestnut Hill		9	23	6				158	457				205	91												949
Good Hill		32	23	42	26			554	372	7			286													1342
Heritage Village									252																	252
Osborne Hill		8	30	6	0		14	474	698	7			2781	27												4045
Huntington State Park		6	12					452	386																	856
Aspetuck Orchard								18																		18
Litchfield Turnpike																	126									126
East Rock Park														3												3
East Shore Park																								2	1	3
Lighthouse Point	67	1						125	1				8		3	70	3	2							72	352
Maltby Lakes	42	20	44	51	7		2	2480	560	5			76	26	1											3314
Cove Island Park			2					1							2										9	14
Quaker Ridge	51	253	595		1		19	7384	629	3		1	1033	30	317	475	7								140	10938
Total	160	385	829	105	34	0	0	36	13335	4628	32	0	1	4781	576	323	1055	10	2	2	222					26516

* See Table 1 for town location.

Table 3: Lighthouse Point Park Hawkwatch, New Haven, CT - Fall 1999

MONTH 1999	Hrs.	SPECIES																		Total
		BV	TV	OS	BE	NH	SS	CH	NG	RS	BW	S	RT	RL	GE	AK	ML	PG	UR	
August	32		1	140	3	38	179	10		1	64		5			178	8	2	5	634
September	172		8	899	13	148	1484	180			216		10			987	146	16	34	4141
October	208		169	430	35	331	3916	577	13	21	72		313	3	2	976	215	26	114	7213
November	136		20	5	1	111	477	80	12	46			641	2		11	33	6	44	1489
1999 Total	548		198	1474	52	628	6056	847	25	68	352		969	5	2	2152	402	50	197	13477
1998 Total	560		254	1516	41	806	6529	771	17	26	371		258	5	3	2598	341	48	156	13740
1997 Total	543		206	1811	38	459	8212	876	12	50	2054	1	212		1	1865	242	53	155	16247
1996 Total	528		180	1384	26	259	5639	538	27	52	1212		404	1	6	1887	204	71	133	12023

Table 4: Quaker Ridge Hawkwatch, Greenwich, CT - Fall 1999

MONTH 1999	Hrs.	SPECIES																		Total
		BV	TV	OS	BE	NH	SS	CH	NG	RS	BW	S	RT	RL	GE	AK	ML	PG	UR	
August	33			16	4	4	43	5			42				46	4	1	11	176	
September	165		16	402	61	66	1107	170	1	10	10756		22	2	432	33	4	45	13127	
October	204		313	207	11	65	1067	136	11	98	140		194		5	325	26	8	53	2659
November	69		53	8	1	10	65	10	5	29			130		3	1			1	316
1999 Total	471		382	633	77	145	2282	321	17	137	10938		346	2	8	804	63	13	110	16278
1998 Total	616		353	923	93	313	3436	315	9	128	9949		238		8	922	67	19	82	16855
1997 Total	590		1	554	610	67	127	3360	368	13	126	15018	2	290		700	93	23	70	21422
1996 Total	557		295	306	68	62	1549	157	7	180	8071	2	336		2	383	49	12	47	11526

See Table 1 for species abbreviations.

Table 5: Twenty Years at Beelzebub Road, South Windsor, CT

YEAR	Hours	SPECIES																	Total
		TV	OS	BE	NH	SS	CH	NG	RS	BW	RT	RL	GE	AK	ML	PG	UR		
1980	42	2	13	0	7	10	0	0	0	966	14	0	0	20	0	0	95	1127	
1981	43	1	22	0	5	24	0	0	0	1968	0	0	0	43	0	0	65	2128	
1982	52	2	9	0	3	4	0	0	0	603	0	0	0	20	0	0	50	691	
1983	8	1	23	0	0	13	0	0	0	2477	1	0	0	1	0	0	3	2519	
1984	53	3	29	0	4	27	0	0	0	2079	7	0	0	33	0	0	56	2238	
1985	56	1	29	0	4	21	0	0	0	3156	7	0	0	30	0	0	32	3280	
1986	76	5	36	1	6	95	0	0	0	2239	0	0	0	50	0	0	64	2496	
1987	63	1	43	0	7	70	0	0	0	2901	0	0	0	38	0	0	42	3102	
1988	51	6	35	0	6	24	0	0	1	2497	0	0	0	42	0	0	17	2628	
1989	35	2	35	1	5	42	0	0	0	2907	0	0	0	58	0	0	21	3071	
1990	56	3	12	2	0	32	0	0	0	810	0	0	0	20	0	0	19	898	
1991	55	2	34	1	3	18	0	0	0	1623	0	0	0	28	0	0	35	1744	
1992	42	7	13	1	0	16	1	0	0	422	0	0	0	13	0	0	19	492	
1993	42	11	11	0	1	26	0	0	0	887	0	0	0	18	0	0	10	964	
1994	45	7	22	0	2	33	0	0	0	663	0	0	0	27	0	0	21	775	
1995	47	*	15	0	0	29	0	0	0	388	0	0	0	17	0	0	15	464	
1996	33		8	2	0	10	0	0	0	973	0	0	0	12	0	0	6	1011	
1997	56		15	1	2	22	0	0	0	1635	0	0	0	7	0	0	28	1710	
1998	51		15	1	3	17	1	0	0	203	0	0	0	3	0	0	12	255	
1999	29		9	0	1	6	0	0	0	136	0	0	0	3	0	0	6	161	
Total	935	*54	428	10	59	539	2	0	1	29533	29	0	0	483	0	0	616	31754	
NO/Y	46.8	2.7	21	0.5	3	27		0	0	1477	1.5	0	0	24	0	0	31	1588	

* - Turkey Vultures no longer counted. Not yet migrating.

"SITE GUIDE: THE LIAONING FOSSIL BEDS"

Alan Brush

"How much more interesting science would be if those who created it told how it really happened, rather than reported it logically and impersonally, as they often do, in scientific papers." George W. Beadle.

Introduction

I am not a paleontologist. I have spent a career studying birds, the origin of evolutionary novelties, and the design of structure. For almost 30 years, much of this interest has been focused on feathers. Feathers define birds. The structural diversity and hierarchical organization of feathers is truly astonishing. I have also worked on the pigments of avian plumage and emergent properties of feathers such as plumage patterns. Simultaneously, I have explored aspects of feather molecular organization in an attempt to encompass their entire organizational spectra. So it was an extraordinary opportunity to participate as a team member invited to travel to China to study, among other things, the specimens described as a "dinosaur with feathers".

Recognizable feathers, even on the earliest birds, have features similar to those on modern birds. Further, the most ancient fossil birds present evidence of structural diversity in feathers. The possibility of a feather-bearing dinosaur has implications regarding the origin of feathers and their earliest presumed functions, but also provides clues to the origin of birds. The question of avian origins is currently under debate, as it has been for over a century. The various schools of thought on this issue have been discussed widely in several scholarly tomes and numerous popular items, a number of which I have reviewed in "The Warbler."

The evolution of birds is not being argued in a vacuum. The origin of flight is often closely coupled with the origin of birds. In my opinion, they should be thought of as separate events. Perhaps not completely disconnected, but it is important to tease out cause and effect in each of two quite complex events in evolution. For example, while feathers are necessary for flight, and are retained by secondarily flightless birds, one cannot argue that feathers evolved for flight. The history of flight in the earliest birds, whether from the trees-down (arboreal) or from the ground-up (cursorial), presumably began independently of the origin of feathers. Feathers certainly evolved prior to the evolution of flight, for reasons other

than their current aerodynamic role. Further, some structures must have preceded the feather as we consider them in a traditional mode based on morphology. It is likely that an ancestral protofeather preceded the most primitive feather. However, there is still not complete agreement on the question "what feather morphology is the most primitive." It is possible that we might use information from the molecular level, and information from the production mechanisms of feathers to reconstruct some of these processes, but that is another issue.

To my mind the China trip provided a potential window into the past, with great potential to provide insights into some of these problems. Little is known about the epidermal structures of dinosaurs. Further, we have no information on the body coverings of ancestral birds. The feathers on *Archaeopteryx*, the oldest known bird, are essentially modern in morphology. Could the China material possibly provide a view back in time to some early stage of feather evolution or were the structures previously only seen in photographs as some undescribed epidermal derivative? The answers to such questions ultimately will involve morphological studies and assessment of the tissue types and protein content, evidence available under ideal conditions of preservation. It may even be possible to infer function from the observations we could make. Conditions at the site are compatible with such preservation. Fortunately, we were given uninhibited opportunities to observe the material. Still, it is also clear that additional work will be required to answer the numerous questions to everyone's satisfaction.

I was—and still am—asked, "Why go?" or "What good could you do?" For a layperson it becomes the question of the relevance of basic research. The first question is often followed by "What did you see?" It is this question, of course, that is the interesting one. It expresses a basic human curiosity regarding the world around us. Just as people say "take lots of pictures", it is an essential human trait to want to know what is over the next hill, what will happen tomorrow, or what life is like half a world away. In a sense we were explorers sent to find out what these new things were. Just as early navigators set sail on unknown seas, or men went to the moon, or a little machine explored Mars; we want to know what is there. Scientists, especially, suffer from terminal curiosity. In China we may effectively even look back in time. That's what fossils are all about.

More than simply travel to an exotic land; there is intellectual justification to what we were about. Here was an opportunity to see what animals were like 125 million years ago. Here was a pos-

sibility to examine specimens that might have been ancestors of modern birds, or closely related to that group. Even more important was the possibility to understand how birds acquired the features we most closely associate with them today: feathers. It might even be possible to gain insights into the evolution of avian flight. Equally important would be the opportunity to meet and exchange ideas with the Chinese colleagues who have described the material and have had the field experience so necessary to understanding the geological setting. This was, after all, their country and their treasures. The best we could do is use all our senses and combined experience to enrich our understanding of this unique material.

What we saw

Sinosauropteryx has a slightly unconventional history. The slab and the counterslab were sold to different institutions by the farmer who found the fossil. This immediately set up potential tensions over priority and description. The Beijing specimen was reported in the Chinese literature and described by Ji & Ji as *Sinosauropteryx prima*. In a subsequent manuscript in *Nature*, Chen et al., reported the same specimen as *Compsognathus*. Subsequently, both institutions have obtained an additional specimen, making three in total. The one in Beijing has a mammal jaw in its stomach; the Nanjing specimen two eggs in the oviduct, and the remains of a lizard in its gut. For starters these appear to be the first fossil record for dinosaur predation on mammals and the presence of unlaidd dinosaur eggs. Exciting findings before we even looked at the skin structures!

There was general agreement that *Sinosauropteryx* is a dinosaur and probably identical to, or very closely related to, *Compsognathus*. This problem and the associated nomenclature tussle will be eventually settled once the complete description is published.

A dinosaur with feathers would have incredible implications regarding the evolutionary origin of birds. Our examination of all three specimens failed to turn up any structure recognizable as traditional feathers. None of the expected structures were detected. What then are they? I think they are epidermal, almost certainly composed of keratin. The type of protein may be critical in the determination of structure. The fibers probably extended above the body surface. Our observations led us to believe the structures were filamentous, relatively densely packed, unbranched, cylindrical, and flexible at the insertion point on the surface (implies a relatively flexible insertion—perhaps a follicle). Some were frayed at

the outer tip, others were tilted at angles less than 90° to the vertical, but none were bent. This implies some stiffness. There was some evidence to indicate that they occurred elsewhere on the body, but were most dense from the crown of the head, along the back and on both the upper and lower surfaces of the tail. Their uniform size, density and distribution implied that they were not a supportive structure in the sense they supported a fin-like structure or a frill. They were probably not imbedded in a membranous structure. Assuming that there was not an enveloping membrane or fluid, they must have had the consistency of a small bristle and felt like a fresh "buzz cut". The growth pattern, acute like a molted feather or continuous like hair or claws, could not be determined. We learned nothing about the internal structure or fibrous organization. Our conclusion was that while these were not feathers as we know them from all other birds, they may be a proto-feather or the Ur-feather, but this cannot be verified at present.

A structure, presumably one similar to this, might have existed in an avian ancestor and eventually given rise to all feathers. The oldest known avian fossil (*Archaeopteryx*) had feathers that are easily recognizable. In fact, the first specimen was described from an isolated feather. Further, *Archaeopteryx* and all the early birds from China, Europe and South America have feathers that have been modified into several shapes with various functions. We cannot at this stage even say what the morphology of a primitive feather might have been.

Protarchaeopteryx was a surprise when shown to us in Beijing. It had been reported in the Chinese literature only weeks before our arrival. Its existence was essentially unknown to any of us. The fossil, of a turkey sized bird, is not well preserved and is in need of careful, accurate preparation. The legs are proportionally large and robust, indicating strong running capacities. Its forelimbs are wing-like, but apparently lack feathers. There are contour feathers visible, hence its definition as a bird. The feathers associated with the tail are reminiscent of those in *Archaeopteryx*, but displaced enough that they may have come from another individual. The skull and other skeletal elements could not be studied without further preparation. The discoverers (Ji & Ji) claim it is ancestral to *Archaeopteryx*, but better dating and further study is absolutely essential to establish this hypothesis.

It is my impression that this beast was a fast moving, robust, ground dweller. The forelimbs are wing-like, but may not have been primarily for locomotion. Preliminary observations indicate that they could have been folded 'bird-like' and the wrist bones

were compatible with the motions associated with flight. The implication being that stages in the cursorial origin of flight might be found here. Evidence from the skull regarding feeding mechanism, location of the eyes, beak structure and the possible presence of teeth is sorely needed.

In the field

Late one afternoon we flew from Nanjing to Beijing, were driven from the airport to the huge Beijing Rail Terminal and later boarded a sleeper train. An early morning arrival in Jincheng was followed by another motor trip to the inland town of Beipiao. We lunched in our hotel/guesthouse in anticipation of an afternoon visit to the field site. We were joined by officers of the local Communist Party and governmental administrators. As was the case with most of our meals the range of dishes was bewildering. Toasts accompanied the chop stick-based feeding frenzy and with two absolutely different languages involved, most of the communication was by facial expression, tone of voice, and handwaving. Despite the language barriers, there was no lack of communication. We were warmly welcomed everywhere and must have provided quite a spectacle to locals.

This part of Liaoning Province is rural and, at least in March, cold and dry. Days were sunny and clear but there were steady NW winds that became brisk at times. There is very little vegetation as the area has been deforested for decades. The low scrub on the hillsides does little to prevent erosion. Streambeds this time of year were dry and the birds were limited to Black-billed Magpies, Siberian and Great Tits, Eurasian Tree Sparrow, Reed Buntings, and little more. The empty fields, which were all small and rocky, were used mostly to grow corn. There were a few small villages, and some rather simply constructed isolated farm buildings. Domestic animals were housed in farmyards. Water was hand pumped, electricity available only in the villages, and local traffic was mostly by bicycle or on foot. The steady winds often made progress slow.

The quarries and naturally exposed deposits are astonishing. The talus deposits below the eroded faces produce fossils in almost every piece. The material naturally fractures into slabs 1 to 2 feet thick and fossil insects, leaves, and small invertebrates are common. In the course of our casual stay at least one (Jurassic) isolated feather fossil turned up and I had previously seen numerous others. Mesozoic feather fossils are extremely rare in museum collections in North America and those I saw here were in every sense

modern feathers. The quarries that have been so productive are easily accessible on foot. It is their size and extent that is overwhelming. The reports indicate they might be 1500 meters thick, and extend for tens of square kilometers. There is enough potential material here to keep a large cadre of paleontologists busy for decades, and even longer if one includes the preparation of the material and publication of descriptions. There is probably not another place on earth so filled with treasures from a time so long ago and so important in earth history.

What is there left to do?

Any view into the origins of feathers is, in fact, a glimpse into the origin of birds. Answers to many questions lie in the deposits in northwestern China. It will require extensive cooperation among institutes to develop the material to its potential. More trips that support intensified study at the field site are essential and negotiations are currently underway for both scientists and technicians to participate. The recent finds must be confirmed. New specimens are, of course, the *sine qua non* of any study. Specimens such as *Caudipteryx*, a small theropod with elongated feathers on its hands, are important as are specimens of a feathered oviraptor (with a pygostyle at the end of a reptilian tail), and a small dromaeosaur (*Sinornithosaurus*) with skeletal features similar to primitive birds. So the excitement is not over. The specimens at hand must be preserved, professionally prepared, and studied. Descriptions and interpretations must become part of the scientific record. There is still much more to learn about the world at a time when the modern world was being invented.

I would encourage further studies of the available 'feather' material including accurate and extensive dating. Some of the Chinese finds, while primitive, are not actually old enough to be ancestral to the oldest recognized birds. Extensive laboratory studies are needed on the fibrous material. For example, both macroscopic and microscopic work on whole samples and thin sections, might establish something about cell structure and whether the structures are hollow or not. Chemical and physical studies could eventually discriminate between the presence of collagen and keratins (i.e., amino acid composition). Protein analysis with techniques such as nuclear magnetic resonance and electronic spin resonance, and ultraviolet/visible spectroscopy may add further to our knowledge of protein structure. It is possible that parallel studies of the development of feathers, especially using contemporary information on gene activity, or analysis of shape, might indicate the

changes at several levels necessary to produce the changes that led to the appearance of the earliest feather structures. Enumeration and descriptions of the process and products involved may yield to a hierarchical approach to this extraordinarily exciting set of questions.

Time

The longer leg of the flight to Beijing is about 16 hours. Flying west you chase the sun and it is a long day covering 13 time zones. Individual hours can go by quickly, or take 'forever' depending on how your attention is focused or the level of your pain. A month in China passes in a heartbeat, bolstered by the excitement of travel. Every day is a new experience, one to be remembered. We retrieve memories of these times with relative ease. We read about people and events from the last century and even share common experiences. What royalty did and poets wrote even 500 years ago is comprehensible. Books on discovery abound and the time Captain Cook sailed, or Africa was explored is easily captured. Still, at one point in China I held in my hand a stone tool from the time of Peking Man. *Homo erectus* lived in China 400,000-500,000 years ago. Here was a connection made over a vast number of lifetimes with a human-like relative. A humbling experience indeed, to try to conceive of those times and all that has transpired between him and me. Yet, even that measure of time rests comfortably in the mind.

Not far distant in kilometers, but much deeper in time are the Mesozoic deposits of Liaoning, preliminary dated at perhaps 120,000,000 years and quite possibly older. The mind often has trouble dealing with time spans of such magnitude. What were the animals like who shed the feathers, the fossilized state of which I held in my hand? Did the warm, moist air feel like a New England summer day? The evidence from the rocks indicates a rich plant, insect and fish fauna. A primitive bird, *Confuciusornis*, was abundant in the area. Organisms lived their lives much like organisms today. Yet they were different. Most of the species are in fact extinct, but similar, related, relatives are found today. Others in the lottery of life became extinct, but what about the descendants of *Sinosauroptryx* or *Protarchaeopteryx*? Extinct along with other dinosaurs, perhaps? Could they, or some close relative have made the transition into birds, survived the massive extinction at the close of the Cretaceous and live today? Answers to questions like these may be buried in the fossil beds of Liaoning, but imagining the magnitude of time that separates our worlds is almost beyond conceptualization.

ALAN H. BRUSH, 92 High St., Mystic, CT 06355



BIRD BEHAVIOR NOTES

TOOL USE BY GREEN HERON

On July 18, 1999 I was at the Flanders Nature Center in Woodbury, Connecticut. There is a large pond there. Since there are a few thin, scattered stumps sticking out of the water, I assume it is not very deep. A Green Heron flew out and landed on one of these small stumps and started watching for food. It was within good binocular viewing distance, and after observing it for a short while I realized I was seeing something special.

The bird had something that it was placing on the surface of the water with extreme care, then picked it up a few moments later and moved it, all the time watching it closely. From what I could see, the item was less than an inch long, light green, thin and straight. My surmise at the time was that it was an insect, or at least most of one. In other words, bait.

While I watched this process the bird caught two fish. The first was a small minnow. The second was a much larger minnow, and when the bird grabbed the fish it got the bait with it. After the second catch was swallowed the heron resumed its vigil, but without this aid. I continued to observe for a while without seeing the bird catch any fish. It stretched out to touch various tiny unidentifiable things floating on the surface, but I never saw it manipulate any of them.

Eventually it flew to the trees on the edge of the pond where it was joined by three others. The first bird was in adult plumage, while at least one of the others was immature.

The Birder's Handbook has a reference under Green Heron to the Tool Using topic. This topic talks of similar (though perhaps more advanced) behavior by herons in southern Japan, and includes the admonition "You should be on a sharp lookout for similar behavior in North American herons."

Roy Harvey, Beacon Falls, CT



BOOKS ON BIRDS

Jamie Meyers

(Editor's Note: With this book review we change book review editors. I would like to take this opportunity to thank Alan Brush for his many fine reviews that have appeared in this journal over the past five years. Alan's reviews were interesting, well written, and [important to me] on time. We wish him well in his future endeavors. Our new book review editor, Jamie Meyers, while new to this job, is certainly not new to many Connecticut birders who read his bird reports on line with Dori Sosensky).

A Guide to the Identification and Natural History of The Sparrows of the United States and Canada. James D. Rising, Illustrations by David Beadle. (1996, Soft Cover, 365 pg., Academic Press, San Diego, CA, \$19.95)

Birders have no doubt noticed an influx of specialty field guides hitting the market recently. One of the better ones from this genre is this ambitious volume, which features treatments of every regularly occurring sparrow and towhee species in North America, plus a liberal selection of vagrants and accidentals.

Dr. Rising has had a fascination with "Little Brown Jobs" since childhood. He spent 25 years studying Savannah Sparrows, and has even more years' experience as a field observer. Internet birders may know him from his frequent and welcome contributions to the popular "Birdchat" news group.

David Beadle is also a veteran birder, and a fine artist, as the plates attest. The result of their collaboration is an accessible, well-researched and authoritative text that should serve the birding community well for many years to come.

While adequate coverage of most of the same species can be found in the latest edition of the National Geographic Society's *Field Guide to the Birds of North America*, there are several things that make this book special. The plates are well crafted, pleasing to the eye and generous in number without going overboard. Easy to confuse species are shown together, and the birds are posed in such a way that their most important field marks are emphasized. Recognizable subspecies are also illustrated. Think you may have

just seen an Ipswich Sparrow running along a sandy spit somewhere? You've just pushed up a Sage Sparrow and want to determine which form it is? A Sharp-tailed Sparrow pops up on a reed in October and you're not sure whether it's Nelson's or Saltmarsh? Assistance in being able to resolve such identification challenges is a primary reason to buy a specialty guide, and I have found that this volume passed the test every time I've personally referred to it.

While not nearly as extensive as those in the Peterson warbler guide, the species treatments are also good. I particularly enjoyed reading about the history of each species; for instance, did you know that Lincoln's Sparrow was named for the first person to collect it? The treatments contain a wealth of detail about most species, offering many useful identification aids and other interesting tidbits. Several grids comparing and contrasting the most difficult species (such as Chipping vs. Clay-colored vs. Brewer's) should be of particular interest to the birder. The only serious complaint I have with the species treatments is that the black and white illustrations accompanying them are far eclipsed in attractiveness and quality by the plates.

Interestingly, Rising has anticipated splits in the Sage and Fox Sparrow complex that have not yet occurred, and treats the differences in each form at length. Thus, this is one field guide that may not go out of date with the next round of splits!

In addition to standard range maps, there are grids showing the relative densities of many species on their breeding grounds, as determined by Breeding Bird Survey data. I was particularly intrigued by this feature, and would love to see it emulated in other similar guides. Connecticut birders traveling to distant parts of North America in search of specific target sparrows might put these specific maps to good use.

I recommend this work to anyone with more than a passing interest in sparrows. It contains a wealth of information on these subtly beautiful little birds that will benefit birders of all skill levels.

JAMIE MEYERS, 4 Sexton Hollow Rd., Canton, CT 06019

CONNECTICUT FIELD NOTES

Greg Hanisek

SUMMER, JUNE 1 THROUGH JULY 31, 1999

The season was dry, which had some impact on species nesting in wetlands. For instance, a small marsh in Woodbury which normally holds Virginia Rails and occasionally Soras, apparently was too dry to support either species. A good array of wandering rarities spiced things up, and as usual an attempt has been made to organize the complicated cross-currents of summer into their breeding, wandering and migratory components.

Lingerers, Strays and Post-breeding Wanderers

In addition to the usual smattering of non-breeding Common Loons, a Red-throated Loon was seen June 25 in Stratford (PCo), and a Horned Grebe was present through June at Holly Pond in Stamford (PDU). Double-crested Cormorants are now regular visitors inland, as exemplified by five plus at Shepaug dam in Southbury June 1-10 (AT,RN). A Tricolored Heron was in Stratford June 30 (DV). An immature **Wood Stork** was photographed July 22 at Cream Hill Lake in Cornwall, marking the third or fourth confirmed state record and only the first since 1955 (MR). A Black-crowned Night Heron wandered up the Naugatuck River to Watertown July 19 (RN), and one was at White Memorial Conservation Center in Litchfield on July 31 (DRo). All known breeding sites are along the coast.

The roster of loafing waterfowl included the expected

Brant and Red-breasted Mergansers on Long Island Sound. Less predictable were an American Wigeon summering at Holly Pond in Stamford (PDU); a male Northern Shoveler at West Hartford Reservoir No. 1 from June 19 to July 20 (DRo et al.); a White-winged Scoter July 16 at Smith Neck in Old Lyme (HG,Mr,MO); a Surf Scoter and a White-winged Scoter off Falkner Island in mid-June (CG); a Common Goldeneye July 15 in Southport harbor (DV); a Bufflehead summering at Holly Pond in Stamford (PDU); and a Ruddy Duck June 22 in New Haven harbor (DV). Oldsquaws lingered in unusual numbers: one June 13 in Milford (PDE), another in late June in Branford (PCo), two June 19 at Milford Point (WS), two in Cos Cob harbor June 20 (CW) and four from a boat off Falkner Island July 9 (PCo).

A **Swallow-tailed Kite**, the second one reported in the state in 1999, was over Weston on June 5 (RG). A Sora was unexpected June 23 in saltmarsh

habitat at Sandy Point in West Haven (JB). A seasonal highlight was a **Sandhill Crane** over the Greenwich Audubon Center on July 17 (FP fide TG). A group of three **American Avocets** was reported July 31 from the saltmarsh at Milford Point (RJ); most, if not all, previous records have involved single birds. An adult male Ruff in breeding plumage, the first in the state since 1996, made an unexpected stop June 29 at marshes in Stratford, where it was enjoyed by a number of observers during a one-day stay (EN et al.). The first three Laughing Gulls of the season appeared July 7 in Stratford (DV). A **Lesser Black-backed Gull** was an interesting find July 1 at the Manchester landfill (PCo), but hardly an adequate reward for climbing a decomposing heap of trash in mid-summer. Single Caspian Terns were at Griswold Point in Old Lyme on June 5 (DP), at Long Beach in Stratford June 9 (PCo), and at Hammonasset Beach State Park in Madison (hereafter HBSP) on July 25 (JG); two were at Cockenoe Island in Westport June 4 (FM). A Royal Tern was at Milford Point July 25 (FM et al.). A Common Tern, definitely uncommon inland, visited Bantam Lake in Litchfield June 15 (DRo). The first Forster's Terns of the season included two on July 5 at North Cove in Essex (HG et al.) and seven on July 14 in Lords Cove in Lyme (TH).

A noteworthy feature of the season was the widespread and

atypical appearance of several boreal species. Most numerous were Red-breasted Nuthatches, which are known to undertake their unpredictable southbound irruptions as early as July. This year birds were present throughout the state from mid-June through July, turning up in coastal and inland locations away from their limited breeding range (TH et al.). More unusual was a widespread flurry of Evening Grosbeaks, a species seldom seen in summer except during rare breeding attempts. A pair present through July 15 in Winchester may have fit that category (SR fide DRo), as well as two lingering in July in Cornwall (fide MR). However, the others made quick hits on the way to who-knows-where: a pair making a brief stop at a feeder in Woodbridge on June 17 (RBe); one June 20 in West Hartford (PCi); a male feeding seeds to a female in Hamden June 26 (ABr); a pair visiting a yard in Eastford in early July (MK); and reports lacking details from Avon and Branford (RBA). A Pine Siskin June 13 in Litchfield (RN), and scattered reports of Purple Finches, in addition to the usual breeders (TK, JMe), may have been part of the same movement.

Northbound Migration

A Whimbrel was in Milford June 13, a record late date for a spring departure (PDe). Other birds moving north in June included: a Bonaparte's Gull at Sachem Head in Guilford on June 8 (JL); two Common

Nighthawks June 5 in Litchfield (DRo); an Olive-sided Flycatcher June 7 in Hamden (J&CZ); a Gray-cheeked Thrush at Devil's Den in Weston June 2 (RBA); a Philadelphia Vireo June 4 in Watertown (RN); a Mourning Warbler in Manchester June 5 (BA); a Wilson's Warbler June 5 at Station 43 in South Windsor (PDe); and a White-throated Sparrow in early June at Mill River in Hamden (ABr,CL,MT).

Southbound Migration

Ospreys began to appear on the Connecticut and Naugatuck rivers in early July (GH,PDe), and on July 20 a cold front produced a flight of 13, apparently all adults, at Lighthouse Point in New Haven (GH,MS). An immature Peregrine Falcon strafed shorebirds on July 29 at Cemetery Pond in Litchfield (DRo). A Lesser Yellowlegs in Stratford June 25 (Pco), plus three the next day, were probably early southbound migrants (CB,ABa). The first Solitary Sandpiper appeared July 13 at Cemetery Pond in Litchfield (DRo), and the first Sanderling was reported July 16 at Milford Point (Pco). Six Semipalmated Sandpipers were inland July 21 at Little Pond in Litchfield (DRo), and c. 500 had already assembled at Milford Point by July 15 (PCo). Single Western Sandpipers were reported July 16 at Milford Point (PCo) and July 31 in Milford (PDe). The first Least Sandpiper appeared July 7 in Stratford (DV); nine were inland July 13 at Cemetery

Pond, with numbers building to 27 on July 21 (DRo). A White-rumped Sandpiper was a good inland find at Cemetery Pond July 29, and seven Pectoral Sandpipers were there the previous day (DRo). Two Stilt Sandpipers were in Stratford July 18 (BF). The first Short-billed Dowitcher was reported July 7 in Stratford (DV). A **Wilson's Phalarope** was in Stratford July 3 (BF,KF). Single Black Terns made early appearances July 5 in Essex (HG,JMr) and July 16 at Griswold Point in Old Lyme (GG,HG).

An Olive-sided Flycatcher was a bit early but certainly southbound August 3 in Canton (JMe). By mid-July Eastern Kingbirds were staging for the push south, with 23 at Little Pond on July 21 (DRo). There was a staging aggregation of 185 Barn Swallows July 22 at Cemetery Pond (DRo), and Rough-winged Swallows were on the move July 10 in Guilford (PCo).

The typically early exit of Yellow Warblers was evident July 26, when 20+ were moving along rip-rap at Mansfield Hollow Dam (MS). A Prairie Warbler was southbound July 16 at Milford Point (PCo), and an American Redstart July 18 at Station 43 in South Windsor (PDe) was at a spot where the species doesn't breed. A Grasshopper Sparrow was an unexpected find on a dike at White Memorial on July 15 (RBe).

Blackbird movements included 1,000+ Red-winged Blackbirds at Lighthouse Point

on July 20 (GH,MS) and 700 Red-winged Blackbirds, 700 Common Grackles and 80 Brown-headed Cowbirds at White Memorial on July 25 (fide RN). Two migrant Orchard Orioles were at Milford Point July 16 (PCo).

The Breeding Season

Pied-billed Grebes were calling June 8 at Lord's Cove in Lyme (PCo) and at a swamp in Canterbury in July (MS); one was present June 20 in Bloomfield (BK). The pair of American Bitterns noted in spring at Great Pond in Simsbury were present July 3 with what apparently were two juveniles (TY), a noteworthy sighting of this scarce and secretive breeder. One was heard calling June 5 at HBSP in Madison (MH), and another was present throughout the period at Little Pond in Litchfield (DRo et al.). Little Pond also produced periodic sightings of two Least Bitterns, whose only firmly established breeding sites appear to be in the Connecticut River valley (DRo et al.). One of the latter locations, Lord's Cove in Lyme, held at least two birds in June and July (HG). Two Yellow-crowned Night Herons standing on a ballfield in Milford on June 16 were in an odd location (DV).

A female Green-winged Teal with five young was observed July 29 in Stratford, where breeding was confirmed last year (DV). Up to two Blue-winged Teal were present through the period at White

Memorial, raising suspicions of breeding (DRo et al.).

Up to seven **Black Vultures** were present during the period in the Woodbury-Southbury area (DRo,AD et al.), and three summered in the Naugatuck River gorge between Naugatuck and Beacon Falls, a suitable breeding location (MS et al.). The state's first recent inland nesting of Osprey was confirmed July 14 when a nest with two adults and at least one grown chick was found in a swamp in Canterbury. The birds were believed to be using an old Great Blue Heron's nest (MS). Bald Eagles nested successfully at Barkhamsted Reservoir, and two were present without nesting success at Colebrook Reservoir (DRo et al.). At the Stratford Great Meadows, the state's only confirmed breeding location for Northern Harrier, a male and two females were present, and a female was seen feeding two juveniles during the period. However, as many as four juveniles may have been present (CB,PCo). A single brown-plumaged bird was at Great Island in Old Lyme, a place with appropriate breeding habitat, on July 12 (TH); an adult female was at Lord's Cove June 8 (PCo). Broad-winged Hawks can be shy and unassuming in the breeding season, so 13 found on a property wide search at White Memorial on June 12 offered a glimpse of density in good habitat (DRo et al.). A Red-shouldered Hawk with two fledged young was

found in Easton (DV).

Nesting Northern Goshawks were noted in Mansfield (MS) and Monroe (FM). A Cooper's Hawk with three fledged young was found in Trumbull (DV). Two immature Sharp-shinned Hawks, described as "very vocal," raised the possibility of breeding July 31 at Devil's Hopyard State Park in East Haddam (PDe). A Peregrine nest that fledged two young was found under a bridge in Bridgeport in early July (DV).

Although the state's Ring-necked Pheasant population is dependent on stocking, the species still breeds occasionally as shown by a hen with four chicks during the period in Watertown (RN). More surprising for a species even more heavily dependent on stocking in most parts of the state was a pair of Northern Bobwhites with 10+ young on July 24 in Watertown (RN). A pair of **King Rails** were observed copulating June 25 along the upland edge of the Great Meadows in Stratford (CB,PCo); they shared the area with Virginia Rails, which were seen with young, and were within hearing distance of Clapper Rails farther out on the saltmarsh. At one point one of the King Rails was seen grabbing and shaking a Virginia Rail chick (JH). Virginia Rails can be numerous in inland wetlands as shown by a tally of 36 on June 12 at Little and Cranberry Ponds at White Memorial (DRo,RN). Little Pond in Litchfield held up to two Soras

during the period (RN,DRo et al.), and a Common Moorhen was seen there July 10-15, raising suspicion of breeding (DRo et al.). Breeding was confirmed in northern New Milford when an adult Common Moorhen and two young were seen June 22 and August 26 (JJ). Willets have expanded into the Pine Creek Marsh in Fairfield, with up to three pairs present (CB). A group of five Spotted Sandpipers July 14 at Pleasure Beach in Bridgeport included one fledgling (CB). Black Skimmers nested successfully for the second straight year at Sandy Point in West Haven, with the fledging of more than a dozen young occurring after the end of the reporting period (m.ob.) Two were off Griswold Point in Old Lyme July 28 (BW).

A pair of Barn Owls fledged at least one young from an industrial building in Stratford (fide DS). A property wide search at White Memorial on June 12 produced 14 Barred Owls (DRo et al.). A Long-eared Owl was heard calling August 16-19 in South Kent, suggesting breeding earlier in the season (JJ). A Monk Parakeet July 21 at New Canaan Nature Center was believed to be a first for the town (FG). The Barkhamsted Summer Bird Count turned up five Whip-poor-wills (DT et al.), and this species also was noted at Bent of The River Sanctuary in Southbury (HB). A Red-headed Woodpecker visited a feeder in Winchester throughout the period, but there were no signs of breeding (SR fide

DRo). As an example of the strong Yellow-bellied Sapsucker population in the northern tier, up to 35 breeding birds were present in the Colebrook area (DRo).

White Memorial, perhaps the best place in the state for Alder Flycatcher, produced 17 on a breeding survey June 12, compared with 10 Willow Flycatchers (DRo). Breeding sites for Acadian Flycatcher included Flagg Swamp Road in Southbury, with up to four present (RN,NC), and up to five in Tunxis State Forest (DRo). An all-white Tree Swallow was observed in Meriden on June 20 (RS). The strong breeding population of Cliff Swallows in the Housatonic valley was anchored by a colony at Shepaug Dam with 150+ adults and young; it still had five active nests on July 30 (DRo et al.). Elsewhere, up to 10 were nesting at Colebrook Reservoir (RN). A Horned Lark June 26 at Sikorsky Airport in Stratford was at one of just a few known nesting sites in the state (CB). Two Common Ravens were present all summer at Shepaug dam (DRo et al.). Fish Crows are noted for forming colonies, which explains a high inland count of 18 in the vicinity of Bantam Lake in Litchfield on June 12 (DRo).

Up to 12 Red-breasted Nuthatches present in the Catlin Woods area of White Memorial were probably local breeders (DRo et al.). At White Memorial, one of the state's best inland colonies of Marsh

Wren held up to 25 birds during the season (DRo et al.). White Memorial was also a stronghold for breeding Golden-crowned Kinglets, with up to 12 present and three nests located (DRo et al.). The thrush count from a property-wide survey June 12 at White Memorial gives a good picture of the ratio in heavily forested Northwest Connecticut: Veery, 206; Hermit Thrush, 37; Wood Thrush, 99. The vireo numbers from the same survey were: Blue-headed, 13; Yellow-throated, 26; Warbling, 18; and Red-eyed, 161. Single White-eyed Vireos were at Station 43 on June 5 (CE) and in New Canaan June 13 (FM).

Brewster's Warblers were present in Woodbury (RN) and Morris on June 13 (EA). A Lawrence's Warbler was found in New Hartford in July (FZ et al.). The only Golden-winged Warbler noted away from Kent was at White Memorial June 13 (DRo). Breeding season Northern Parulas turned up in North Woodbury June 6 (RBI) and at Heron Pond in Litchfield June 13-14 (RN); another was at New Canaan Nature Center June 12 (DRd). How many Pine Warblers could you find breeding if you searched the best habitat? How about 30-40 in the Woodbury-Roxbury area (RN) and 75+ in the White Memorial-Litchfield area (DRo,RN). South of their stronghold at River Road in Kent, two Cerulean Warblers were found at River Road in Roxbury (LW) and one was at Shepaug dam in Southbury (DRo); in the east,

four males and a female were noted June 13 in Chaplin (MS). Two singing male Kentucky Warblers were found in June near Lord's Cove (PCo). A Yellow-breasted Chat was territorial in Lyme in June (PCo).

At White Memorial the property-wide survey on June 12 produced the following warbler numbers: Yellow, 143; Chestnut-sided, 91; Magnolia, 6; Black-throated Blue, 8; Yellow-rumped, 22; Black-throated Green, 32; Blackburnian, 18; Pine, 40; Black-and-White, 59; American Redstart, 89; Ovenbird, 135; Northern Waterthrush, 24; Louisiana Waterthrush, 10; Common Yellowthroat, 128; and Canada, 20. A farm on the Woodbury-Roxbury line produced two breeding pairs of Savannah Sparrows (AD et al.). A field in Manchester held three singing Grasshopper Sparrows July 3 (PCo), and four singing males were noted at Windham Airport (MS). Breeding season Dark-eyed Juncos were found at three locations in Litchfield, including six in the Cranberry Pond area of White Memorial (DRo et al.), and one was in North Woodbury (RN). A White-throated Sparrow was on Cranberry Pond Trail in White Memorial on June 12 (DRo). A good concentration of Orchard Orioles in Southbury included up to five at Southbury Training School and up to eight at Shepaug dam (RN et al.).

[Editor's Note: Reports of rare or unusual bird species in Con-

necticut (species marked with an asterisk on the most recent COA checklist) require that documentation be submitted to the secretary of the Avian Records Committee of Connecticut (Mark Szantyr, 145 Farmington Ave., Waterbury, CT 06710) if they are to be included in the field notes.]

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PHOTO CHALLENGE

Julian Hough

ANSWER TO PHOTO CHALLENGE 29

Out birding along the shore, immediately after the passage of a hurricane, you notice a dark bird in the Sound, heading directly toward you. Its dark upperparts, languid flight and rakish appearance suggest a tern, but it doesn't feel quite right for Black Tern. As the bird draws closer, you notice its whitish underwings and pale forehead, and realize it is one of the southern tropical terns, Sooty or Bridled. It is hard to judge size on this lone bird and we must quickly assess plumage features. The white forehead is obvious on both species, but it is the shape of the white patch which helps separate Bridled from Sooty. On Bridled, the white patch continues in as narrow band across the lores and behind the eye, whereas on Sooty Tern, the white forehead patch is broader across the 'nose' and doesn't extend back beyond the eye as in Bridled. In reality, without experience, this feature may be difficult to assess on flying birds, especially distant ones. To me, one of the best features



to concentrate on is the difference in the distribution of light and dark on the underside of the primaries. On Sooty Tern, the white underwing coverts end rather abruptly at the greater primary coverts and offer a good contrast with the darker primary bases. On Bridled, the pale underwing extends further along the bases of the outer primaries

creating less of a contrast at the 'elbow' and gives the appearance that the white extends further along the undersides of the primaries. Also, Sooty Terns, even in bright light look black while Bridled's being browner, lack the sharp contrast often shown by distant Sooties and look 'washed-out' or gray, particularly at a distance. The broad forehead patch, distinctive underwing pattern, and 'black and white' appearance of this month's bird fit perfectly with Sooty Tern. This adult was photographed by me on the Dry Tortugas in April 1997.

JULIAN HOUGH, 21 Walnut St., Naugatuck, CT 06770



Photo Challenge 30. Identify the species. Answer next issue.

THE CONNECTICUT WARBLER

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Send manuscripts to the Editor. Please type double spaced with ample margins, on one side of a sheet. Submit a copy on a computer disk, if possible. Style should follow usage in recent issues. All manuscripts receive peer review.

Illustrations and photographs are needed and welcome. Line art of Connecticut and regional birds should be submitted as good quality prints or in original form. All submitted materials will be returned. We can use good quality photographs of birds unaccompanied by an article but with caption including species, date, locality, and other pertinent information.

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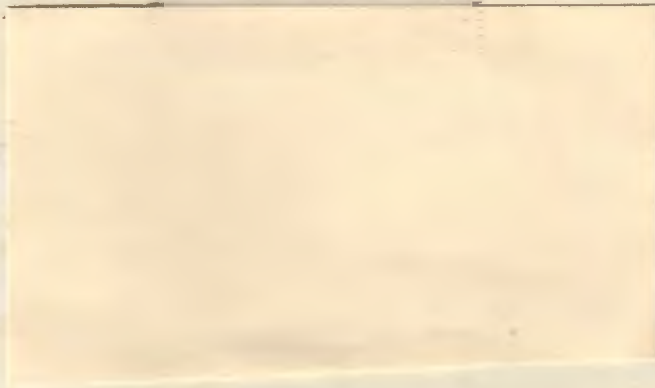
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THE CONNECTICUT WARBLER

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ABOUT OUR COVER

Northern Harrier (*Circud cyaneus*)

by Paul Carrier

Paul Carrier, our cover artist for this issue, has contributed artwork for a number of issues of *The Connecticut Warbler*, both the front cover as well as illustrations for articles. Besides his work as a freelance artist, he also enjoys field birding, and lead trips for the Hartford Audubon Society.

Paul is a member of the North American Bluebird Society, and as such, he keeps track of and maintains 180 bluebird houses. He makes his home in Harwinton, Connecticut.

IDENTIFICATION AND STATUS OF NELSON'S GULL IN CONNECTICUT

Patrick Comins

PROBLEM

Nelson's Gulls, hybrids of Herring Gull X Glaucous Gull (*Larus argentatus* *Larus hyerboreus*), are rare but regular winter visitors to Connecticut. The status of this hybrid in the state may be clouded by identification difficulties. The variable appearance of Nelson's Gulls, combined with normal plumage variation in Herring Gulls (chiefly in immature plumages) can make the identification of some individuals problematic. Typical birds, and more Glaucous-like individuals, are generally straightforward, but birds showing characteristics that lean towards the Herring Gull extreme can cause problems. Occurrence of Nelson's Gull in the state also has implications for identification of other, rarer species such as Thayer's Gull and the, as yet unrecorded in the east, Glaucous-winged Gull. Birders should be aware of the possibility of Nelson's Gull in the winter.

DISCUSSION

The form Nelson's Gull has been known in North America since at least 1884. It was first described by Henshaw and probably named for Dr. Edward Nelson. At least until 1925 some authorities even believed it to be a separate species. Nelson's Gulls are now thought to result from hybrid pairing between Herring and Glaucous Gulls.

Hybridization within the genus *Larus* (the gulls) is well documented. The large gull species are closely related genetically, and the ability of gulls to travel great distances increases opportunity for hybridization. The most common recognizable hybrid combination in New England is that of Herring Gulls and Glaucous Gulls, i.e., Nelson's Gull. Think of this name in the same way hybrid Blue-winged and Golden-winged Warblers are called Brewster's or Lawrence's Warblers. Like that hybrid combination, Nelson's Gulls are variable in appearance. Ingolfsson developed a "hybrid index" based on observations of hybrid offspring between Herring Gulls and Glaucous Gulls in Iceland, ranging from having primaries indistinguishable from pure Herring Gull, to having all white primaries like a Glaucous Gull. Other features of size and structure also were intermediate between those of the parental

species. Hybrid offspring can fall anywhere in the middle of the scale on many features. This may be partly due to back crossed hybrids (that is, hybrids breeding with members of either parental species).

OCCURRENCE

Most Nelson's Gulls in Connecticut might be expected to have come from the nearest area of overlap of the breeding ranges of the two parental species, that is, northern Labrador, extreme northern Quebec, the northeastern shore of Hudson Bay, and Baffin Island. The ranges of these two species also overlap in northern Canada farther to the west, as well as in parts of Alaska. Individuals of northwestern origin can not be ruled out in Connecticut. The possibility of extralimital nesting individuals of either species could also result in Nelson's Gull offspring. Furthermore, a bird of Icelandic origin would not be impossible in our area.

For some time, Nelson's Gulls were discussed, but rarely observed in the state. Records for their occurrence are difficult to find because they have not been considered a review species by the Connecticut Avian Records Committee. In the last few winters, sightings of Nelson's Gulls at the Manchester Landfill have involved mostly first-year individuals, but also second-year and at least one adult. The recent heightened interest in gull watching may account for the increased sightings, but many occurrences of Nelson's Gulls may still go unreported.

In February of 1998 we got lucky. During the COA Gull Identification Workshop at the Manchester Landfill, with many experienced gull observers present, a beautiful example of a first-basic Nelson's Gull briefly appeared. The large group of birders set out to document a Thayer's Gull discovered the previous day (Hough, 1998). While we were looking for the Thayer's, a large first-year Thayer's-like gull flew in to the garbage heap. It was first thought to be a Glaucous Gull, as in flight it appeared white-winged from below. Julian Hough, however, had seen the upperwings well, and proclaimed "If that is a Glaucous Gull, then I am a Dutchman" (which was a more meaningful statement when heard in its original British accent). Some others who had seen the upperwings thought perhaps this was the bird called a Thayer's Gull the previous day. That possibility quickly dissolved when we saw the big bill and head resembling in size those of a Glaucous Gull. If the wingtips had not been seen the bird could easily have been mistaken for a Glaucous. However, the primaries showed that the bird was a Nelson's. It had a pale brown wash in the outer primaries

that contrasted darker than the rest of the upperparts, recalling a pale Herring Gull. A pure Glaucous Gull would never show such a pattern. This Manchester bird was a classic example of a Nelson's Gull and the easiest form of this hybrid to identify in the field. What luck, and with so many birders present! For many of them it was their first definite Nelson's Gull.

In the winter of 1998-1999, I spent much time observing gulls the Manchester landfill. I recorded the first, second and possibly third Nelson's Gulls of the season in December with photographs as well as video; all were first-basic individuals. The last candidate Nelson's was observed in April. In all, as many as eight separate individuals were observed, including six first-year birds, one second-year, and one adult. All six first-year birds were either photographed or video taped, and two separate first-year individuals were observed during the COA Gull Identification Seminar in February. We now had hard evidence of this bird's occurrence in our state. Surprisingly, the numbers recorded that winter were very similar to the numbers of pure Glaucous Gulls in Manchester. Perhaps that winter was unusual, but one might surmise that Nelson's Gull may possibly have a status similar to Glaucous Gulls in Con-



Photo 1. A fairly typical first-basic Nelson's Gull photographed in February, 1999 at the Manchester Landfill. Note the Glaucous-patterned bill (with little gonydeal bulge), the pale eyering, pale ground color, the pale-fringed primaries, and tertials with internal mottling, that contrast paler than the primaries. *Photo by Patrick M. Comins.*

necticut, that is, as a rare but regular winter visitor and migrant, occurring chiefly between November and early April (although Glaucous Gulls have been recorded as early as late October and as late as May in Connecticut). Similar dates of occurrence might be expected for both Glaucous and Nelson's Gulls. Out of season, a leucistic, albino, extremely faded, or worn Herring Gull must be ruled out before considering the possibility of a Nelson's Gull or Glaucous Gull. Even if the winter of 1998-99 was unusual in the number of hybrids present, Nelson's Gulls are probably at least semi-regular in Connecticut.

The latest chapter in this story came in December 1999 when as many as two first-year, two second-year, and one adult Nelson's Gulls were observed in Manchester. Both second-year birds were photographed, and both were observed during the Hartford Christmas Bird Count by David Sibley, Chris Elphick, and myself. One wonders if these second-year birds were seen the previous winter as birds of the year. The closing of the Manchester Landfill in January 2000 could make it more difficult to find either Glaucous or Nelson's Gulls in the state in the future.

A BRIEF NOTE ON AGING GULLS

Accurate aging is essential for gull identification. Whether a bird is a first, second, third, fourth-year, or adult, can greatly affect the appearance of the larger gulls. State of molt, and whether the gull is in alternate or basic (summer or winter) plumage is important as well. For example, Herring Gulls molt their primary feathers in the late summer and early fall. Birds missing the outer primaries can appear to have less black in the wingtips, or even appear "white-winged" at a distance. Also, throughout the fall and early winter, a faded Herring Gull retaining first-alternate plumage can resemble an extremely pale first-basic bird which would be a year younger. Often retained plumage shows extremely worn feathers. Practicing aging of gulls of the more common species can come in handy when confronted with a possibly rare gull. Going through your local flock of Herring, Great Black-backed, and Ring-billed Gulls and aging each individual can be advantageous when you do encounter a rarity.

IDENTIFICATION

The key to identifying Nelson's Gulls of all ages is to look for features that are intermediate between those of Herring Gull and Glaucous Gull, and then be able to eliminate aberrant individuals of either species.

JUVENILE / FIRST-BASIC / FIRST-ALTERNATE PLUMAGE

Because of gull population dynamics and different winter ranges for adults as opposed to immatures, most Glaucous Gulls in Connecticut are birds that hatched the previous summer, i.e., juvenile or first-basic birds. By the time they head back north some have changed into first-alternate plumage. The same would be true of Nelson's Gulls.

Often the first impression of a Nelson's Gull is that of a Glaucous Gull that does not appear quite right. Typical first-basic Nelson's Gulls, like the one observed at the 1998 identification seminar, look much like a Glaucous Gull, i.e., large birds with a Glaucous-like bill, tan or brown in the outer primaries, a prominent secondary bar and a tan or brown tail, all of which contrast darker than the rest of the plumage. Any first-year bird that at first appears to be a Glaucous Gull, but shows these features, or has outer primaries darker than the inner, is likely to be a Nelson's Gull. This is especially true if the outer primaries are darker than the color of the rest of the upperparts. The presence of a secondary bar (a darker line along the trailing edge of the wing caused by contrast between darker secondaries and the paler wing coverts and inner primaries) or tail that contrasts darker than the rest of the upperparts in a Glaucous-like individual are almost certainly signs of hybridity. Those features should be absent in a pure Glaucous Gull. Additionally, a blackish area around the eye or on the ear coverts would be unusual on an immature Glaucous Gull. Problems may arise for individuals that are more like Herring Gulls. Birds with primaries only slightly paler than in Herring Gulls can be confusing. It is best to rely on a combination of several features for such birds, or leave them unidentified.

Larger size: In general, most Nelson's Gulls would be expected to be large compared with Herring Gulls because Glaucous Gulls average larger than Herrings. Care must be taken when comparing sizes of gulls, or any birds. Optical effects can distort sizes, and there can be marked sexual dimorphism in gulls with females at times much smaller than males. In addition there may be geographic and individual variation. Consequently one can encounter runt Glaucous Gulls or monstrously large Herring Gulls. Large size, while not an absolute necessity for a Nelson's Gull, does not hurt the case. Smaller-sized individuals may be better left unidentified unless a combination of other features clearly points to a Nelson's Gull.

Pale fringed primaries, primary pattern in flight: Even the darkest-primaried Nelson's Gulls in first-year plumage should

have pale fringed primaries. Pure Herring Gulls should have dark primaries right to the feather tips (at least until some birds begin to be faded and worn late in the winter season). Nelson's Gulls can appear completely white-winged from below, with the pale secondary bar and markings in the primaries only seen from above. Compared with Herring Gulls, Nelson's Gulls can also have noticeably larger translucent inner primary 'windows' which would be most obvious when seen from below.

Absence of, or reduced dark secondary bar in flight in Herring-like individuals First-year Herring Gulls should have secondaries darker than the rest of the wing, excluding the outer primaries. This is more apparent from above than below. Any first-year Herring-like gull that lacks a prominent secondary bar in flight should be examined for the possibility of Nelson's Gull, similarly, a Glaucous-like individual with a prominent secondary bar would also point to a Nelson's Gull.

Extensively barred or pale tertials, tail pattern: Herring Gulls should have extensively dark tertials, with at most small pale fringing on the edges. Any pale Herring Gull with extensively barred tertials, or mottled tertial centers, should be examined for the possibility of Nelson's Gull. Any definite first-year Herring-



Photo 2, bird in flight: Same bird as in Photo 1. Note Venetian blind effect on the secondary bar, caused by paler inner webs. Note large inner primary windows compared with Herring Gull, with brown confined mostly to the outer four primaries. Note pale underprimaries, and uniform pale Smithsonianus-like tail. Also note broad inner wings and relatively short outer wings. *Photo by Patrick M. Comins.*

like gull with tertials paler than the primaries (particularly before February) is also worth examining. A tail paler than the primaries in Herring-like individuals or one darker than the base color of the bird in Glaucous-like individuals may also indicate a hybrid.

Paler overall ground color of the head, neck, chest, and overall plumage is another feature that most Nelson's Gulls seem to show in juvenile and first-winter plumage as compared with Herring Gulls of the same age. This feature must be used with caution as immature Herring Gulls can be remarkably variable.

Bill Color, size and shape: All first-year Glaucous Gulls have clean cut dark tipped bills, with more dark apparent on the lower mandible and extensive pinkish (pinkish-flesh to horn-colored) bases to the bills. Most Herring Gulls of the same age have mostly dark bills that fade towards the base as the winter wears on, but there is individual variation. Nelson's Gulls in our area generally have Glaucous-like bill patterns, but in unusual cases, they may run the gamut from Glaucous-like to nearly dark-billed. Being completely dark-billed would be quite unusual.

Bill pattern is clearly not enough to identify a Nelson's Gull, but size and shape are also relevant. Glaucous Gulls generally have thick, long bills with little gonydeal bulge, in contrast to Herring Gull's relatively smaller, shorter bills with prominent gonydeal bulges. Nelson's Gulls should be generally large billed with reduced gonydeal bulges compared with Herring Gulls, though this may vary from individual to individual, and could be considered at best additional supporting evidence.

Eye-ring, size of eye: First-winter Nelson's Gulls often show a whitish eye-ring because the feathers around the eye are paler than the rest of the head plumage. This feature is also common at this age in the white-winged species, Glaucous and Iceland. It is less prevalent in similarly aged Herring Gulls. This feature may not occur in all Nelson's Gulls, and may occur in some Herring Gulls so it is best used only as additional supporting evidence.

The relative size of the eye may also be a clue. Glaucous Gulls often have relatively small eyes compared with other species. This is especially apparent when compared with the overall length of the bill. A small-eyed Herring-like individual, or a large-eyed Glaucous-like individual, might be a Nelson's Gull. Relative eye-size is not age dependent, but can appear more striking in dark-irised young birds.

Wing extension, overall shape: Glaucous Gulls are generally plump, powerful butterballs of gulls, with powerful pectoral muscles often giving them a 'pot bellied' appearance. The short

wing extension of Glaucous Gulls adds to the round, stout look. The relatively short primaries also give Glaucous Gulls markedly short outer wings contrasting with markedly long, broad innerwings in flight. These features also seem to be common in Nelson's Gulls, but long-primaried individuals can present problems, especially when the identification of Thayer's Gulls is considered. These features should also be consistent throughout the various ages of Nelson's Gulls (beware of individuals molting primaries), but again should only be considered as additional supporting evidence.

A final clue, considered anecdotal at best, would be behavior. Glaucous Gulls seem generally more aggressive than Herring Gulls, often even holding their own against the "super gull" Great Black-backed Gull. Nelson's Gulls can also be similarly aggressive and hardy.

OLDER SUB-ADULT BIRDS AND ADULTS

By March many immature gulls become quite faded and ragged looking, remarkably so in some individuals. By this time, first-alternate plumaged birds are also seen. Thankfully, Nelson's



Photo 3: One of the first Nelson's Gulls observed at the landfill in the winter of 1998-9. Photo taken in December 1998. A nearly prototypical first-basic Nelson's Gull. If only they all looked like this bird does. Obviously not a Glaucous Gull and obviously not a Herring Gull. Note the round, powerful jizz, pot-bellied appearance, accentuated by short primary and wing projection. This bird was quite large.

Photo by Patrick M. Comins.

Gulls also should become similarly worn and faded, often markedly pale. As the season progresses extreme caution must be taken in the identifying abnormally pale Herring-type Gulls.

Older immature individuals can present their own problems. Second-year birds in particular are quite variable. Size, bill shape, and overall structure remain unchanged, but features such as primary color, tertials, bill color, and overall ground color become much less reliable. If adult gray shows on the mantle/scapular region, the shade of gray may be slightly paler than on Herring Gulls. Mantle color of gulls, however, can be an extremely tricky field mark, affected by light angle and individual variation. Many Nelson's Gulls, especially the larger paler specimens, will still be readily separable in second-year plumages, but the intermediate individuals are probably better left unidentified.

From third-winter onward primary color becomes the most reliable feature. By this age primary color in Herring Gulls becomes more uniform, and noticeably paler individuals would be extremely unusual. Partially albino Herring Gulls have, however, been recorded with pure white primaries and normal overall coloring on the rest of the plumage. One such individual has been seen for several winters in Stamford. In such birds the contrast between the pure white primaries and normally colored plumage should be so striking as to indicate immediately partial albinism. Leucism, or paler than normal plumage, is another possibility at all ages. Leucism may rarely occur in gulls, but such individuals should appear otherwise normal in features such as size, structure and bill shape and pattern. Age independent features such as size should always be checked to confirm identification.

The best feature for separating Nelson's Gulls from Glaucous Gulls at any age is that Glaucous Gulls have white primaries, or in the darkest individual immature birds, outer primaries that are at least paler than the rest of the bird. Any adult Glaucous-like gull with dark markings in the outer primaries would be a Nelson's Gull. In more Herring-like individuals the distinctions are trickier. Reduced black in the primaries or increased white in the primaries should be apparent on adult birds, particularly when seen from below. It helps however if the black in the primaries is actually gray; the paler the better. Adult plumage Nelson's may also have reduced, paler or finer streaking on the head, but this is only reliable from December through January).

Beware Kumlien's Iceland Gull. Nearly all Iceland Gulls in North America are "Kumlien's Gulls". Primary tip color in Kumlien's can be extremely variable, from nearly pure white to

nearly as dark as Herring Gull. Kumlien's should be notably smaller than expected for any Nelson's Gull. Some Kumlien's can be larger and may seem quite large compared with smaller than normal Herring Gulls. The bill should be relatively smaller, shorter, and darker in most immature plumages, the eye relatively larger, the head should be more rounded and the wing extensions should be longer. In flight Kumlien's generally have relatively much longer outerwings than Nelson's Gulls. Also, Kumlien's fly with typically faster wingbeats than a Herring or Glaucous Gull.

IMPLICATIONS OF NELSON'S GULLS IN IDENTIFICATION OF RARER SPECIES:

Thayer's Gull

Size and structure should readily separate Thayer's Gulls from Nelson's Gulls. Size can be difficult to judge and can be variable, so great care must be taken when determining size. Occasional smaller individual Nelson's Gulls, especially if they have a dark



Photo 4: One of two second-basis Nelson's Gulls recorded on the December 18th Christmas Count. Note Venetian blind effect on pale outer primaries and on pale secondary bar. Primaries and secondaries were pale enough to easily rule out Herring Gull, even in second-year plumage. Note large Glaucous-like bill, flat crown, and broad innerwings helping to eliminate the possibility of leucistic Herring Gull. Note huge size compared with nearby Herring Gulls. *Photo by Patrick M. Comins.*

basal area on the bill, can pose a problem in identifying Thayer's Gull in our area. A pale first-year gull photographed at the Manchester landfill in the winter of 1998-99 was quite small, with a mostly dark bill and long wing extension. Although that bird still remains unidentified, experienced birders who reviewed the photographs, are inclined to consider it to be a small Nelson's Gull rather than a Thayer's Gull. The possibility of such individuals makes it even more important to exercise care in identification of Thayer's Gulls out of range. For a possible Thayer's to pass muster, it must fit that form in every detail. Many references cover the identification of Thayer's in depth and some are cited in the references, but a few points of separation are reviewed here. Aside from being smaller in all respects the bill should be relatively small in a Thayer's, generally smaller than in an average Herring. The bill color should differ in immature plumages, as Thayer's usually have an all or mostly black bill throughout the first winter. This black is generally more extensive than that on Herring Gulls throughout most of the winter and is held longer, being generally darker than in Herring second-year plumages. The upperparts (secondary coverts, tertials, and scapulars) should also be more finely checkered than in any Nelson's. In adult plumage, Thayer's Gulls should have black in the upper primaries and dark irises whereas Nelson's Gulls should be "pale-eyed". Nelson's Gulls may also resemble Glaucous-winged Gulls, so the possibility of Nelson's must also be considered before identifying an extralimital Glaucous-winged.

SUMMARY

Most Nelson's Gulls in New England should be readily identifiable in the field by a combination of features intermediate between those of the parental species. The most reliably identified individuals would be large, pale, first-basic, or adult plumaged individuals. Intermediate individuals may present problems. In birds that are not clearly intermediate between the parental species, it is best to rely on a combination of several features to make positive identification. How many features must match in a marginal individual in order to pass the muster as a Nelson's Gull is not quite known, but it is probably best to leave a gull unidentified if in doubt.

Nelson's Gulls are probably more common in our area than such species as Thayer's Gulls or Glaucous-winged Gulls. Identification of such rarer species in our area requires full consideration of the possibility of an unusual Nelson's Gull. Above all, don't be

disappointed if the bird you thought you could tick off as a Glaucous Gull turns out to be a Nelson's Gull. Consider it a great opportunity to learn more about gulls, and enjoy the opportunity to observe these rare and often beautiful birds.

For more images of Nelson's Gulls from Manchester, as well as color versions of the photos that appear in this article, see the COA's website at: <<http://www.ctbirding.org>>.

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Age	Dates seen	Comments
first-year	2/14/98	COA Gull ID Seminar
first-year	12/21,22,28/98, 1/22/99, 3/1/99	Thayer's-like individual photographed, videotaped
first-year	12/21,22/98	photographed, videotaped
first-year	12/22/98	photographed
adult	1/22/99	
first-year	January, 1999	videotaped, date unknown
first-year	1/18,21/99,2/9,13/99	photographed
second-year	January, 1999	videotaped, date unknown
first-year	2/12,13,19,23/99	photographed
first-year	2/27/99	photographed
first-year	4/2/99	videotaped,dark-billed ind.
first-year	12/2,6/99	photographed videotaped European origin?
second-year	12/2/99-12/18/99	photographed, videotaped
first-year	12/6/99	
first-year	12/7/99	
second-year	12/18,31/99	photographed
adult	December 1999	date unknown

SITE GUIDE: BENT OF THE RIVER Southbury

Dwight G. Smith, Arnold Devine, and Polly Brody

INTRODUCTION

The 647-acre Bent of the River Audubon Sanctuary in Southbury takes its name from the hairpin turn of the Pomperaug River which cuts through it. Open from dawn to dusk throughout the year, the facility offers a wide variety of habitats—fields, riverine and riverside growth, floodplains, scrub-shrub habitat, and mixed and conifer woodlands. This National Audubon Society Sanctuary is active throughout the year, hosting activities as varied as full moon walks, nature walks, owl prowls, trail maintenance days, visiting lecturers, and numerous other events in addition to a wide variety of birding opportunities.

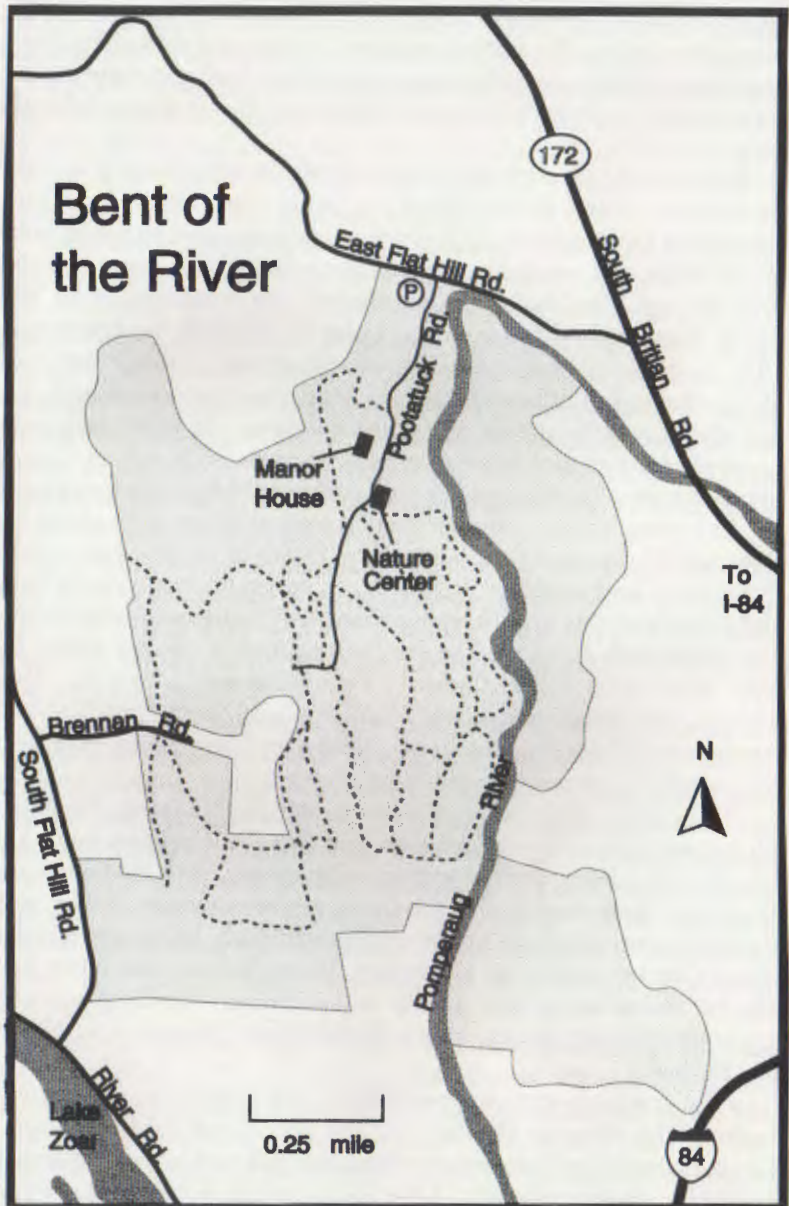
Ten miles of trails provide access to the many and varied habitats in this Sanctuary. Spring and fall offer the best birding opportunities, but a variety of nesting species make the breeding season interesting as well. Spring migration daily species tallies can be particularly impressive. Polly Brody, who frequently birds this property, routinely logs between 60 and 70 species on a good spring day. During one morning in May, 1998, she tallied 96 species at the sanctuary. Some notable nesting species include Common Merganser, Least and Acadian Flycatchers, Winter Wren, Chestnut-sided, Prairie, Hooded, and Canada Warblers, Orchard and Baltimore Orioles, and Savannah Sparrow. Winter birding can be slower, producing primarily mixed foraging flocks and an occasional woodpecker species.

DIRECTIONS

From Interstate 84 take Exit 14 and travel north on Route 172 (South Britain Road) for 1.1 miles. Turn left onto East Flathill Road and continue for 0.3 miles to the entrance on the left, marked by a sign "Bent of the River Audubon Center, Est. 1993." Pull into the driveway and park in the grassy lot immediately on the right.

BIRDING

The parking lot abuts a grassy field which continues around to the west as part of a horse farm. The gravel roadway (Potatuck Road) leads to the Visitor Center, about 0.4 miles down the road.



Begin birding by checking the fields and nest boxes strategically placed along the fence posts for Tree Swallow and Eastern Bluebird which may be sitting on the boxes or hawking insects over the meadows during the nesting season. The open fields also offer a vantage point from which to search the skies for hawks during migration and Turkey Vulture and Red-tailed Hawk throughout the year.

From spring through fall Red-winged Blackbirds and Common Grackles are often flitting about the fields while chattering Chimney Swifts fly overhead. Other possible spring and summer birds in the fields and meadows include Song Sparrow, Chipping Sparrow, Eastern Meadowlark, and Bobolink. An occasional Wild Turkey or Ring-necked Pheasant may also be spotted, the latter most often in the late evening or very early morning hours. From mid-March through April and into early May American Woodcock sing and display in the fields along the roadway. In good migration years as many as nine birds may be seen or heard at a time. One or two pairs usually nest in early successional fields on the property.

In spring, the sycamores, maples and other growth along the river can be especially productive for a variety of thrushes, vireos, flycatchers, and warblers. In mid-April, migrants can include Palm and Pine Warblers and Ruby-crowned and Golden-crowned Kinglets. From late-April on, the shrubs and lower canopy along the way may hold Gray Catbird, Yellow-rumped, Yellow, Blue-winged, and Black-and-White Warblers, and American Redstart. American Goldfinch, Blue Jay, American Crow, and Northern Mockingbird are possible any time of year.

The canopy high above the river may yield Eastern Kingbird, Blue-gray Gnatcatcher, Cerulean and Parula Warblers, and Yellow-throated Vireo during spring and summer. Both Red-eyed and Warbling Vireo nest in this stretch of riparian woods. Other nesting species may include Louisiana Waterthrush, Baltimore and Orchard Orioles, and Least Flycatcher. Woodpeckers which can usually be found along this stretch and elsewhere on the Sanctuary grounds include Downy, Hairy, Red-bellied, Pileated, and Northern Flicker.

The roadway enters a woodland and continues uphill, overlooking the river to the left. At the woodland-field interface a Great Horned Owl has been spotted, but this owl, of course, can be anywhere on the property. After a short walk, lawns and gardens which are part of the main complex of buildings, appear on the right. The lawns are graced with shade and ornamentals such as magnolia, apple, and lilac, which provide optimum habitat for a

variety of nesting birds. Mourning Dove, Northern Cardinal, Gray Catbird, and Eastern Phoebe can usually be found in the lower branches while House Finch, Rose-breasted Grosbeak, Indigo Bunting, and an assortment of other songbirds forage in the upper canopy. The area around the lawn and tennis courts can hold a variety of warblers during both spring and fall migration: Bay-breasted, Black-throated Green, Black-throated Blue, Parula, Blue-winged, and Yellow Warblers, and Common Yellowthroat are all possible during peak migration periods.

The Visitor Center is located in the large red barn, now remodeled to house a small auditorium, display cases, and offices, along with a balcony overlooking several bird feeders. Stop in and look over the daily checklists of birds and butterflies (in season as appropriate) which are posted on the bulletin board. The oversized second story balcony offers an excellent vantage point from which to check out activity at the bird feeders. Throughout the year the feeders can attract a variety of species, along with eastern chipmunks and gray squirrels, both of which patrol the grounds looking for discarded or spilled seed.

In summer, wildlife enthusiasts will enjoy the long, glistening black snakes which are often seen weaving in and out of the big stone wall doing their own bit of birding, although probably they more often encounter a chipmunk. Their movements and behavior are interesting to watch.

A sampling of the species that "hang out" at the feeder may include White-breasted Nuthatch, Rose-breasted Grosbeak, Brown-headed Cowbird, House and Carolina Wrens. In late spring and summer you can also add Ruby-throated Hummingbird to the feeder tally. In winter, some birds that frequent the feeding station include White-breasted Nuthatch, American Goldfinch, Evening Grosbeak (occasionally), American Tree Sparrow, White-throated Sparrow, Dark-eyed Junco, Black-capped Chickadee, Tufted Titmouse, and Purple Finch. Sometimes a Red-breasted Nuthatch joins the crew.

Upon leaving the Visitor Center you have several options; either continue along the roadway up into the woods or work down across the lawn and pick up the trail that parallels the river. We recommend continuing along the river trail, which usually provides the best seasonal sampling of birds at the Sanctuary, especially migrant warblers, thrushes, vireos, and waterbirds. This area has also proven productive for rarities such as Olive-sided Flycatcher, which has been spotted twice during migration.

Common Merganser nests along the river in the tree hollows of

the large sycamores. Drakes are most often spotted on the river or sitting on the horizontal limbs of the sycamores that line the river. Other potential inhabitants of these tree holes are Wood Duck, Eastern Screech Owl, and Barred Owl.

Check the river shallows and shore line for waterbirds; Great Blue, Green, and Black-crowned Night Herons (rare) have been tallied, the latter, of course, seen most often in the late evening hours. Belted Kingfisher can be glimpsed or more often heard rattling while foraging along the river. Spotted and Solitary Sandpipers, and Northern Waterthrush also occur along the river in season. Flocks of Canada Geese commonly occur while Ring-necked Duck, Hooded Merganser, and others ducks may turn up, especially in spring.

Fall migrants occurring among the trees and scrub may include Brown Thrasher, and White-throated and White-crowned (rare) Sparrows. By late October, however, birding variety decreases, and for the remainder of the year birding staples basically include Eastern Bluebird, Hairy, Downy, and Red-bellied Woodpecker, Black-capped Chickadee, and Northern Cardinal. Throughout winter this area may also yield owls, which often respond to vocal imitations of their calls: Great Horned, Barred, and Eastern Screech Owls may all respond almost anytime from dusk to dawn but remember to call the owls in order of size from smallest to largest in order to get the best responses.

Further along, the river trail cuts through a small hemlock woods, which has proven to be a good locale for nesting and migrant Black-throated Green Warbler and Acadian Flycatcher. Just beyond the hemlock stand the trail cuts sharply right, and continues uphill through fields, some of which are now covered with a scrubby growth of red cedars, barberry, and other brambles. In spring and summer this area is a great place to find nesting Chestnut-sided, Blue-winged, and Prairie Warblers along with White-eyed Vireo (uncommon), Eastern Towhee, Field and Song Sparrows, and Purple Finch. In fall, the fields of little bluestem and goldenrod and their shrubby edge offer good movements of migrant warblers and sparrows.

Several branching trails offer access to much of the upland woodlands, which consist of varying mixtures of young deciduous growth, mixed, and conifer woods, the latter mostly of hemlock. If you elect to return to the visitor center, turn right at the end of the field and follow the roadway (actually Potatuck Road) down the hillside through a predominately hemlock stand on the left and a mixed woodland on your right. During migration, foraging flocks

of warblers work both woodland types. Blackpoll, Black-throated Green, Nashville, Blackburnian, and Magnolia Warblers all are likely woodland visitors, while less common species such as Cerulean Warbler have occurred.

Interesting species nesting on the hillside woodlands include Worm-eating and Hooded Warblers, and Winter Wren. Other woodland nesting species should include Eastern Wood-Pewee, Great Crested Flycatcher, Wood Thrush, Veery, Ovenbird, Rose-breasted Grosbeak, and Scarlet Tanager. The Sanctuary's first Mourning Warbler was also discovered along this stretch of roadway.

Winter birding can be slow except for woodpeckers and the occasional Pine Siskin, Red and White-winged Crossbills (both rare). The woodpeckers are year-round residents. The winter finches are erratic. Crossbills are rare and siskins are generally uncommon to rare, depending on the year. In some winters siskins occur in numbers.

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STATUS AND DISTRIBUTION: SEASONAL EXTREME DATES FOR CONNECTICUT BIRDS IN THE 1990's

Greg Hanisek

There is more to identifying birds than field marks. Status and distribution go hand in hand with physical appearance when we attempt to increase our familiarity with Connecticut's avifauna. Of course, a bird is what it is; its physical characteristics define its identity. Yet seasonal status and geographical distribution play key roles in telling us where and when to look for birds. They also offer important clues about when to look at a bird more carefully. If you understand a bird's normal pattern of occurrence, anything out of the ordinary should raise a red flag. For example, if you see what you think is a Swainson's Thrush in winter, you should immediately remind yourself that Hermit Thrush is the only species of spotted thrush normally occurring at that time of year. Then, you should take another look - long and careful - at the bird in question, examining it with a critical eye. If it really is a Swainson's Thrush, you've added a significant record to the annals of Connecticut field ornithology. The most up-to-date compilation of status-and-distribution data for the state is *Connecticut Birds*, by Joseph Zeranski and Thomas Baptist, but a decade's worth of information has accumulated since this volume was published in 1990. New early and late arrival dates have been published quarterly in the Field Notes section of *The Connecticut Warbler*, but finding them requires a lot of paging through back issues. This article is an attempt to pull together record dates that have been established since the publication of *Connecticut Birds*. Following are some new extreme dates in several categories:

SPRING ARRIVALS:

This is probably the category of which birders are most aware. After a long winter, we are all anxious to find spring arrivals. The process is hazy early in the season, when many of the migrants (such as blackbirds and vultures) are hardy enough to spend the winter. As the season progresses, however, we are able to track more and more species that are unequivocal arrivals from distant wintering grounds.

Little Blue Heron - 28 March 1998, New Haven

Tricolored Heron - 16 March 1991, Old Saybrook

Cattle Egret - 30 March 1997, Milford
 Glossy Ibis - 17 March 1990, Westport
 Laughing Gull - 23 March 1997, Stamford
 Common Tern - 20 April 1991, Westport
 Least Tern - 25 April 1991, Milford
 Ruby-throated Hummingbird - 9 April 1991, Groton
 Common Nighthawk - 15 April 1993, Mansfield
 Yellow-bellied Flycatcher - 4 May 1990, Newtown
 Great Crested Flycatcher - 19 April 1994, Branford
 Northern Rough-winged Swallow - 21 March 1999, Essex
 Tennessee Warbler - 9 April 1991, Storrs
 Northern Parula - 19 April 1994, Branford
 Yellow-throated Warbler - 30 March 1997, Killingworth
 Bay-breasted Warbler - 22 April 1999, Guilford
 Cerulean Warbler - 25 April 1994, Branford
 Worm-eating Warbler - 17 April 1997, Easton (tie)
 Scarlet Tanager - 17 April 1993, Westport
 Rose-breasted Grosbeak - 17 April 1993, Westport
 Indigo Bunting - 11 April 1993, Willington
 Seaside Sparrow - 2 April 1999, Madison

SPRING DEPARTURE:

This category draws little attention, partly because it involves fewer species. We can easily track the spring arrival of our Neotropical migrants, but many of them remain in Connecticut to breed. Only those species whose breeding grounds are limited to areas north of Connecticut offer unequivocal lingering dates. In-state breeders away from breeding habitat, however, such as an upland-nesting warbler on the coast, are worth noting.

Whimbrel - 13 June 1999, Milford

Snow Bunting - 2 April 1992, Willington

Red Crossbill - 7 June 1970, Simsbury*

* Predates Zeranski and Baptist, but has not been previously published.

FALL ARRIVAL:

This is the flipside of spring departure. Birds whose entire breeding ranges lie north of Connecticut provide clear-cut arrival dates. Those that nest in-state are problematic. Again, the coast offers a window on movements of upland nesters, even those that nest in Connecticut.

Yellow-bellied Flycatcher - 2 August 1990, Falkner Island

Least Flycatcher - 18 July 1996, Falkner Island

Golden-winged Warbler - 8 August 1990, Falkner Island
 Nashville Warbler - 10 August 1996, Madison
 Northern Parula - 10 August 1996, Madison
 American Redstart - 10 August 1996, Madison
 Northern Waterthrush - 2 August 1996, Stamford
 Louisiana Waterthrush - 3 August 1996, Falkner Island
 Mourning Warbler - 16 August 1996, Falkner Island

FALL DEPARTURE:

These include the lingerers that show up unexpectedly on Christmas Counts, or even later. Occasionally a species eliminates itself from this category by successfully overwintering, e.g., see Ovenbird below

Forster's Tern - 4 December 1994, Milford
 Piping Plover - 31 December 1993, Old Lyme
 Semipalmated Plover - 25 December 1993, Old Lyme
 Western Sandpiper - 2 January 1994, Old Lyme
 Long-billed Dowitcher - 1 January 1996, Bridgeport
 Stilt Sandpiper - 30 November 1983, Stratford*
 Black Skimmer - 30 November 1983, Milford*
 Common Nighthawk - 26 November 1993, Madison
 Barn Swallow - 2 December 1990, Madison
 Blue-gray Gnatcatcher - 19 November 1989, Stamford
 Blue-headed Vireo - 7 December 1997, South Windsor
 Red-eyed Vireo - 19 November 1992, Greenwich
 Golden-winged Warbler - 4 October 1997, Groton
 Tennessee Warbler - 26 November 1998, Hamden (tie)
 Nashville Warbler - 3 January 1995, Greenwich
 Chestnut-sided Warbler - 16 November 1997, Hamden
 Magnolia Warbler - 23 November 1997, New Haven
 Cape May Warbler - 18 December 1994, Westport
 Black-throated Green Warbler - 14 December 1991, Storrs
 Blackburnian Warbler - 21 December 1998, Greenwich
 Prairie Warbler - 12 November 1996, Stamford
 American Redstart - 24 December 1993, New Haven
 Scarlet Tanager - 4 December 1998, New Haven
 Blue Grosbeak - 1 November 1989, Westport

*These two records predate Zeranski and Baptist, but have not been previously published. They were provided by Mark Szantyr and are supported by photographs.

The late lingerers category includes two sets of records that require special mention:

Myiarchus flycatchers - This genus probably offers the best example of the power of status information as an aid to identification. One member of this genus, the Great Crested Flycatcher, occurs regularly in Connecticut. It is a fairly common breeder and found throughout the state. Another species, the Ash-throated Flycatcher, is a vagrant from the southwest that has been fully confirmed just twice in the state. These two species are similar in appearance, but they have very different schedules of occurrence. Most Great-crested Flycatchers have departed for the tropics by mid-September, and records after early October are rare. Northeastern records for Ash-throated Flycatcher are clustered in late November and December. Thus, any *Myiarchus* seen in late fall or winter should be examined critically, because it most likely will turn out to be an Ash-throated. In our list of recent records, it should be noted that a Great-crested Flycatcher was reported from Barn Island in Stonington 5 November 1989, a date more appropriate for Ash-throated. Lacking any descriptive detail, this record should probably be listed as *Myiarchus* species.

Ovenbird - Ovenbird has a history of December appearances in Connecticut and surrounding states, including several Christmas Count records. In 1997-98, a winter that produced a flurry of unseasonable reports, one Ovenbird was seen through mid-January in Woodbridge and another successfully wintered at a feeder in New Canaan. Also one overwintered in Simsbury at Ginny Knight's feeder in a harsh winter in 1990. In effect, that overrides all record late dates, but late records should still be reported to help establish the species' pattern of occurrence over time.

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BEHAVIOR EXHIBITED BY AN AMERICAN BITTERN

Arnold Devine, Jayma Welch, and Dwight G. Smith

On June 13, 1999, Jayma Welch and Arnold Devine were conducting wetland call-back surveys in Litchfield County, Connecticut. The survey, organized by the Connecticut Department of Environmental Protection (DEP), is an on-going project to identify and locate potential nesting locales of marsh-dwelling species. According to established procedures, participants are required to conduct the surveys from one-half hour before sunrise to 0900 hours, or from one hour before sunset until dark.

Unfortunately, on this day we had a late start, arriving at the first survey station, Long Swamp, Goshen, at approximately 0815 hours. After surveying for rails and bitterns without success, it was already later than 0900 hours. However, as the day was overcast and darker than normal, we decided to try a new survey station farther to the north. This new station was selected because Dwight Smith reported that he had heard and observed an American Bittern (*Botaurus lentiginosus*) at the location on May 29, 1999.

At approximately 1030 hours, we arrived at the southern terminus of Robbin's Swamp along Wangum Lake Brook, Canaan. Immediately after getting out of the car, we heard a Virginia Rail (*Rallus limicola*) begin calling from the adjacent marsh. We listened for a few minutes then played the Virginia Rail call-back tape. Within minutes, two Virginia Rails called from the marsh and shortly thereafter an individual scampered across the road. We were pleased with these results since it was the first time we surveyed this site. Subsequently, we tried play-back calls of Sora (*Porzana carolina*) and King Rail (*Rallus elegans*) without receiving any aural or visual responses.

By now it was approaching 1100 hours with the cloud cover slowly dissipating, but we decided to survey for American Bittern. Even if a bittern was in the area, a response was not expected this late in the morning. To our surprise, almost immediately after the tape was played, a gulping call emanated from the marsh behind us. As we turned to listen an American Bittern jumped out of the marsh about 80 meters to the northeast. The bittern began flying counter-clockwise in a rapid upward, narrowing spiral. As the bird ascended the flight became more labored with quickening wing beats

marsh. Once the bittern reached the top of the spiral, it plummeted back to the marsh in a steep dive, landing in the vicinity of its starting point. So as not to further disturb the bird we did not attempt to replay the tape-recorded call.

The American Bittern, a reclusive marsh dwelling creature, is considered an endangered breeding species in Connecticut (Connecticut Department of Environmental Protection, 1998. Connecticut's Endangered, Threatened, and Special Concern Species). Not only is the species a locally rare breeder in freshwater interior marshes within the state, its secretive habits make it difficult

to find and observe even in its preferred habitat. We were quite surprised by this uncharacteristic territorial behavior. Arnold Devine has participated in the wetland call-back survey for four years and has used tape-recorded playback to census wetland species for 15 years. Arnold Devine's experience with the American Bittern suggests that the species appears to be more active during nocturnal and crepuscular hours



Art Work by Paul Carrier

especially in the breeding season. To witness such an extraordinary behavior by such an elusive species was truly remarkable.

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BOOKS ON BIRDS

Jamie Meyers

A Century of Birding in the South Windsor Meadows. Jean H. Klein. (1999, Chapbook, 44 pg., available from the Wood Memorial Library, South Windsor, CT, \$8.95)

Most birders in our state have enjoyed the wonders afforded by a morning spent exploring the Station 43 area in South Windsor. A quick rundown of species that have been recorded there in just the past year - Rough-legged Hawk, Connecticut Warbler, Western Kingbird, Eurasian Wigeon, Northern Shrike plus nesters like both cuckoos and Least Bittern tell what a special spot this is, blessed with a diverse mixture of marsh, woodland and open field habitat that is unmatched anywhere else in Hartford County.

That's common knowledge. In *A Century of Birding in the South Windsor Meadows*, local author Jean H. Klein tells a story that many of us may not know about the history of birds - and birding - in South Windsor. It's a tale that highlights the lives of three noted naturalists whose footprints each of us walk in as we now carry birding in this special place into a third century. Just as interesting is the story it tells of the evolution of birding itself during those formative years during the latter part of the 19th and early part of the 20th centuries.

The shotgun was the ornithologist's best friend in the mid 1800's, when Dr. William Wood called South Windsor his home. His biography is rife with accounts of his collecting expeditions. Raptors appear to have been his favorite target. While this modern-day reader found some difficult reading here, it bears note that Mr. Wood contributed significantly to the ornithological knowledge of his time through his careful studies, and many of his specimens are still used as study skins at the University of Connecticut.

Charles Watson Vibert was also a master of the shotgun. As a youth, he hunted Passenger Pigeons and other game for the table and for his living. As the century turned, however, Mr. Vibert noticed the obvious decline in many species. He put down his shotgun and joined the fledgling Hartford Bird Study Club, devoting his tireless energy to the study of the birds. As "Guide, Philoso-

pher and Friend", he was a mainstay of the club in its early years, and his notes from birding all over the area but especially the "Station 41" marsh (at present-day Vibert Road) are a lasting record of the avian mix that existed there in his day. Even more significant for the modern-day birder was the realization of the "glorious tribute" suggested by

Mr. Vibert's contemporaries upon his death - the setting aside of ten acres that today is the cornerstone of the Station 43 sanctuary that we all enjoy so much.

The final biography is that of Dwight Newberry, a lifelong birder and taxonomist whose work lives on today in the collection of South Windsor's Wood Memorial Library for today's birders and non-birders alike to enjoy.

A Century of Birding ... is presented in a low-budget chapbook form, and is a quick, easy read. While there are criticisms that could be made about the booklet (the photo reproduction is fuzzy, and the margins are non-standard), it serves as an interesting historical document, and the text is rife with anecdotes that help illustrate what birding was like in its infancy. As such, it is recommended to any Connecticut birder with an interest in the past and couple of hours to spare for some light, fun reading.

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CONNECTICUT FIELD NOTES

Greg Hanisek

FALL, AUGUST 1 THROUGH NOVEMBER 30, 1999

This fall season produced a convergence of birds and birders perhaps unlike any other recorded in the annals of the state's ornithology. A quick look through these notes will reveal a stunning array of rare species, as well as a broad selection of less-common migrants and a good sampling of irruptive species from the north. The fact that so many of these birds were found and enjoyed, is a function of the growing number of active birders in the state; the fact that so many found their way into this account is a function of the Internet boom, which has greatly increased the number of persons reporting their sightings on a timely basis.

Readers should find lots to savor and ponder in this report, but they will also find the birds listed in an unfamiliar order. For the first time, the field notes follow the new taxonomic order promulgated by the American Ornithologists' Union's Check-list of North American Birds, Seventh Edition 1998.

LOONS THROUGH VULTURES

A good flight of Red-throated Loons was illustrated by counts of 200 on November 21 at Hammonasset Beach State Park in Madison, hereafter HBSP, (JG,PCo) and 140+ on November 25 at Shippan Point in Stamford (FG,PDu). There were two reports of **Pacific Loon**, both by single observers. One was seen October 19 off Sherwood Island State Park in Westport (FM), and another was reported at Harkness Memorial State Park in Waterford on November 13 (JTm). There is

one accepted state record. The staging group of Pied-billed Grebes at Bantam Lake in Litchfield topped out at 12 on November 5 (DR), and up to 20 had gathered in the Lordship area of Stratford by late November (DV). Two Red-necked Grebes were off Stamford November 14 (PDu et al.); inland one was at Bantam Lake in Litchfield November 2 (BD) and another was at Nepaug Reservoir in Canton on November 29 (JMe). In the wake of Hurricane Floyd, which had little impact on Connecticut,

four **Wilson's Storm-Petrels** were off HBSP September 18, along with an apparent unidentified shearwater (TK,DHo). The high count for Northern Gannet was 40 off HBSP November 15 (FM). A Great Cormorant was an early arrival September 19 at Avery Point in Groton (FM et al.). One of the season's most intriguing reports involved an **Anhinga** in flight over Woodbury on August 10 (CWo). Written details have been submitted to the ARCC.

American Bitterns were widespread along the coast, with the noteworthy arrival of three on September 6 at Lighthouse Point in New Haven, where they flew in from the northwest and joined one already showing itself in the marsh (GH). Two were at Station 43 in South Windsor September 30 (CEk). A Least Bittern was at Lords Cove in Lyme, a possible breeding area, September 3 (HG). The latest Snowy Egret was at Sherwood Island State Park in Westport on November 2 (FM). An immature Little Blue Heron was inland at Little Pond and Bantam Lake in Litchfield August 14-29 (DR,DT et al.). Up to five Cattle Egrets were at the reliable Kowalsky farm in Westport in August (JHu et al.), and two were at Sikorsky Airport in Stratford September 10 (GH). Single Black-crowned Night

Hérons, uncommon inland, were at White Memorial in Litchfield periodically August 3 to September 17 (DR). The high count of Yellow-crowned Night Herons was 20 on September 1 at Milford Point (FM); singles were quite late November 13 at Milford Point (SK) and November 19 at Frash Pond in Stratford (CB,PCo); and up to two were unusual for the Northeast Corner August 8-22 at Quinebaug Fish Hatchery in Central Village (RD). A Glossy Ibis was inland in Simsbury August 4 (DMa), and single Plegadis ibises, reported without details as Glossy Ibis, were found on the late dates of November 14-16 in Branford (TT) and Nov. 25-27 in Stratford (fide JHu). Amid a number of sightings of single **Black Vultures** in western Connecticut, six were noteworthy November 28 over Derby (BB); farther north two were in Torrington August 17 (RBa) and one was in Harwinton October 22 (PCa).

GEESE THROUGH FALCONS

The beat goes on for **Greater White-fronted Goose**. There were six observations involving a total of seven individuals for the season, all of them inland with Canada Geese in the central and eastern part of the state, which is the emerging pattern: two on November 25 in South Windsor (PCi,MH)

and singles November 5-7 in Sterling (RD), November 19 at Farmington meadows (PCi), November 20 in Suffield (DHa) and November 29 in Storrs (SM). A flight of 400+ Brant passed inland over Harwinton on October 12 (PCa). Five **Tundra Swans** flew over Holly Pond in Stamford on November 25 (FG,PDu). Little Pond in Litchfield held a high count of 159 Wood Ducks October 17 (DT). Gadwalls, now common along the coast, are still noteworthy at places such as Station 43 in South Windsor, where two were present November 21 (PDe). Drake **Eurasian Wigeons** were back at West Haven and Furnace Pond in East Haven by late October (EN et al.). The high count of Blue-winged Teal was 15 at two locations: on September 18 at Little Pond in Litchfield (LW) and on October 3 at a pond in Wallingford (WS). A smattering of Northern Shovelers included eight at a pond in Goshen on November 28 (MH,JMe) and up to nine at Bishop's Pond in Meriden through the end of the period (WS). Green-winged Teal was noted as early as August 19 at Aspetuck Reservoir in Easton (DV).

Bantam Lake held a good assemblage of up to eight Red-heads November 2-21 (PK et al.). A Ring-necked Duck made an early appearance August 12 at North Farms Reservoir in

Wallingford (WS), and a flock of 17 weren't far behind September 19 at Laurel Reservoir in Stamford (PDu). Greater Scaup were beginning to build up in the Sound by mid-November, when 500 were off Sachem Head in Guilford on November 15, along with 500 Surf Scoter (FM). A **Harlequin Duck** was at Cove Island Park in Stamford Oct. 28-Nov. 17 (PDu,GH). This remains a rare bird in the state, although it is becoming annual. Historically it has been much less than annual. There was the usual scattering of Black Scoters along the coast, as well as a noteworthy 35 at Nepaug Reservoir in Canton on October 25 (JMe). A White-winged Scoter was on Snipsic Lake in Tolland November 17 (CEK), and three were on Nepaug November 11 (JMe,JK). The only inland report of Long-tailed Duck (Oldsquaw) was of up to four on Bantam Lake November 4-6 (BD et al.). The only inland report of Red-breasted Merganser was of three on November 18 at Bantam Lake (EB). Another major arrival of Ruddy Ducks resulted in some impressive flocks, such as 272 at Holly Pond in Stamford on November 25 (FG,PDu), 200 at the Old Saybrook town dock November 26 (TH), 140 at Trap Falls Reservoir in Shelton on November 17 (DV) and 100 at Bantam Lake in late November (RBl).

At Lighthouse Point in New

Haven, a flight of Ospreys on August 3 produced 25 in two hours, and all appeared to be adults. Recent early reconnaissance there suggests there is a push of adults before the heavy flights of juveniles begin from late August to October (GH,MS). Late Ospreys were at Lake Saltonstall in East Haven November 23 (PCo) and at Shepaug dam in Southbury through the end of the period (RN). A group of three Northern Harriers, consisting of an adult male, an adult female and a juvenile, suggested breeding August 8 at Barn Island in Stonington, an area with appropriate habitat (DP,MS). A female Cooper's Hawk escorted four fledglings at White Memorial in Litchfield August 6 (DR). An immature Swainson's Hawk, which is now close to annual, was reported at Lake Zoar October 31 (RN). An above-average flight of Rough-legged Hawks produced six reports away from the hawk lookouts, beginning in mid-October (BL,AD,SK,DC et al.) Away from the lookouts, Golden Eagles were in New Haven October 6 (PDe), in New Canaan October 12 (FG), at HBSP November 7 (PDe et al.) and at Selden Creek in Lyme on November 21 (HG). A white Gyrfalcon was in Old Lyme October 25, with at least one report the following day (DP et al.).

RAILS THROUGH GULLS

A King Rail, a species whose movements through the state are poorly known, was at Sandy Point in West Haven September 29 (DV). **Common Moorhen** is a scarce breeder in the state, so the following were significant: up to two juveniles at a vegetation-choked pond in Wallingford through October 3 (WS) and an adult with two young in a similar situation in New Milford August 26 (JJ). Another strong showing by American Coots included 230 at Bantam Lake on November 16 (DR) and 100 at North Farms Reservoir in Wallingford on November 26 (MK).

A light flight of American Golden Plovers included one that remained until November 12 at HBSP (RBd). A Semipalmated Plover was late November 25 at Seaside Park in Bridgeport (DV). A Greater Yellowlegs November 13 at Snipsic Lake in Tolland was late for an inland location (CEk). An Upland Sandpiper found an urban respite at Cove Island Park in Stamford August 22 (PDu); another visited HBSP August 16 (BK). Griswold Point held two Whimbrels September 18 (HG), and there were scattered reports of singles along the coast. Four **Hudsonian Godwits** for the season included one September 26 at HBSP (CEL,MR), one in mid-October at Milford Point (JB,NC), and up to two in

Stratford October 18-26 (DV). The only **Marbled Godwit** was at Sandy Point in West Haven September 12 (BS). A good August showing of shorebirds in Litchfield County included a Sanderling at a pond in Goshen August 15 (DT) and the following highs at the ponds at White Memorial Foundation: 34 Least Sandpipers, 14 Semipalmated Sandpipers, a White-rumped Sandpiper, a Pectoral Sandpiper and a Short-billed Dowitcher (DR et al.). The high count of Western Sandpipers was four on October 2 at HBSP (JC). Baird's Sandpipers were hard to find, but one inland at Nepaug Reservoir in Canton on August 16 was noteworthy (JMe). A Pectoral Sandpiper was late November 21 at Station 43 (PDe), and a nice flock of 18 was at HBSP September 19 (JC); 50 were in the Milford-Stratford area in the wake of Hurricane Floyd on September 17, along with two Buff-breasted Sandpipers (DV). Another buff-breast was at HBSP September 24-26 (LT,LK). Among several contenders for bird of the season was **Sharp-tailed Sandpiper**. A single-observer report of an adult on August 11 at a drained pond in Waterbury comes with extensive details, a field sketch and a colored drawing based on the sketch (MS). There is one previous state record. Two Long-billed Dowitchers were at

Watch Rock in Old Lyme October 29 (DP). **Single Wilson's Phalarope** were a good finds August 29 at Griswold Point (PP) and September 27-30 at Station 43 (CEk).

A Laughing Gull was still at HBSP on November 26 (MK). The best gull by far was a **Franklin's Gull**, apparently a second-year bird, at Cove Island Park in Stamford from October 24 to November 3 (P Du,m.ob.). Photos, video and written documentation have been submitted to the ARCC. A **Black-headed Gull** was at Holly Pond in Stamford for the fifth straight year, from October 30 through period's end (P Du,JB et al.). By August 9, three juvenile Bonaparte's Gulls had arrived at Sandy Point in West Haven (GH). The first **Lesser Black-backed Gull** of the season was noted September 20 at Manchester landfill, with four present October 25 (PCo); one was at HBSP November 26 (MK), and one was at Holly Pond, Stamford, for the sixth straight year, from October 21 through period's end (P Du). Manchester, in its last fall of operation, held an **Ice-land Gull** and a **Glaucous Gull** November 26 (FG,CEl).

TERNs THROUGH VIREOS

In a year in which they were more numerous than usual, four Caspian Terns were in Old Saybrook September 19-20 (PP)

and singles were at Griswold Point in Old Lyme (HG) and Milford Point (JB), both on September 17, and in Stamford September 19 (PDU). The season's only Royal Tern was reported August 4 at Sandy Point (NC). A Common Tern was unexpected on the Naugatuck River near Waterbury September 17 (RN). The best count of Forster's Terns was seven off Short Beach in Stratford October 11 (DV); one was inland at a park in Hartford September 26 (PCi). A state record 13 Black Terns were present August 26 in a cove at Bantam Lake in Litchfield, where they remained in diminishing numbers for a few days (GH,DT, et al.). A few also were scattered along the coast (BK et al.). Immature Black Skimmers were noted September 5 and 18 at Griswold Point (HG).

A Yellow-billed Cuckoo was banded on Falkner Island off Guilford on September 12 (JS). A Barn Owl was a nice surprise flying across the road in Westbrook on October 7 (DS). An immature Snowy Owl was an early arrival October 26 in Stamford (PDU). A Long-eared Owl was found at Cove Island on November 15 (PDU), an Short-eared Owl was in good supply along the coast. A Northern Saw-whet Owl was in Litchfield October 17 (DT,FZ) and at HBSP November 7 (SK);

they were daily at HBSP during second week of October (DS). A flight of 250 Common Nighthawks was over Southbury August 26 (JL) and 100+ were over Waterbury the next evening (GH); two were late October 15 in Westbrook (PCo). An adult Red-headed Woodpecker was in Newtown November 4-5 (PB). There was just one **Western Kingbird** for the season, November 21-22 at Stratford Point, with sightings through the end of period at Milford Point just across the mouth of Housatonic River (GH,NB et al.). By season's end, 30 **North-ern Shrikes** had been reported from throughout the state. This easily exceeds the number present by the end of November during the incredible invasion of 1995-96. However, that flight may just have gotten started later. We have a long way to go to match the 200+ reported in the state that year. A state-record late Warbling Vireo was at Hammonasset November 6, and the observers believed it showed characteristics of the western race (DP,DS). A September 18 flight at White Memorial included four or five Philadelphia Vireos, an excellent one-day total (DR). Common Ravens away from the expanded breeding area included two at Lighthouse Point on September 27 (GH).

SWALLOWS THROUGH WARBLERS

The event of the season was the flight of **Cave Swallows** into northeastern North America, which produced Connecticut's first records involving 20 to 30 individuals. Some of these were closely observed and described in detail; others were seen just well enough to determine that they were Cliff/Cave. Given the widespread flight during this time period and the lack of Cliff Swallow reports here and elsewhere, all are listed here as either Cave or probable Cave Swallows:

Nov. 5, Cove I., Stamford, one probable (CT,DA); Nov. 7, HBSP, c. 10 (NP,DP et al.) and Lighthouse Point, 6 (FM et al., with identifiable photos); Nov. 8, Shippan Point, Stamford, 2, (PDU, FG), Lighthouse Point, 1 or 2 probable (JHo et al.), HBSP, 2 (NP), Sherwood I., Westport, 2 probable (JHu) and Mansfield Hollow, 3, (MS) (The last is the only inland sighting and the only one involving perched birds. They were flushed from a fence); Nov. 12, Lighthouse Point, 1, (GH,RE); Nov. 15, New Haven harbor, 1 probable (JTa); Nov. 16, Cove I., 1, (PDU); Nov. 29, one probable at HBSP (DMn).

Two Tree Swallows were still present November 26 in Stamford (PDU), and a Northern Rough-winged Swallow

was very late November 4 at Cove Island (PDU,BO), where a Barn Swallow lingered to November 3 (PDU). Three **Boreal Chickadees** were reported for the season, a major flight by recent standards. All were along the coast during a five-day period: one at HBSP November 6 (MM), one photographed at Greenwich Audubon November 8 (DMn) and one in Westport November 10 (JHu). An aberrantly colored Tufted Titmouse, with a charcoal head and extensively rufous underparts, visited a feeder in Hamden for a few days in late September (CZ,JZ). The heavy movement of Red-breasted Nuthatches mentioned in the summer report continued in August and September but then tailed off; the birds were everywhere including a total of five visiting Falkner Island (JS). **Sedge Wren**, which is less than annual, produced a single sighting September 28 in Stratford (PCo). A Marsh Wren lingered to November 21 at Station 43 (PDe). A flight on October 2 at Bluff Point in Groton produced a combined total of 600 Golden-crowned and Ruby-crowned Kinglets (fide DS). A Blue-gray Gnatcatcher was banded on Falkner on August 15 (JS). Listening to a pre-dawn flight on September 12, an observer assessed the Veery numbers at an excellent 300+ (RN). A female **Varied Thrush** visited a yard in

Hamden November 18-20, where it was seen by numerous observers and photographed (AB et al.).

An **Orange-crowned Warbler** was early at White Memorial in Litchfield September 4 (DR et al.); others were at White Memorial October 10 (BF,KF), singles October 15 and Nov. 5 in Bloomfield (JMe), at Station 43 November 5 (JMe), in Madison November 10 (JC) and at Kosciuszko Park in Stamford November 23-27 (LB). A Nashville Warbler in Bloomfield on November 5 was actively tail-pumping, a trait some authorities (i.e., Dunn and Garrett) attribute to the western race (JMe). A late Northern Parula was at HBSP November 15 (CEI,FG), and a Magnolia Warbler was late November 21 in Stamford (PDU). One of the season's many highlights was the report of two **Black-throated Gray Warblers**: one a HBSP November 6 (LC,JMh) and one on Crookhorn Road in Southbury November 7 (KF). Late Blackpoll Warblers included two in Lyme on November 7 (TH), one in Old Lyme on November 14 (TH) and one in Stamford November 16 (PDU). Bluff Point produced the season's only **Prothonotary Warblers**, singles on September 18 (CEI) and September 20 (fide DS). A Louisiana Waterthrush, moving during its typically early time slot, was banded on

Falkner Island on August 13 (JS). Kentucky Warblers are seldom seen in fall, so one in a Bloomfield yard September 15 was noteworthy (RPi). Connecticut Warblers were at White Memorial September 12 (FZ,DT), Naugatuck September 18 (JHu) and Station 43 on September 26 (PDe). A Mourning Warbler was in Westbrook August 18 (PCo) and Bloomfield October 26 (JMe); another was present August 23 Cove Island, which also held a Yellow-breasted Chat September 13-15 (PDU). Other chats were at HBSP August 16 (BK) and November 24 (CJ), Waterford October 19 (DP) and banded at Milford Point October 20 (CWe).

Warbler highlights from Bluff Point, the state's premier spot to witness morning flight by nocturnal passerine migrants, were compiled by DS: September 11 - 800 warblers; Sept. 12 - 1,800 warblers of 21 species; September 18 - 4,000 warblers of 18 species (total includes 130 Am Redstarts, 3700 unidentified warblers); September 20 - 1,600 warblers of 22 species; September 27 - 4,000 birds (warblers and others), including 17 species of warblers; October 1 - 3,000 warblers, primarily "baypolls," Northern Parula, Black-throated Green and Yellow-rumped; and October 2 - 600 warblers of 17 species. A September 18 flight at

White Memorial logged 17 species, including 19 Northern Parulas and 35 Black-throated Green Warblers (DR).

TANAGER THROUGH NORTHERN FINCHES

Another of the season's array of western vagrants was a **Western Tanager** reported on October 27 from a yard in New Fairfield (DB). The first American Tree Sparrow was noted October 30 in Litchfield (DR). A total of nine **Clay-colored Sparrows** was about three times the recent average. Vesper Sparrows put in a good showing, with two at HBSP October 16 (SK) along with many single reports around the state. Two **Lark Sparrows** for the season continued a recent trend of increased sightings: one was in Stratford October 5 (FM) and one was at Sherwood Island State Park in Westport October 8 (RS). Two "Ipswich" Sparrows were at Great Island in Old Lyme on November 21 (TH), with one reported from Milford Point November 13 (SK). A Grasshopper Sparrow was late and unusual away from the coast in fall at South Windsor November 14 (PDe). Dark-eyed Juncos were already moving hard enough on September 12 to reach Falkner Island, where one was banded (JS). One of the season's more unusual items was a **hybrid sparrow** that appeared to be a

cross between a White-throated Sparrow and a Dark-eyed Junco, a pairing that has been documented a number of times in North America. The bird was found and photographed at the feeders at White Memorial Conservation Center in Litchfield, where it was present November 14-17 (BF,KF). During that time period the feeders also attracted up to 17 Fox Sparrows (DR et al.), and 19 were at Station 43 on November 21 (PDe). Snow Buntings were widespread and numerous with several flocks of 100+ reported along the coast. Lapland Longspurs were also present in good numbers, with a high count of 32 on November 11 at HBSP (GH).

A **Blue Grosbeak** was at the community garden in Simsbury September 21 (JMe). Lighthouse Point continues to produce a steady trickle of **Dickcissels**, with a high of four on October 11 (GH), and they were reported on six dates from Cove Island (PDu). A two hour vigil at Lighthouse Point on August 3 produced 2,000 Red-winged Blackbirds, most of them adults (GH,MS). An excellent count of up to 30 Eastern Meadowlarks was made November 12-14 in fields at Griswold Point (HG,TH), and 18 were at Vietnam Park in Wallingford October 24 (WS). Two **Yellow-headed Blackbirds** were reported for the sea-

son, an average total: one as a fly-by September 5 at Lighthouse Point (BB) and one appeared October 31 at Station 43 (PCi). Much more unexpected were three male **Brewer's Blackbirds** found in a huge mixed icterid flock in Columbia on November 10. A detailed report with sketches has been submitted to the ARCC (MS). An unusually large count of 175 Rusty Blackbirds was made October 16 at Little Pond in Litchfield (DR). Most of the state's recent reports of **Boat-tailed Grackle** have occurred in the spring, so a female August 6 at Milford Point was especially noteworthy (PDU). Yet another western vagrant, a strongly marked immature male **Bullock's Oriole**, visited a feeder in Stafford November 5 through end of period and was well-photographed (LM,MS). A Baltimore Oriole remained until November 29 in Waterford (DP).

Red and White-winged Crossbills were moving regularly along the coast after about October 28 with just a handful of inland reports; the majority of reports involved Reds with some flocks of 20+ reported. There was a heavy movement of Pine Siskins in October and November but it tailed off at the end of the period. The precursor was a single siskin at White Memorial on August 19 (DR). Among the scattered sightings

of Common Redpolls in late November were 50+ in South Windsor November 28 (PDe et al.). An early Evening Grosbeak, presaging a light flight in October-November, was at HBSP September 12 (WH).

[Editor's Note: Reports of rare or unusual bird species in Connecticut (species marked with an asterisk on the most recent COA checklist) require that documentation be submitted to the secretary of the Avian Records Committee of Connecticut (Mark Szantyr, 145 Farmington Ave., Waterbury, CT 06710) if they are to be included in the field notes].

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Correction

In Vol. 20, No. 1, in the Field Notes on page 35, should read:

“Bald eagles were unsuccessful in their nesting attempt at Barkhamsted Reservoir, while the pair at Colebrook Reservoir successfully fledged one young.”



PHOTO CHALLENGE

Julian Hough

ANSWER TO PHOTO CHALLENGE 30

It is easy to ascertain that this month's photo is of one of the larger Pluvialis-type plovers in non-breeding plumage, either Black-bellied or American Golden. In fall/winter American Golden have densely spangled upperparts, often with noticeably yellow tips, giving them a darker and more 'golden' appearance. In contrast, juvenile Black-bellieds are colder, more grayish looking - hence the old world name of Grey Plover.

All the feathers look fresh and uniform in pattern which age the bird as a juvenile. The size and shape of the intricate spangling and mottling on the upperparts and underparts suggest American Golden, but we need to take a closer look. Black-bellied Plovers are typically larger in size, are proportionately larger-eyed, bigger-headed and have more stout bills than American Golden Plovers. These features are often obvious in mixed flocks, but may be hard to assess on lone individuals. Overall plumage tones are always a first clue. A pitfall not appreciated by many birders is that many juvenile Black-bellied Plovers, as well as appearing gray-toned, can appear as brown and yellow as many American Golden. As with many species pairs, it is more likely that you will mistake one



of these 'brown-looking' Black-bellieds for an American Golden, rather than the inverse. On our bird, the dense longitudinal streaking on the breast, the large eye and stout bill, all favor Black-bellied Plover. American Golden tend to show more subtle mottling on the breast, a more pronounced whitish supercilium and a thinner bill. Plumage tones and upperpart markings are of little use, though the larger pale 'spangling' to the upperpart feathers may be larger on Black-bellieds. One useful feature is that the primaries do not extend as far beyond the tail as those of American Golden. Together with a longer neck, thinner body and proportionately longer legs, American Golden often look noticeably rakish in comparison. Of course, the dead give away is when the bird takes flight and exhibits the tell-tale black axillaries (armpits) and white rump of a Black-bellied Plover, two features never shown by American Golden Plover.

This juvenile Black-bellied Plover was photographed by me at Sandy Point, New Haven County, CT in September 1998.

JULIAN HOUGH, 21 Walnut St., Naugatuck, CT 06770



Photo Challenge 31. Identify the species. Answer next issue.

THE CONNECTICUT WARBLER

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Illustrations and photographs are needed and welcome. Line art of Connecticut and regional birds should be submitted as good quality prints or in original form. All submitted materials will be returned. We can use good quality photographs of birds unaccompanied by an article but with caption including species, date, locality, and other pertinent information.

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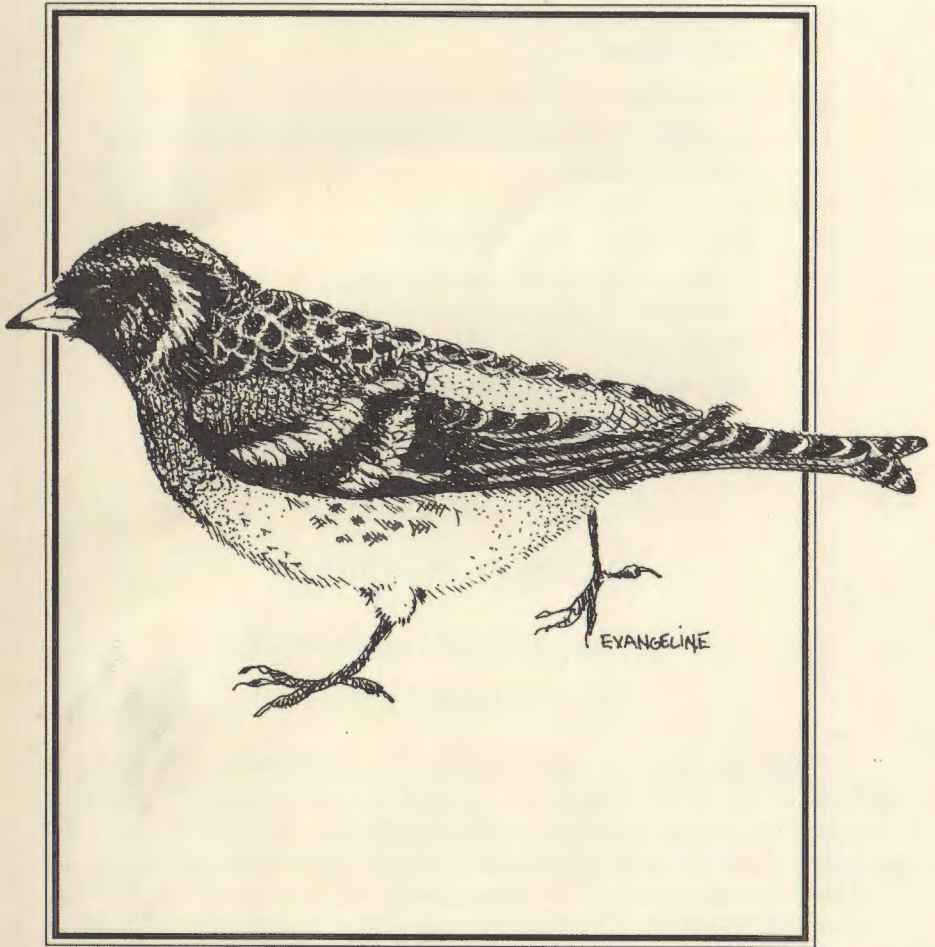
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THE CONNECTICUT WARBLER

A Journal of Connecticut Ornithology



The Connecticut Warbler

A Journal of Connecticut Ornithology

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ABOUT OUR COVER

Brambling (*Fringilla montifringilla*)

by Evangeline LaMore

Evangeline LaMore, of Weston, CT, graduated from Cooper School of Art in Cleveland, OH, majoring in Illustration. She enjoys watercolor, acrylic, and pen and ink drawing. Favorite subjects are wildlife, particularly birds, and landscapes. Some of her paintings, including her rendition of the Brambling, can be seen at the Wildlife Gallery in Stamford, CT. Evangeline is also a volunteer wildlife rehabilitator for The Nature Center for Environmental Activities in Westport, CT.

BRAMBLING: AN OVERDUE ADDITION TO THE BIRDS OF CONNECTICUT.

OR
Yet Another Lesson in Humility as Taught to Me
by a Bird

Mark S. Szantyr

As Secretary of the Avian Records Committee of Connecticut, I get to hear about quite a few rare birds. On closer inspection, a number of these "rarities" magically turn into more expected species. I don't get tired of fielding these phone calls and E-mails, and I will chase most anything that is reported to me, no matter how improbable. Why? Because you never know.

When Jim Hunter, one of the intrepid voices of the Connecticut Rare Bird Alert, called on 2 February 2000 and said that he knew someone that thought she had a winter plumage male Brambling (*Fringilla montifringilla*), at her feeder in Weston, a small town in western Connecticut, I was gobsmacked.

Brambling is a common Eurasian finch that occurs in North America regularly in Alaska, especially on Attu, the outermost island in the Aleutian chain, and less regularly, though probably annually, across the northern-most tier of the Lower 48 states. The first record of Brambling for the Lower 48 was on 15 December 1958 when a bird was seen with House Sparrows (*Passer domesticus*), at a Stanton, New Jersey feeder. There have been in excess of 50 records of the species south of Canada since then, with some years showing multiple sightings across the country (For an excellent accounting of this species' occurrences in North America, see "America's 100 Most Wanted Birds", by Steve Mlodinow and Michael O'Brien, published by Falcon Press Publishing, Helena, Montana, 1996). The dates of occurrence range from late October to late April, with the peak being in late January and early February.

Yikes! While I always dreamed of seeing a Brambling in Connecticut, I will admit to being initially skeptical. Evangeline LaMore, a volunteer at the Westport Nature Center and an artist, was not well known to the birdwatching community. Though she had been seriously interested in birds for some time and had spent countless hours observing and studying the rich birdlife that visited her rural feeding station, none of us had heard of her. Jim conveyed her assessment of the bird's field marks to me and while

they sounded plausible, I thought that she certainly must be jumping the gun. Sure, I knew that a Brambling could occur. Sure, the timing was perfect, well within the established pattern of occurrences. And sure, I knew that there was one being reported from the western part of the country at this same time. But a Brambling! This was a bird that many of the regular bird-chasing community had hardly even heard of. How could she be so sure?

Jim said that Evangeline had seen the bird once in mid-January and once at the end of January. This was far from a regular, established pattern and, asking Jim to get more details, I was prepared to let this sleeping dog lie. Jim called me back two days later, on Friday, February 4, and said that the bird was seen again the day before. He said that Evangeline had photographed it and noted a striking white rump when the bird flushed off of the ground.

A WHITE RUMP!!!!!! Not many small songbirds that occur in eastern North America share this field mark with Brambling and adding this to the previous list of characters she had noted was enough for me. I asked Jim to secure permission for me and a few others to visit her feeder and see this bird. Jim said that this homeowner was very concerned about a fuss being made in the neighborhood by hoards of birders descending on this quiet cul-de sac. He would try to convince her that it would be good if she allowed a few of us to confirm so rare a bird.

I sat at home on this Friday night, pretending to be social to my all-too-understanding family while visions of this Eurasian finch danced in my head. Jim called back. He had secured permission for us to visit the next morning.

Frank Gallo, Dave Provencher, and I arrived at the Weston home at dawn and walked this unlikely neighborhood until a decent hour when we could meet Evangeline and her husband. Evangeline and Terry were exceptionally accommodating. They asked us inside to wait and Evangeline shared stories of "her" bird with us. As I have mentioned, she had taken pictures but had not gotten them developed. She asked if we would like her to go and have them processed while we waited. I tripped over my tongue and tried not to seem too eager as I cried "YES!". We waited and waited without so much as a glimpse of our quarry. Evangeline returned from the photo lab and handed me the envelope, begging me not to say that it was a grosbeak. (Black-headed Grosbeak, [*Pheucticus melanocephalus*], had been suggested as an ID contender). I would say my heart sank when I saw the images of the beautiful Eurasian finch below the feeder I had just been staring at, but my heart didn't know which way to go! The vigil continued

unsuccessfully for the rest of the day. Evangeline asked us to keep the knowledge of this occurrence quiet. This was a very small, close, and quiet neighborhood and she wanted to keep it that way. We ran a limited roster of local, available, and well-qualified searchers past her and she agreed that, until the bird could be located and a pattern of occurrence be determined, it would be best to keep the information limited to this small group.

Another group searched the next day and the next and the next, and each day with no luck. Frank Gallo and Pat Dugan even made a "wanted poster", depicting this bird. They circulated this to all the homes in the neighborhood, asking people to pay special attention to the birds using their feeders and to call us if this species was seen. An ingenious and valiant effort but none the less futile.

On Wednesday, 9 February, I made another attempt to see this bird. Accompanied by Louis Bevier, Curtis Marantz, Denny Abbott, and Jim Hunter we arrived at Evangeline's home after an unsuccessful search for a white Gyrfalcon in Stratford. As before, we spent the first two hours in vain, checking out every songbird that visited the feeder, grimacing when each one melted into the familiarity of a standard Connecticut winter feeder bird. We had drifted into cliques of conversation, debating issues that were currently before avian records committees, discussing the other Bramblings some of the group had seen, studying field guides, when Jim Hunter shouted "THERE IT IS!".



Brambling Photo by Sam Fried

Perched in a leafless bush adjacent to the feeder in Evangeline's backyard was the Brambling. Amazing! An assessment of the bird's plumage suggested that Evangeline had been correct in her determination of the bird's gender. The bird remained in the area for about ten minutes and sadly, no one else got a chance to see the bird that day. Thus began one of the most aggravating episodes in Connecticut ornithological study.

Despite nearly constant surveillance by Evangeline and a host of experienced observers, the bird went undetected for quite a few days. Many individual birders spent countless hours trying to relocate the bird and establish some sort of pattern or routine to the Brambling's comings and goings from this feeding station. Approximately a week after our sighting, the bird surfaced again for a very brief visit at Evangeline's feeder and also at a nearby neighbor's feeder. This bird was proving to be maddeningly unpredictable in its appearances. It would not be seen for one day, two days, three days, a week or longer and then, out of nowhere, the Brambling would appear and stay for ten minutes, twenty minutes, an hour, two hours, a day, two days, three days, or on two occasions, four consecutive days. Just when we thought the little bugger had settled into a routine, it would go missing again. Many times birders would locate the bird and make a multitude of cell phone calls to spread the word, only to have their compatriots arrive to stories of where the bird had been ten minutes before.

This occurrence was problematic on another front, as well. The neighborhood that the bird was frequenting was small, quiet, and closely guarded. The residents were largely commuters that were gone most of the week and held their time at home on the weekend as sacred. With Evangeline, it was decided that word of this bird would be spread solely by word-of-mouth, rather than by the more efficient and wide-reaching electronic Rare Bird Alerts. If this could be maintained and the humor of the neighborhood could be kept on an even keel, we could probably ensure that the bird could be seen by all that were interested (as long as the bird cooperated).

Evangeline and Terry were generous and gracious hosts. They allowed birders to use their yard as a base for surveillance and often, invited these unknown faces into their home out of the cold to wait out this finch. By 24 March, the last day the Brambling was confidently recorded, virtually everyone that had an interest in seeing this beautiful little visitor had an opportunity to at least make an attempt. It is fortunate (?) that the bird left just as the neighborhood was beginning to tire of the constant flow of binocular-empowered eyes peering into their privacy. All in all, this was

a very successful management of a touchy "twitch" and shows that we can behave when necessary.

Description:

The Brambling was a small finch, about the size but slightly longer than the dark-eyed Juncos (*Junco hyemalis*), with which it loosely associated. The bird seemed very active and at times, even aggressive towards the juncos. The Brambling was often seen engaged in bursts of pursuit with these birds, with the dominant role switching from sparrow to finch and back again. When observed, the Brambling was usually seen feeding on the ground, below any of a few feeders offering black-oil sunflower seed. Occasionally, the bird was noted in the bare winter bushes or in a few catkin-laden tree tops, where it appeared to poke around and possibly also feed. Adjacent to Evangeline's yard flowed a small stream and the bird was often noted in this area, possibly using this as a source of water.

The Brambling appeared in full, healthy, plumage with no signs of cage wear, no bands, and was very wary.

The bird appeared fairly well marked but surprisingly, to my eyes, pale overall. The pointed, moderately long, finch-like bill was yellow with a dark tip that extended slightly along the top of the culmen. The head was grayish, varying from a cool bluish gray to a warmer, buffy gray, especially in the area of the cheek. The area in front of the eye and behind the bill was dark, almost blackish and this extended into a broken and splotchy mask. Blackish feathering continued on the forecrown but then split to flank the crown and nape down to the upper shoulder and the base of the neck. The rear crown and center of the nape were pale gray. The back appeared quite scaled, with dark feather centers edged with broad buffy orange. The rump was white. The upper tail coverts were dark centered and had grayish fringe. The deeply forked tail was blackish with a very narrow pale edging.

The chest, flanks and lesser coverts were a bright rich orangish color, similar in coloration to the flank color on Tufted Titmouse (*Baeolophus bicolor*), and the median coverts were either tipped with or white, forming an often obscured white bar on the shoulder. The rear flanks showed a dusky dark spotting. The belly and under tail coverts were white. The greater coverts were black with broad orangish tips that formed a bright wing bar. There was a diagonal white bar at the base of the outer primaries and the remaining flight feathers were blackish and edged pale. The legs were dark pinkish. Due to the rich coloration of this bird and the extent

of dark feathering in the face, it was determined that this individual was most likely a winter plumage male. On a few occasions during the early part of the bird's stay, the Brambling was heard to issue brief vocalizations that sounded finch-like but very raspy and nasal. Later in its stay, the bird was noted in full song, further suggesting a male. The bird was located by its song on some of these occasions. The description of this song is not easily put into words but is described as a monotonous and wheezing, finch-like "zweeeur". It is considered harsh and penetrating and often compared to a saw. This is often interspersed with a few weak notes and variations often include a rattling trill (Beaman and Madge, 1998).

Acknowledgments

I would like to extend the thanks of the New England birding community to Evangeline LaMore and her husband Terry for being incredibly generous with their information, their home, and their time. Without Evangeline's help, many people would not have seen this wonderful bird. Likewise, the people of this Weston, Connecticut neighborhood must be applauded for their tolerance and good will in dealing with this motley crew of eager, overeager, and downright zealous twitchers. I would like to thank the number of local and regional birders that made their way here to see this bird for their consideration and restraint, even in the heat of the frustration that this little finch caused. Finally, I would like to extend my personal thanks to Dori Sosensky and Jim Hunter for maintaining a current and accurate flow of information about this bird's arrivals and departures, allowing many of us the opportunity to share in a truly wonderful Connecticut birding experience. I would especially like to thank Jim for saying those three words. "THERE IT IS!"

Special thanks go to George Clark for his thoughtful editing of this text.

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THE 1999-2000 CONNECTICUT CHRISTMAS BIRD COUNT

Stephen P. Broker

This year's National Audubon Society sponsored Christmas Bird Count was the 100th edition of the longest running annual wildlife census in the world. It was also the 100th year that Connecticut conducted an early winter bird census, our state having been an original participant in the innovative and brilliant conceptualization of 1900 that it would be more productive to go out and count and report birds of the region than to shoot and eat them. That fact, in its own right, is sufficient to consider the 1999-2000 Christmas Bird Count a special one, here at home and in the larger, national and international, context. A century of sustained effort in seeking, locating, identifying, compiling, studying, and interpreting the occurrence of the avifauna of the Americas (once a North American phenomenon, but year by year a broader endeavor as the concept spreads) is a genuine source of pride for those who place a high value on biological diversity, ecological and environmental studies, wise stewardship of natural resources, and conservation.

The following is an overview of the Connecticut Christmas Bird Count for this important anniversary year. I offer some comments on the high points of the 17 counts conducted entirely in Connecticut or overlapping somewhat with adjacent New York and Massachusetts: The rare and unusual species observed on these counts; the trends which emerge from analysis of the last twenty years of state CBC data; and the weather conditions which contributed to the 1999-2000 tally of 173 Count Day and 1 Count Week species, encompassing nearly half a million individuals sighted. Highlights of our state's December 18 through January 2 surveys include an immature Broad-winged Hawk on the Westport count, two Razorbills on the New London count, a Blue-headed Vireo (*Vireo solitarius*) at Oxford, a Yellow-throated Warbler at New Haven, and an American Redstart at Greenwich-Stamford, all species new to the current 20 year State Count Day list.

Other rarities observed during this year's CBCs include six Tundra Swans at Salmon River and two more at Woodbury-Roxbury, a Eurasian Green-winged Teal (Common Teal) and a King Rail at New Haven, Lesser Yellowlegs at Old Lyme-Saybrook, three Long-billed Dowitchers at New London,

Townsend's Solitaire at Salmon River, four Orange-crowned Warblers (one each at Woodbury-Roxbury and Greenwich-Stamford, two at New Haven), Nashville Warbler at New Haven, Ovenbird at Old Lyme-Saybrook, and Bullock's Oriole at Litchfield Hills. Also noteworthy were a Common Loon at Barkhamsted and four at Salmon River, a Greater White-fronted Goose at New Haven, a Eurasian Wigeon at Greenwich-Stamford, seven Greater Scaup at Litchfield Hills and one at Salmon River, an Oldsquaw count week at Litchfield Hills, Golden Eagle at Lakeville-Sharon, a wintering pair of Peregrine Falcons at New Haven, and two carefully identified gull hybrids (Herring x Lesser Black-backed, and Glaucous x Herring) at Hartford.

All told, there were 760 field observers and at least 105 feeder watchers participating in the 100th Christmas Bird Count. The statewide total of 173 count day and one count week species was outstanding, in fact, the second highest species count ever. The northern and mid-state tallies of 121 count day species were records. Old Lyme-Saybrook had a stunning 131 count day and one count week species to lead all coastal counts. Hartford had a remarkable 102 count day and three count week species to lead inland counts, with Quinnipiac Valley recording an excellent 93 count day species. Twenty year high counts were achieved for 24 species, including Common Loon, Pied-billed Grebe, Northern Gannet, Great Blue Heron, Northern Shoveler, Ring-necked Duck, Ruddy Duck, Turkey Vulture, Red-tailed Hawk, Merlin, American Oystercatcher, Eastern Bluebird, and Lapland Longspur. Twenty year low counts were made for eight species, among them two diving ducks (Greater Scaup and White-winged Scoter), Rough-legged Hawk, Brown Thrasher, and Eastern Towhee.

A Winter Wonderland? Not!

The three familiar cardinal rules of real estate are location, location, location. Comparable tenets for our early winter CBCs (maybe not cardinal, but certainly parulid), must be weather, weather, weather. How else does one account for an eye-popping nine different species of wood warblers, including Nashville, Yellow-throated, American Redstart, and Ovenbird, as well as Connecticut's first-ever CBC sighting of a vireo? The National Weather Service (NOAA) and the Northeast Regional Climate Center (Cornell University) have some interesting things to say about this past fall and early winter season which shed some light on the occurrence of these and other lingering neotropical migrants. The month of October was decidedly cooler and wetter in

the Northeast than in most years, with Connecticut at 126% of average October precipitation accumulation and an average state temperature 1.8 degrees below normal. The situation reversed statewide in the month of November. All of New England experienced unseasonably warm weather, Connecticut enjoying the fifth warmest November since record keeping commenced in 1895. Our state was at 75% of normal precipitation accumulation, and this was the driest November since 1990. The pattern continued through December, as Connecticut recorded month-long temperatures 3.5 degrees higher than the mean, and approaching the record warmth of December 1998. Precipitation was at 67% of normal. According to the NWS, "January 2000 started out with unseasonably warm temperatures, the first week of the new year bringing temperatures that reached into the 60s and the low 70s," averaging 8 to 10 degrees warmer than normal. For those readers recalling a cold January, all of the chill occurred during the second half of the month, with post-CBC snow storms occurring on January 13 (four to six inches in the northern parts of the state, two inches along the coast), January 25 (six to eight inches in Hartford County), and January 30-31 (three to three and a half inches inland and two inches along the coast).

Most Connecticut Christmas counts were conducted under comfortable to downright balmy conditions. None of the counts experienced rain, and only Pawling, NY - Hidden Valley, CT reported a light dusting of snow in some parts of its count circle. The four counts held on Saturday, December 18 saw temperatures ranging from the high 20s to the high 40s, with inland counts being somewhat cooler at midday. Hartford moved its traditional count date ahead to join the usual crowd for this opening day of the 1999-2000 CBC season. Seven counts held on Sunday, December 19 enjoyed slightly cooler conditions, reaching highs in the upper 30s. Barkhamsted and Stratford-Milford counts, held on Sunday, December 26, started out with temperatures in the low to high teens, respectively, and each count reached the mid-30s at maximum temperature. The two counts of Saturday, January 1 reached the low 40s (coast) and the mid-30s (mid-state). Edwin Way Teale-Trailwood and Old Lyme-Saybrook closed out the CBC season on January 2 with early morning temperatures in the low 30s and afternoon temperatures in the low to mid-50s. Still and moving waters were open to partly open throughout the state and throughout the count period. Most counts held in December experienced clear morning skies and partly cloudy afternoon skies. However, the counts of January 1 had very cloudy to very foggy skies in the

A.M. and partly cloudy to foggy skies in the P.M. On January 2, the morning again was foggy, but the skies cleared by the afternoon.

Let's turn now to several of the compilers for the avian implications of these weather conditions. Jay Kaplan wrote, "the 1999 Hartford Count smashed all prior records on December 18 with an astounding total of 102 species plus several additional count period birds. It is unlikely that this record will ever be surpassed." He attributes the remarkable inland species count to several factors, including the earlier, mid-December count date, the absence of prior cold periods or snowfall, the extensive open water, a readily available natural food supply, and the successful lingering of various semi-hardy migrants. Gary Palmer's assessment of the Greenwich-Stamford count also emphasizes the influences of weather on bird species found. "Late lingering birds included five species of warblers (four of which were found in a small flock), three phoebes, two House Wrens, and one American Oystercatcher." The weather did have some adverse effects on at least two counts. Compiler Sybill Gilbert, writing of the January 1 Pawling-Hidden Valley count, stated that "fog clung persistently to all but the highest elevations, all day, within our 15 mile diameter circle, and severely limited observations." She additionally described the count circle's widespread deposits of hoarfrost, which "formed exquisitely delicate little spikes of ice, up to three quarter inches in length, that surrounded each twiglet . . . remained for most of the day . . . and was the unexpected bonus that compensated for the lack of birds." Steve Mayo noted for the December 26 Stratford-Milford count that an "extremely bitter cold front (and powerful winds) throughout the morning of the count kept passerine numbers down." Having addressed issues of weather, let's review this year's results for bird species observed.

Loons through Ducks

Finding loons inland in early winter is not easy to do, so the discovery of Red-throated Loon on the Quinnipiac Valley count was a welcome find, and a first for a mid-state count. A Common Loon in northern Connecticut at Barkhamsted and four mid-state at Salmon River also were quite noteworthy. Pied-billed Grebe achieved high counts mid-state and coastally, leading to a record 106 observed statewide. Nearly forty per cent of that total was observed coastally from the Connecticut River eastward. Horned Grebe numbers were fairly average (81 at Old Lyme-Saybrook being a record high), and the two Red-necked Grebes observed on the New London count were representative of past years' results.

It's been 11 years since an Eared Grebe has made its way here, and 22 years since Western Grebe accidentally appeared on a Connecticut CBC.

Northern Gannet has a new predilection for Long Island Sound, witness the 42 at New London (including New York waters), 11 at Old Lyme-Saybrook, and one each at Stratford-Milford (from Long Beach, Stratford) and Westport (from Sherwood Island State Park). First seen in 1989-90, this species is now reported in small numbers in most count years, but 55 solids is a blockbuster total. Both cormorant species were in typical numbers. Old Lyme-Saybrook counted three American Bitterns (best total this count has ever had), and one of these secretive marshland birds was observed count week at Stratford-Milford (Great Meadows salt marsh). Great Blue Heron broke all the northern, mid-state, coastal, and statewide records, with 442 observed. Twenty years ago, 77 Great Blue Herons made for a good total. The remarkable increase in numbers of this species, especially over the past ten years, has been commented on in CBC summaries of recent years. Trailwood and Hartford were inland, northern counts having particular success in finding Great Blues.

In addition to the aforementioned Tundra Swans, Greater White-fronted Goose, and Common Teal, six anseriform ducks were counted in high numbers: Northern Shoveler, Gadwall, Ring-necked Duck, Lesser Scaup, Hooded Merganser, and Ruddy Duck. New Haven had 12 shovelers, all from the same count area, and Quinnipiac Valley found eight. Stratford-Milford waters were loaded with Gadwalls and Ring-necked Ducks, with New London contributing large numbers of Ring-necks, also. Yet, the biggest duck story of this count was the 2699 Ruddy Ducks found. Thirteen counts recording stunningly high numbers. Pawling-Hidden Valley led the way with 987 ruddies (886 in Connecticut), followed by 357 at New London and 315 at Litchfield Hills. This certainly fits the definition of "an unusually large concentration" described by Zeranski and Baptist (1990) for the winter of 1953-1954. Concerning low numbers of Common Merganser at several inland locations, Jay Kaplan noted that "Hartford tends to see more Common Mergansers during colder years when Connecticut's large reservoirs freeze early and the birds move to the Connecticut River."

Hawks through Sandpipers

Black Vulture has become an annual find on Connecticut CBCs, twelve being sighted in the state this year. Turkey Vulture

continued its dramatic increase in numbers of the last four years, reaching nearly 400 throughout the state. Osprey sightings were reported by Storrs and Woodbury-Roxbury (2). Noteworthy high numbers of Bald Eagles were at Litchfield Hills, Lakeville-Sharon, and Greenwich-Stamford. Both Sharp-shinned and Cooper's Hawks were in good numbers, continuing the trend of recent years, but just six counts reported individual Northern Goshawks count day or count week. Sixty two Red-shouldered Hawks make for the second highest total in more than twenty years, and nearly 1200 Red-tailed Hawks shattered the previous high count. Reports in past years of Broad-winged Hawk on Connecticut Christmas have been considered lacking in persuasive field descriptions, and Zeranski and Baptist (1990) list late fall departure dates of Broad-wings from late October, also including one record from November 11 (1972). Thus, the reporting of an immature Broad-wing flying over Mountain Grove Cemetery in Bridgeport (Westport count) is of substantial interest and requires careful consideration. Previous annual count summaries have failed to note a disturbing decline in numbers of Rough-legged Hawk in the early winter of Connecticut. The apparent partial recovery of Rough-legged Hawks in our region prior to 1990, which followed long-term decline from the 1880s to the 1960s, now appears undone, based on the results of the counts since 1992-93. During these past eight years, four or fewer birds were reported on all but one count. This year, Hartford had the lone report of a Rough-leg. As noted above, Lakeville-Sharon had the only Golden Eagle seen this year.

Thirty American Kestrels, fairly evenly distributed throughout the state, give little hope that this species is bouncing back from its serious decline of the last 17 years. Merlins, however, continue a slow but steady increase in CBC appearances, with 11 reported in 1999-2000. Among the half-dozen Peregrine Falcons seen this year on count days (two more were seen during count weeks both in the north and on the coast), there were three at Hartford and two at New Haven. One of the Hartford peregrines, true to its reputation for aggressive defense of territory, was seen to give pursuit to a Bald Eagle above the I-91 corridor, heading in the general direction of Springfield. Various observers have reported a pair of Peregrines in downtown New Haven, feeding at Sandy Point, West Haven, and roosting at an undisclosed location elsewhere over the course of the past year, raising hopes that this species will soon be establishing a new breeding site in the state. Last year, New York State recorded 43 nesting pairs of Peregrines, and Connecticut is bound to benefit from dispersal of some of the recently hatched

and fledged Peregrines of New York, as the recovery program for this exquisite bird continues.

Both Ring-necked Pheasant and Ruffed Grouse reached their second lowest statewide totals in more than 20 years. Pheasant depends on annual restocking for maintenance of its numbers, but Ruffed Grouse populations are subject to natural fluctuations in southern New England. As noted in Zeranski and Baptist, "the loss of habitat through development and the aging of the forest appear to have resulted in a decrease in numbers" of this species. In comparison, the wildly successful reintroduction of Wild Turkey has resulted in their being almost as likely to be observed in suburban and urban areas as in forests and woodlands. More than 1100 were counted this year. New London provided the only Bobwhite, with a representative eight individuals being counted. For the seventh time in 20 years, a King Rail was found, once again at New Haven (Branford). The 26 Virginia Rails counted, all but one at Old Lyme, New London, and New Haven, are a 14 year high total. These birds are perhaps best located in coastal marshlands between 5:00 and 5:45 A.M., responding to taped calls. American Coot numbers have picked up over the past six years, and 11 constitute an average total. Most years through the 1980s, four or fewer were seen.

Good numbers of Killdeer were found along the coast and at Quinnipiac Valley, making for an eight year high count. Since the late 1980s, we've come to expect a small number of American Oystercatchers on our coastal counts. Old Lyme-Saybrook reported 13 this year, and Greenwich-Stamford found another, moving this species into double digits for the first time. The mild weather resulted in the second highest Greater Yellowlegs total observed. Lesser Yellowlegs was seen for only the fifth time in twenty years (Great Island salt marsh, Old Lyme). Efforts to reach Purple Sandpipers on the south edges of breakwaters and rocky outcrops led to a very respectable 344 across the Long Island Sound coastline. The best sandpiper find of the count was the three Long-billed Dowitchers at New London, seen for only the third time in twenty five years. The dependable drainage ditches at Tweed-New Haven Airport, visited with an airport security escort, produced a dozen Common Snipe, heading up a good statewide total of 22 snipe. American Woodcock was new to the Lakeville-Sharon count and also a rare find at Hartford; finding eight statewide is average for the state count.

Gulls through Corvids.

Ring-billed Gull numbers have been fairly stable during the

last twenty years, just shy of 20,000 distributed in a gradient declining from north to south in Connecticut. The once-dominant Herring Gull is now in fairly equal numbers with Ring-bills, along the coast and at the few still active landfills inland. With the closing of the Manchester landfill, there's no longer such thing as a free lunch. Landfill closings mid-state have caused Ring-billed, Herring, and Great Black-backed Gull populations to drop back severely, with northern counts anticipating a similar drop in the near future. Black-headed Gull was seen only at Greenwich-Stamford, and Storrs had the great fortune of finding a Bonaparte's Gull, new for all northern counts. Hartford (Manchester) again did well with Iceland (five), Lesser Black-backed (two), and Glaucous Gulls (six), the first two species also being found along the coast. Two intriguing gull hybrids, mentioned above, rounded out the finds at Manchester landfill. Alert birding along the coast at New London led to the discovery of two fly-by Razorbills, a good example of the rule that if you actually try to look for them, you just might find them. Green with envy, New Haven birders have been demanding a piece of the action with Monk Parakeet. In the true spirit of generosity, Stratford-Milford and Westport are sharing offshoots of their colonies. Greenwich-Stamford continues to benefit from the largess, with 50 parakeets believed to be more representative of the total colony there. Do we have an official state parrot, yet?

Early A.M. and late P.M. efforts to record Barn Owl at New Haven (the abandoned incinerator building near I-95 Exit 8) were unsuccessful on count day, but two Barn Owls were observed there the day before the count. It seems that prior use of rat poison and the capping of the New Haven landfill have not fully deterred Barn Owl from roosting and perhaps breeding in this highly porous building, well-situated on the edge of the Quinnipiac Marshes. Four nestling owls were banded there in the mid-1990s, following two months of observations of the breeding effort in the hollow I-beams high above the detritus-filled incineration pits. The recent condemnation of the building now makes checking for evidence of breeding a very complicated process. Most other nocturnal predators were in average numbers, although Long-eared Owls at Barkhamsted and Edwin Way Teale-Trail Wood were good finds, and eleven Northern Saw-whet Owls at Woodbury-Roxbury helped to produce a mid-state high total.

Belted Kingfisher achieved a 20 year high count thanks to high numbers on northern counts and good numbers elsewhere. The only Red-headed Woodpecker observed this year was at Greenwich-Stamford (Doral/Arrowwood Golf Club). Red-bellied

Woodpecker continued to set record numbers along the coast and was tallied just short of its 1998-99 record high. Yellow-bellied Sapsucker reached elevated numbers for the third consecutive year, setting a new coastal record in the process. Downy, Hairy, and Pileated Woodpeckers and Northern Flicker also checked in with solid totals, indicating a thriving wood products industry for the state. The mild season induced 11 Eastern Phoebes to stand up and be counted, second highest total during the last twenty years. Among the open grassland species, Horned Lark continues to show a somewhat cyclical pattern of population increases and decreases, this year reaching a twenty year low, while doing about as well on the northern Connecticut counts as along the coast. Some 50,000 American Crows at Hartford (that's right, no typo in that number) and 11,500 at Litchfield Hills pushed the statewide total to a record 86,000, a number approached only by the 61,000 counted in 1983-84 and again in 1995-96. Jay Kaplan wrote that Hartford's "enormous crow roost [is] adjacent to I-84 near the Hartford/West Hartford town line. Take a ride by the area at dusk and see for yourself. It's a scene right out of Alfred Hitchcock." The estimate in size of the roost is considered conservative. Fish Crow dropped down to a mere 342 individuals, still the second highest in state CBC history. Common Raven now has nested successfully as far south as Mount Carmel/Sleeping Giant State Park, Hamden and has been seen with increasing regularity at West Rock and East Rock, the most coastal of our Central Valley trap rock ridges. The raven observed at Willard Island/Hammonasset State Park makes Old Lyme-Saybrook the first coastal count to record this species. Ravens continue their steady expansion in the state.

Nuthatches through Sturnids

A total of 142 Red-breasted Nuthatches partially made up for the extreme paucity of last year's count. Brown Creepers were harder to find, with low numbers for the third year in the last six. Carolina Wren is now two jumps away from attaining anew its record high totals of seven years ago. Interestingly, recovery has been fastest in northern Connecticut, while still significant in all parts of the state. Winter Wren moused its way ahead of last year's record total, with new highs at Greenwich-Stamford, New Haven, and generally along the coast. Golden-crowned Kinglets were in exceedingly short supply, with Ruby-crowned Kinglets comparatively easy to find. This year's ratio of one ruby for every six goldens is seldom achieved in Connecticut. Count among the con-

tinuing success stories in southern New England the strong recovery of Eastern Bluebird populations. This handsome occupant of open woodland and agricultural fields has moved out of the uncommon category for winter numbers, this year attaining record high totals for 11 counts and all three latitudinal regions of the state.

Townsend's Solitaire has been observed only four times in more than 20 years of Connecticut counts (it is casual in New England in winter), so the report of a solitaire at Salmon River is of particular interest. With nearly 28,000 American Robins seen on last year's count, ten times the typical sum, we were bound to drop back to a more normal total this year. Hermit Thrushes and Catbirds did not respond particularly strongly to the intemperately warm weather, and three Brown Thrashers (at Hartford, New London, and Stratford-Milford) suggest a species on the downward slide. Quinnipiac Valley's 54 American Pipits and Hartford's seven were rare finds. Four years after the major incursion of Northern Shrikes of 1995-96, during which 67 were seen on counts, another good incursion this year brought us 24 for the count. Thirteen counts recorded shrike as a rarity or a new species this time around. Careful study is required for the palest immatures of this species. Note also that Loggerhead Shrike was last seen in 1984-85. It's been said before, but it deserves repetition: European Starlings have been declining in numbers steadily and significantly over a fifteen year period. Take another 20,000 off last year's starling count. For the first time in the modern era, crows outnumber starlings. Jay Kaplan wrote, "the vaunted starling roost in downtown Hartford continues to decline with a mere 12,000 birds, down 75% from the numbers of several years ago."

Vireos through Sparrows

The inexplicable detention of a Blue-headed Vireo in Oxford prevented this individual from spending Thanksgiving and Christmas in Cuba. Blue-headed Vireo, the avian artist formerly known as Solitary Vireo, rates this writer's vote for most remarkable bird of the past Christmas Bird Count season - a princely find! This is the first vireo ever found on a Connecticut Christmas Count. It will be interesting to see how many times the species has occurred anywhere in the Northeast on previous counts. One of the most significant stories of this count was the occurrence of such an illustrious group of wood warblers. New Haven's Nashville Warbler was in and around a weedy field at the East Haven Industrial Park, a warble away from Morris Creek Marshes. The Yellow-throated

Warbler spent nearly a month feeding on suet and thistle seed at a Hamden backyard, plenty of time for extensive photographic and video records. Its occurrence in Connecticut in December and January is without precedent, and it is a match with Blue-headed Vireo as Williams was for DiMaggio. Greenwich-Stamford found American Redstart for the second consecutive year, this time on count day. Old Lyme-Saybrook sleuthed out Ovenbird, just the fourth such CBC occurrence in twenty years. Altogether, there were 22 hard to find or seemingly impossible to find warblers representing eight species. With slightly better than average numbers of Yellow-rumped Warblers, this was indeed the year of the parulid.

The extreme scarcity of Eastern Towhee along the coast produced a twenty year low count. I offer no explanation for these dismal results. Sparrow numbers were unremarkable, with Chipping, Savannah, and Swamp Sparrow showing little or no advantage in the relative warmth of December and early January. Fox Sparrows made probably the most impressive showing of the count. Vesper Sparrow was seen count day at Quinnipiac Valley and count week at Hartford. New Haven and Old Lyme-Saybrook produced single Saltmarsh Sharp-tailed Sparrows. Old Lyme-Saybrook's 50 Lapland Longspurs comprised the finest foraging flock of this species in more than two decades of Christmas Bird Counts. Red-winged Blackbirds were in high numbers this year, due largely to sizeable numbers at Old Lyme-Saybrook and Hartford. Eastern Meadowlark has rebounded somewhat from low numbers of the six previous years. It was a good early winter for grackles, also, fueled by 4700 at Hartford and a great big 7900 at Trail Wood. Compiler Marilynn Higgins cited "two huge flocks of mixed European Starlings, Red-winged Blackbirds, and Common Grackles" in her compilation report. Cowbirds, however, were not on parade anywhere this year (the cow stampede in downtown Stamford notwithstanding).

Isn't it fun to count two oriole species among our winter icterids? Quinnipiac Valley and Woodbury-Roxbury each located Baltimore Oriole, and Litchfield Hills boasted having a Bullock's Oriole this year. Where are the crossbills? Send in the crossbills. Well, maybe next year. (This year, at least, Quinnipiac Valley had a Red Crossbill, and Barkhamsted came up with a White-winged Crossbill). Common Redpoll, on the other hand, appeared in good numbers, on five northern counts: Woodbury-Roxbury mid-state, and three coast counts. For those suffering from winter finch withdrawal, the fourth highest total in twenty years was welcome

medication. Pine Siskin numbers were pretty good, too. Finally, what of the continuing non-adventures with Evening Grosbeak? With one *Coccothraustes vespertinus* last year and just two this year (Salmon River, Greenwich-Stamford), we appear on the verge of having it drop off the radar screen.

Concluding Comments

I would like to close this article with some centenary observations. Our fascination with round number events or anniversaries – the 100th Run for the Roses, the 100th “The Game”, Y2K, the new millennium, and for a future generation of sports enthusiasts, Superbowl C, is, after all, a stochastic product of an historical, genetically inherited program, the evolution of tetrapod limb buds, apoptosis (programmed cell death), embryological development, ten fingers and ten toes, and the derivation of a base ten number system. It’s that simple. Arbitrary though it may be to memorialize events in 100 year or 1000 year units of time – pointed out so eloquently by Stephen Jay Gould in his 1996 publication, *Questioning the Millennium* (Oxford University Press), there being no astronomical basis for time units of 100 or 1000 – it’s an anniversary that provides us a useful frame of reference.

Over the past two decades, I’ve logged a few more than two dozen Christmas Bird Counts, in Connecticut and in Arizona. New Haven and Salmon River CBCs are penciled on each year’s calendar in red. I’ve also participated in a couple of Stratford-Milford and Old Lyme-Saybrook counts, and my family trips to Arizona occasionally get me on the Green Valley-Madera Canyon and Avra Valley counts. I’m left in the dust, however, by a few Connecticut birders who I know have surpassed 100 Christmas Bird Counts in their birding careers. A few years ago, I asked an assembled group of New Haven Bird Club members to stand if they had participated in a CBC in the 1990s. The vast majority in the audience stood up. When asked if they had been on a CBC in the 1980s, most remained standing. More sat down when we thought back to the 1970s and then to the 1960s, but remarkably, several were still on their feet when we got to the 1940s, my decade of birth.

These veteran birders are still on their toes today, out in the field and at backyard feeders, using their considerable field skills to continue this great tradition and this critically important landscape monitoring of our rich avifauna. The seasoned veterans of Christmas Bird Counts are our bridge to the 21st century. The data collected by all of us on Christmas Bird Counts provide far more than anecdotal information about birds of the Americas. Properly

collected and interpreted, they provide a valuable measure of bird population changes, ecosystem health, environmental issues, and the status of avian biodiversity for a major portion of earth's surface. We're still counting after all these years. The second century of CBCs will bring some new success stories and some new failures, preferably more of the former and fewer of the latter. The continued recovery of Bald Eagle, Peregrine Falcon, and Eastern Bluebird show us the levels of success that concerted efforts in conservation biology can bring about. The loss of Labrador Duck, Heath Hen, and Passenger Pigeon show us the directions in which not to go. Once again, this year's compilers' reports point out the continued degradation and loss of habitat, as our human population shifts within state boundaries, as we fragment our forests, continue to alter our wetlands, and pave over our fields. The state, regional, and national leadership of tomorrow requires our input on how to close the broken circle of ecology, economics, and ethics. So, let's get at it; it's on to the next century.

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CONNECTICUT CHRISTMAS BIRD COUNTS 1999-2000

SPECIES	NORTHERN						MID-STATE					COASTAL						STATE TOTAL
	BA	EW	HA	LH	LS	ST	OX	PA	QV	SR	WR	GS	NH	NL	OL	SM	WE	
Red-throated Loon	1								1			12	43	9	98	9	9	181
Common Loon	1								4			6	26	50	83	14	8	192
Pied-billed Grebe	1			2				1	3	5	4	14	14	18	22	10	12	106
Horned Grebe												16	25	39	81	20	17	198
Red-necked Grebe														2				2
Northern Gannet														42	11	1	1	55
Great Cormorant						1			5			25	43	44	57	23	15	213
Dble.-crest. Cormorant			3						1	11		2	16	33	31	3	3	103
Cormorant, sp.																	1	1
American Bittern															3	CW		3
Great Blue Heron		20	33	4	4	3	18	1	17	20	14	32	33	63	47	36	57	442
Black-cr Night-Heron												3	1	CW		1	8	13
Tundra Swan									6	2					CW			8
Mute Swan		1	41	36	16	21	41	38	271	62	58	96	402	413	168	136	88	1888
Gr. Wh.-fronted Goose													1					1
Snow Goose			2	1	1		1		1		CW				1	1	1	10
Brant												306		15			11	332
Canada Goose	321	1634	11090	2425	6910	5063	879	1899	4128	371	4551	2635	2173	2510	1281	1784	1747	51401
Canada Goose (small)											CW							CW
Wood Duck	1		17						5	1	1	9	3				3	40
Green-winged Teal			14	3	6	1			3			8	128	CW	14	49	19	245
Green-wngd Teal-Eur.													1					1
American Black Duck	139	68	132	142	62	44	107	62	156	350	118	534	1110	496	576	1010	464	5570
Mallard	493	378	1394	907	331	169	392	667	1232	232	649	1727	1088	1284	697	1251	954	13845
Mallard Hybrid	2									1			10				1	14
Northern Pintail			2				1		6	2		2	5	1	5			24

SPECIES	BA	EW	HA	LH	LS	ST	OX	PA	QV	SR	WR	GS	NH	NL	OL	SM	WE	TOTAL
Northern Shoveler			1	2					8			1	12	4				28
Gadwall	CW		5	1					15			60	180	23	7	373	13	677
Eurasian Wigeon												1	1					2
American Wigeon			3		4			1	32			53	165	21	4	231	346	860
Canvasback	CW	4		7	1		1	1			CW	3	6	256	4	154	2	439
Redhead				5									3	CW		1		9
Ring-necked Duck	43	5	1	43	49	20	16	106	46	36	CW	185	219	567	92	606	61	2095
Greater Scaup				7						1		4	13	21	409	56		511
Lesser Scaup	1		3	12					1	4		14	285	14		17		351
Scaup, sp.												19			800			819
Oldsquaw				CW								44	270	24	28	42	132	540
Black Scoter														8	3	3		14
Surf Scoter													6	27	153			186
White-winged Scoter												1	2	6	5	---	11	25
Scoter, sp.													45					45
Common Goldeneye	3	9	2	63	27	1		37	2	6	2	220	309	330	215	518	214	1958
Bufflehead	2		CW	18	2	1	6	14		14	2	366	130	484	82	103	175	1399
Hooded Merganser	72	2	7	163	36	16	28	42	38	117	10	307	138	522	50	88	134	1770
Common Merganser	211	4	36	733	127		34	382	263	284	224	176	48	286	410	178	33	3429
Red-br. Merganser			1									306	128	941	207	290	329	2202
Ruddy Duck	4		40	315	66		28	987	257	40	1	260	110	357	70	81	83	2699
Black Vulture				2			5	CW			5					CW		12
Turkey Vulture			1	CW		45	103	CW	89	1	42	50	13	2	24	4	22	396

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	BA	EW	HA	LH	LS	ST	OX	PA	QV	SR	WR	GS	NH	NL	OL	SM	WE	
Osprey						1					2							3
Bald Eagle	7	2	2	7	8		1	7		1	5	5	CW		9		3	57
Northern Harrier		2	3		1	2	1	2	2	2			10	2	25	9	3	64
Sharp-shinned Hawk	---	2	26	6		2	3	2	8	9	8	13	19	17	12	8	7	142
Cooper's Hawk	1	2	13	2	4	3	1	4	6	1	6	9	8	5	11	3	5	84
Northern Goshawk	1				1				1			CW	CW			1		4
Accipiter, sp.		1				2												3
Red-shouldered Hawk		2	1			5	4	2	8	10	2	3	7	5	9	1	3	62
Broad-winged Hawk																		1
Red-tailed Hawk	33	23	190	95	65	43	45	48	88	55	111	109	104	32	68	28	60	1197
Rough-legged Hawk			1															1
Buteo, sp.						4												4
Golden Eagle					1													1
American Kestrel	1		6	3	1	CW	1	1	4		1		4	4	1	2	1	30
Merlin			4									2		1	2	2		11
Peregrine Falcon			3	CW						1		CW	2					6
Ring-necked Pheasant	CW	1	2	3	9	2	3	6	6	6	10	4	---		1		10	63
Ruffed Grouse	8	6		5	CW	1	1	1		6	---				2		CW	30
Wild Turkey	178		45	193	49	97	28	126	85	5	35	80	101	3	22	62	23	1132
Northern Bobwhite														8				8
Clapper Rail													4		1	2	2	9
King Rail													1					1
Virginia Rail									1				6	7	12			26
American Coot			39	356	43	1		319	136		13	4	11	77	2	14	43	1058
Black-bellied Plover												7	7	21	27		10	72
Killdeer						CW			10		1	14	55	14	14	4	30	142

SPECIES	BA	EW	HA	LH	LS	ST	OX	PA	QV	SR	WR	GS	NH	NL	OL	SM	WE	TOTAL
Amer. Oystercatcher												1			13			14
Greater Yellowlegs												3	2	2		7	8	22
Lesser Yellowlegs															1			1
Ruddy Turnstone												5	35	34	126			200
Sanderling													42		25	59	75	201
Purple Sandpiper												8	243	53	23		17	344
Dunlin												CW	18	40	451	57	23	589
Long-billed Dowitcher														3				3
Common Snipe		3							1		1		12	2	3			22
American Woodcock			1		1					1		CW		1	3		1	8
Black-headed Gull												1						1
Bonaparte's Gull						1						34	12	63	8	32	6	156
Ring-billed Gull	307	211	1845	603	610	210	377	2422	1372	194	783	1974	2298	1567	784	2241	481	18279
Herring Gull	24	12	7497	40	80	29	189	257	96	165	130	659	986	4413	822	1847	2169	19415
Iceland Gull				5	1										1			7
Lesser Bl.-backed Gull				2								1				1		4
Glaucous Gull				6														6
Great Bl.-backed Gull	6	12	717	15	281		14	15	12	69	24	83	173	415	329	168	142	2475
Herring x LBb. Gull Hybd				1														1
Glauc. x Herr. Gull Hybd				1														1
Gull, sp.		7				4												11
Razorbill														2				2
Rock Dove	242	80	3096	208	703	360	472	163	903	96	181	778	1284	562	519	1208	597	11452

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Mourning Dove	198	298	1756	432	254	287	163	258	494	258	522	571	715	565	584	227	316	7898
Monk Parakeet												6	94			212	257	569
Barn Owl													CW					CW
Eastern Screech-Owl	4		16	27	10		8	11	34	10	28	40	12	4	18	2	31	255
Great Horned Owl	4	1	3	14	15	5	6	2	7	14	18	16	8	9	14	2	13	151
Barred Owl	4		3	5	2	1		1	1	7	7	1	2	2	1			38
Long-eared Owl	1	1									1		1	1			1	7
Short-eared Owl														1	4	2		7
North. Saw-whet Owl	3			7	1	1	1	3		1	11	2		3	2		1	36
Belted Kingfisher	4	10	33	10	12	8	13	8	12	16	14	33	48	40	31	8	19	319
Red-hdd. Woodpecker												1						1
Red-bld. Woodpecker	15	29	162	26	23	43	19	44	30	71	84	133	41	46	69	12	63	910
Yellow-bld. Sapsucker			7	3	2		2	1	3	4	7	11	4	2	12		7	65
Downy Woodpecker	78	41	368	114	84	77	60	106	64	116	158	244	146	80	69	22	132	1959
Hairy Woodpecker	23	11	59	29	10	16	11	33	8	12	29	40	33	6	30	8	22	380
Northern Flicker	9	33	104	17	13	34	31	28	34	62	49	35	78	49	86	20	35	717
Pileated Woodpecker	6	1	8	6	15	3	5	8	1	2	6	11	3		2	1	5	83
Eastern Phoebe			2			1				2	2	3			1			11
Horned Lark			54	31	43	91	20				25		34	67	75	29		469
Blue Jay	184	270	842	324	157	518	220	260	305	519	688	412	299	505	508	109	220	6340
American Crow	475	273	50000	11539	862	638	754	761	1684	654	5128	4562	3722	879	944	896	2925	86696
Fish Crow			15				15	4				6	245	8	2	21	26	342
Common Raven	23		CW	5	2	1		4			1				1			37
Black-cpd. Chickadee	970	202	1469	1539	536	695	545	590	328	661	1167	1202	623	673	535	178	458	12371
Tufted Titmouse	167	108	826	348	95	356	165	189	182	490	709	681	309	190	314	31	304	5464
Red-br. Nuthatch	13		35	6	1	5	3	1	2	4	7	11	34	3	13	CW	4	142

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White-br. Nuthatch	126	72	305	223	74	136	56	130	77	183	246	255	106	72	125	19	80	2285
Brown Creeper	17	2	16	9	4	3	4	7	2	15	12	4	6	2	10		2	115
Carolina Wren	5	13	73	4	CW	20	13	5	24	44	30	102	62	153	115	21	30	714
House Wren										1		2			1			4
Winter Wren	2		6	7		2	7	4	2	5	9	25	11	6	6	1	2	95
Marsh Wren			1										4	1	8			14
Golden-crown' Kinglet	31	19	23	13	18	21	11	14	9	41	28	4	25	25	15	2	10	309
Ruby-crowned Kinglet			6		3		2	3	1		9	11	6	7	5	2	1	56
Eastern Bluebird	113	130	185	208	232	223	291	135	125	242	487	140	49	86	199	7	119	2971
Townsend's Solitaire										1								1
Hermit Thrush	2	1	10	2	5	4	11	2	10	13	28	22	4	24	17	2	8	165
American Robin	139	119	538	94	207	106	40	172	343	121	276	198	195	591	225	53	35	3452
Gray Catbird			9	1		2	3	1	12	2	3	12	10	22	14	3	5	99
Northern Mockingbird	40	26	302	44	18	68	76	45	183	51	116	165	202	201	155	69	76	1837
Brown Thrasher			1											1		1		3
American Pipit			7						54			1	29		2			93
Cedar Waxwing	152	59	226	190	80	52	75	113	11	79	475	151	52	153	250		20	2138
Northern Shrike	3		1	4	3	1	1	2	1	1	2	1	1	2	1			24
European Starling	1589	3009	20000	1708	4135	2101	1270	1156	3516	1026	2018	4115	5410	5473	3407	2347	2997	65277
Blue-headed Vireo							1											1
Orange-crnd. Warbler											1	1	2					4
Nashville Warbler													1					1
Yellow-rmpd. Warbler			23				42	4	51	26	79	31	11	61	30	53	44	455

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	BA	EW	HA	LH	LS	ST	OX	PA	QV	SR	WR	GS	NH	NL	OL	SM	WE	TOTAL	
Yellow-thrted. Warbler													1					1	
Palm Warbler												3	2	1			CW	6	
American Redstart												1						1	
Ovenbird															1			1	
Common Yellowthroat			2									1	2					5	
Yellow-breasted Chat													1	1	1			3	
Northern Cardinal	129	74	571	193	66	159	181	134	205	182	340	367	268	260	172	120	239	3660	
Eastern Towhee			4				1				CW	1	2	7		---	---	15	
Amer. Tree Sparrow	81	81	609	400	173	45	113	209	251	108	496	77	275	173	183	181	65	3520	
Chipping Sparrow								1							1			2	
Field Sparrow		1	22	2		11	17	10	3	39	32	7	27	42	40	7	11	271	
Vesper Sparrow			CW						1									1	
Savannah Sparrow			16				2		5				10	4	28	5	6	76	
'Ipswich' Sparrow															3	2		5	
Saltm. Shp-tailed Spar.													1		1			2	
Fox Sparrow	1	14	1	CW	1	3			6	2	6	14	23	28	5	5	14	123	
Song Sparrow	31	34	330	60	6	43	164	41	165	113	178	365	338	209	277	169	163	2686	
Swamp Sparrow	1		9	8	1	9	7	7	6	30	17	10	28	19	52	2	5	211	
White-thr. Sparrow	30	92	667	168	54	139	479	335	456	322	582	1039	708	614	49	198	301	6233	
White-crn. Sparrow			4		4				1	4				1				14	
Dark-eyed Junco	797	498	1719	859	336	455	556		414	733	1370	1154	432	152	327	222	521	10545	
Lapland Longspur			1											2	50			53	
Snow Bunting							10		CW	CW			9	40	10	28	5	102	
Red-winged Blackbird	661	3750	5	1			6		56		3	2	119	5615	335	34	5	10592	
Eastern Meadowlark									24		10		17	7	16			74	
Rusty Blackbird			6	CW							3			4	37			50	

SPECIES	BA	EW	HA	LH	LS	ST	OX	PA	QV	SR	WR	GS	NH	NL	OL	SM	WE	TOTAL
Common Grackle		7903	4713	1		1	2		2	1		2	8	8	10	---	15	12666
Brown-hdd. Cowbird	1	9	2472	559	526	112	14		19	2	23	1	47	1	17	8	50	3861
Baltimore Oriole									1		1							2
Bullock's Oriole				1														1
Pine Grosbeak																		CW
Purple Finch	39	5	9	37	8	4			5	5	38	4	2		2		7	165
House Finch	214	148	988	394	157	201	315		261	422	487	613	447	452	484	212	349	6144
Red Crossbill									1									1
White-winged Crossbill	1																	1
Common Redpoll	117		29	100	14	21					15	7	20				36	359
Pine Siskin	146		8	10	24	15				1	1	23		3	5		3	239
American Goldfinch	296	95	728	346	182	225	179		261	297	460	467	341	174	198	66	222	4537
Evening Grosbeak										1		1						2
House Sparrow	246	386	1774	539	140	469	222	171	662	453	377	1317	1123	1819	672	985	536	11891

TOTALS	BA	EW	HA	LH	LS	ST	OX	PA	QV	SR	WR	GS	NH	NL	OL	SM	WE	TOTAL
Individuals	8631	17207	122273	27100	18107	13581	9015	12626	19730	9657	23921	30051	29558	35913	19940	19454	19516	436280
CD Species	68	60	102	86	75	73	80	78	93	86	88	116	125	119	131	98	107	173
CW Species	3	0	3	4	4	2	0	2	0	1	5	4	4	3	1	2	2	1
Field Observers	34	14	157	66	29	24	34	19	18	44	23	83	98		59	16	42	760
Feeder Watchers			59				1	12		6			8		2	0	17	105
Total Observers	34	14	216	66	29	24	35	31	18	50	23	83	106	0	61	16	59	865
Party Hours			566.5		67	85	80	67	63	102			174		168.4	81.5	131	1585.6
Party Miles			1030				372	438		453			600		471.7	283.5	371	4018.7

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SORTING OUT THE VIRENS WARBLER GROUP

Greg Hanisek

If you want to know the wood warblers, you've got to master the genus *Dendroica*. This large and varied group includes 21 North American species, most of them eastern. Sixteen of them occur regularly in Connecticut, and ten of them are annual breeders. In addition, some western species occur in the East often enough to warrant our attention. Members of the genus share some common characteristics, such as wing bars and tail spots, but learning all of these sprightly beauties still amounts to quite a mouthful. One approach is to start with bite-sized helpings, which is what we will do in this article.

Biologists apply a concept called superspecies to a group of species that appear to have close evolutionary ties and share a number of physical and behavioral traits. We're going to focus on one such group within *Dendroica*. Its members are Black-throated Gray Warbler, Golden-cheeked Warbler, Black-throated Green Warbler, Townsend's Warbler, and Hermit Warbler. Their common characteristics include black throats in most plumages and two bold white wing bars. Dunn and Garrett, in their excellent new *Field Guide to Warblers of North America*, call this the virens group. The term is derived from the scientific name of the Black-throated Green Warbler (*Dendroica virens*).

Actually, we're going to whittle the group down even more. The Black-throated Gray Warbler, a vagrant to the Northeast, is distinctive enough that it poses little chance of confusion with other members of the group, and Golden-cheeked Warbler, with a very limited breeding range in Texas, has never been recorded in the Northeast. That leaves us with three species - Black-throated Green Warbler, a common breeder and migrant in Connecticut; Townsend's Warbler - a fairly regular vagrant to the Northeast; and Hermit Warbler - a very rare vagrant to our region.

Black-throated Green Warbler - A good strategy when learning birds involves a focus on the familiar. Since this species is present in Connecticut from late April until at least early October, it offers good opportunities to learn it well. That in turn, will enhance your ability to zero in on a similar, but different, species if you're fortunate enough to find one. In adult males, the combination of yellow "face," green back, and white area below the black

throat separate it from the other two. The Hermit Warbler has a gray back, while the Townsend's Warbler has a dark auricular patch breaking up the yellow "face," as well as yellow on the lower breast, just below the black throat.

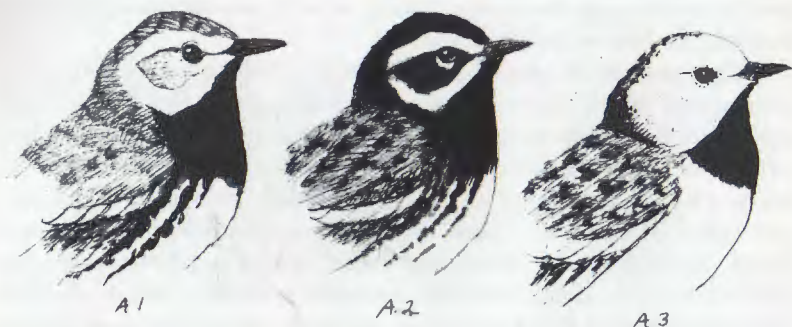
The amount of black on the throat is reduced in females and immatures of all three species, with immature females looking most different from mature males and presenting the biggest identification challenge. However, Black-throated Green Warblers show a key feature in all plumages that both Townsend's and Hermit lack - a splash of yellow on the vent. This point isn't emphasized in most field guides, and it isn't really needed to separate Black-throated Green from other eastern warblers. But it could be the clincher on a fall female that suggests one of the western vagrants.

Townsend's Warbler - This bird of the Far West has occurred many times in New England and the Middle Atlantic States, usually in November or December, but surprisingly there are no confirmed records from Connecticut. Since it is probably our most overdue vagrant, it would pay to get to know it. The combination of green back, dark auriculars, and some degree of yellow on the breast separates it from Black-throated Green and Hermit, but one other *Dendroica* warbler, the Blackburnian, can mimic Townsend's pattern in some plumages. Female and immature Blackburnians, with yellow rather than orange on the throat and face, show a Townsend's-like pattern.

However, Blackburnians show a pattern of alternating dark and light stripes on the back. The intensity of contrast varies with age and sex, but some degree of striping is almost always evident. In most plumages, Townsend's has a streaked back that is quite uniformly composed of dark centers to green feathers. When young birds vary from this pattern they tend to be plainer backed and even less like Blackburnians.

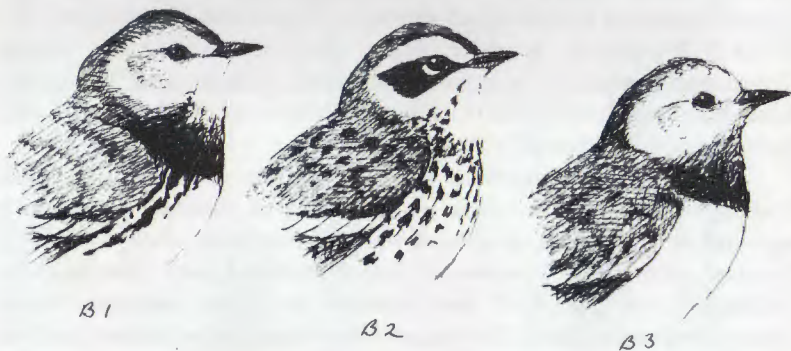
Townsend's and Blackburnian both have dark auricular patches, but the shape of the patches are different. (See illustration and caption). In addition, Townsend's usually shows very clear yellow tones around the auriculars, while Blackburnian tends to show some degree of buff or off-yellow.

Hermit Warbler - Although Hermit is a much rarer vagrant than Townsend's, Connecticut has an accepted record. The bird was found in the state's most famous migrant trap, East Rock Park in New Haven, on May 1, 1977 by veteran birder Richard English.



These are the diagnostic adult males.

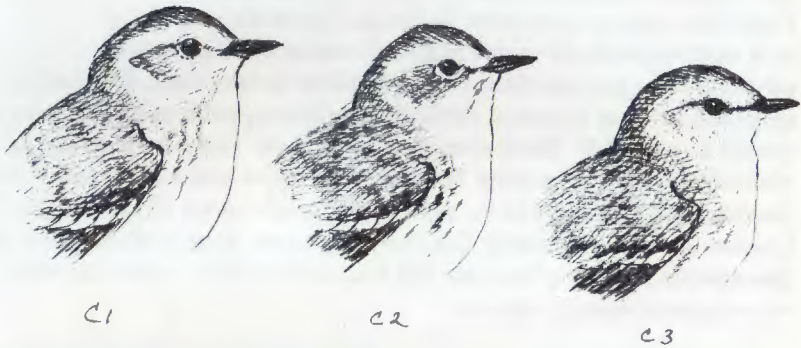
- A1. Black-throated Green.
- A2. Townsend's
- A3. Hermit.



Adult females are less crisply marked.

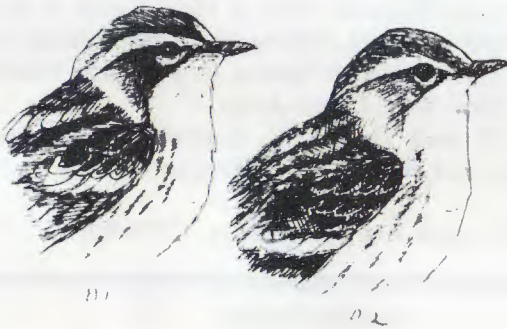
- B1. Black-throated Green lacks yellow below the black throat or breast markings.
- B2. Townsend's shows extensive yellow below the black throat or breast markings.
- B3. Hermit lacks yellow below the throat but shows a gray back.

Artwork by Mark Szantyr



Immatures are generally duller than adult females, but the patterns are similar. See text on separation of the most similar Black-throated Greens and Hermits.

- C1. Black-throated Green.
- C2. Townsend's.
- C3. Hermit.



M. SZANTYR

Blackburnian Warbler.

D1. Female and D2. immature Blackburnian Warblers showing yellow rather than orange tones could be confused with Townsends. However, note the striped back on Blackburnian, as well as the different shapes of the auricular patches. Townsend's patch is rather oval with an extension from the upper rear corner often touching the dark hind neck. Blackburnian's patch is more triangular, with an extension from the lower rear corner pointing down toward the breast sides.

However, most eastern records are from November and December. Hermit Warblers most closely resemble Black-throated Green Warblers, and in immature birds the Hermit's extensively yellow face may be reduced to the point of confusion. Key points of separation are the gray back and lack of yellow on the vent. It should be emphasized that the most difficult confusion problem in the virens group is probably Black-throated Green vs. Hermit in some fall plumages, when immature Hermits may show some olive tones on the back. It also should be noted that while most Black-throated Greens are gone by early October, there are plenty of records of this species lingering into late fall and early winter, when the western vagrants usually appear.

Hybrids - Townsend's and Hermit warblers are known to hybridize. Dealing with these forms is probably beyond the scope of eastern birding, but a close look should allow elimination of Black-throated Green Warbler. Hybrids of the two western forms should lack the yellow vent.

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GREG HANISEK, 175 Circuit Ave., Waterbury, CT 06708

CORRECTION

Vol. 20, No. 2, April 2000.

In the article "Behavior Exhibited by an American Bittern" the following sentence was omitted from the bottom of page 64, after quickening wing beats: "until it attained a height of approximately 100 meters above the".

NORTHERN SAW-WHET OWL BACKYARD BREEDING ATTEMPT

Robert A. Dixon

In late February, a male Northern Saw-whet Owl (*Aegolius acadicus*) began calling in and around my yard in Sterling, Connecticut. In previous years, this would last for a few days and then the owl would move on, presumably to some damp, secluded, coniferous forest farther north. But, this owl decided to stay and was heard calling sporadically for the next three weeks.

In mid-March, I found the owl calling from a nest box I had erected in hopes of attracting Eastern Screech-Owls (*Otus asio*). It was while observing this behavior that I discovered a female Saw-whet nearby. The male continued to call for the next several nights.

The thought of having nesting Saw-whets a couple hundred feet from the house was exciting but seemed unlikely. After all, the nest box was within twenty feet of an active chicken coop, faced an open field, and had human and canine activity daily. I hoped the abundance of mice and voles in the surrounding wet and deciduous woods and the adequate housing would convince the owls to stay.



Photo by Robert Dixon

Over the next few days I made several interesting observations. The first was the discovery of two daytime roosts used by the male. Both of these, in small stands of conifers, were found when the male was heard making occasional soft "toots" during the day, which I presumed were intended to assure his mate of his presence. I also observed the male storing food on his daytime roost. On several occasions, the owl had a mouse or a vole, often half-eaten, on its roost branch. When I would return later in the day the food would be gone. This was an interesting behavior upon which I could find no literature.

The female was now spending her days inside the nest box. She would appear in the opening when there was any activity in the immediate area. It now seemed apparent that they were going to nest.

I spent the next two weeks watching the owls' nightly activities. Usually the female would appear in the nest box entrance at dusk and depart shortly thereafter, returning within a few minutes and going directly inside the box. The male would often call before leaving his roost and would make occasional visits to the nest box during the night. On each approach, he would call softly and the female would greet him. She would often let out a raspy screech when he arrived. Food was probably brought by the male to the female, although I never actually observed this. The female's reluctance to leave the nest box for any length of time led me to believe she was incubating eggs.

On April 10th, I made my morning check on the owls. The male was not on either of his usual roosts and the female did not appear at the nest box entrance. A closer look revealed some downy feathers at the opening. I decided to open and inspect the box. The female was gone, an apparent victim of an attack during the night. There were four eggs inside. One egg was broken and the others were cold. There was also a dead vole inside the box. This discovery was devastating, made more tragic by the fact that this is an uncommon and little-observed nesting species in Connecticut. I was never able to determine what attacked the female Saw-whet on the nest. It did not seem like a typical raccoon attack with the eggs being left untouched. Possibly it was a Great Horned Owl. They have been known to pull Purple Martins from their housing. The male Saw-whet remained roosting in the pines for another two weeks before moving on.

Hopefully I will have another opportunity to share my yard with Saw-whets in the future.

ROBERT A. DIXON, 179 Main St., Sterling, CT 06377



BOOKS ON BIRDS

Jamie Meyers and Robert Keyes

The migration of birds is one of the most fascinating natural phenomena on the planet, and it's thus not surprising that a number of excellent books have come out in recent years on the topic. Scott Weidensaul's *Living On The Wind* (1999, North Point Press, New York, xii + 420 pg., ISBN 0-86547-591-1, \$15.00) is the latest in this genre, but the subtitle - "Across the Hemisphere With Migratory Birds" is closer to the truth, as it's more than just another study on the nuts and bolts of migration. Instead, Weidensaul has drawn on the experience of his own wide ranging ornithological studies and in this remarkable book has painted a series of vivid, poignant pictures of migrants of all kinds and the lives they lead during all phases of their lives, from their nesting and wintering grounds to all places in-between. The tales within are told in a refreshingly lively style, making for easy yet informative reading that should appeal to bird enthusiasts of all levels and interest.

The opening chapter, which tells the story of the little-known Bristle-thighed Curlew and documents its remarkable journey from remote Alaska to the very small islands in the South Pacific where it winters, is one of the more memorable of the many highlights. The narrative here reads almost like a fine suspense novel as the reader - in the guise of the curlew - is thrust out from the relative safety of the tundra to undertake a perilous journey across thousand of miles of unforgiving ocean, with no guide or maps except those that have been somehow been preprogrammed into the bird through thousands of years of evolution. It's so well done that when the fictional curlew finally lands, one can't help but breathe a very heavy sigh of relief.

But the sigh doesn't last for long, as there are further challenges facing the curlew, and the many other world migrants that Weidensaul focuses on. For all the wonderful writing and remarkable imagery he presents us, there is a very sobering conservation thread running through the book. Another of the long lasting images I'll carry for the rest of my life are those of his grisly experiences on the Argentinean pampas, wading through a veritable Swainson's Hawk killing field, victims of a massive spraying of

chemicals outlawed here in the first world. Here too, the writing and imagery remain vivid - the same joy and exultation I felt in earlier chapters turned to sadness and grief as I read through the accounts here. Similar feelings cropped up as Weidensaul described the abject destruction of the tropical forest he encountered in places like the Dominican Republic, where sensitive species like Bicknell's Thrush somehow need to find ways to hold out through long months in traditional wintering grounds that have been almost totally denuded of trees in recent years.

After fearlessly driving the reader to dizzy heights then painful lows, the author leaves us with a conclusion that is probably obvious to most of us but bears repeating anyway. The future is in our hands, and while trends should rightly leave us very skeptical, he instead focuses on the positives, like the education of farmers in Argentina on the plight of the Swainson's Hawks, and doesn't give up hope at all that we can right our environmental ships before it's too late.

Conversation wise at least, a similar take, but from a totally different angle is offered in *Song of the Meadowlark* by James Eggert (1999, Ten Speed Press, Berkeley, CA, xiii + 144 pgs., ISBN 1-58008-034-0, \$12.95). This is a surprising piece of work in that it's written by an economist well versed in the writings and passions of Henry David Thoreau, and it suggests ideas that most mainstream economists would undoubtedly scoff at. The general idea running through this brief yet important tome is that economists, who deal with cold hard numbers and financial figures, leave one important component out of their calculations, that being the impact on the environment and those creatures we birders so cherish. That component is what Eggert calls "Meadowlark Values." This hidden cost is probably evident to any of us who has been birding for any significant short period of time. Many of you reading this now can probably think of at least one formerly great birding spot that's been destroyed in recent years in the name of "progress." In pure economic terms, the balance sheet-toting dismal scientist would generally consider such a developed place to be "improved" over its natural state.

Eggert disagrees. Drawing heavily on the work of Thoreau, he suggests in these pages that we take the environmental consequences of our economic deeds seriously, and begin factoring the opportunity costs of our various land uses into our business and economic decisions. Sound radical? He actually comes to very similar conclusions that Thoreau came to a century and a half ago when he suggested that every town should be free to pursue its

own economic goals but should set aside significant lands (at least 750 acres, Thoreau proposed) to compensate for that development. Can you imagine the environmental - and birding - harvests we'd be reaping if Thoreau's vision had been put to fruition? I can, and I can also imagine those our own children might enjoy if only more of us read Eggert's book and took his basic premise to heart, too.

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The Miracle of Flight, by Stephen Dalton 183 pages, Firefly Books, Buffalo, NY, 1999

Stephen Dalton is an English nature photographer. He has mastered the art of high-speed photography, capturing fast action in the air. The present book is, of course, lavishly illustrated with Dalton's photographs. Although the photographs qualify "Miracle of Flight" as a cocktail table book, it is about much more. It is all about flight: what makes it possible and how did it come about. Dalton is fascinated with flight, finds beauty in flying animals and tells us that he himself indulges in hang-gliding and flying ultralight aircraft.

By way of introduction he reviews the fossil history of flight; insects flew at least one hundred million years before vertebrate animals left the ground. The existence of flight is inferred from the presence of wings; the earliest vertebrate wings belonged to reptiles; feathers imply that a wing is part of a bird. The scanty fossil record is not sufficient to reveal stages in the evolution of wings, which must have come about by slow changes over a very long time. Nor does it reveal whether the wings were used for powered flight or for gliding.

The first chapter attempts to explain the aerodynamic principles of flight, the physics of how birds and bats and aircraft large and small master the air. Aerodynamics is a complex mathematical subject and a reader is left with only a few impressions, the most significant, perhaps, is the importance of the shape of the wing. There are many good qualitative explanations of aspects of the flow of air around a moving wing.

Everything one learned about flight so far must be forgotten in Chapter 2, insect flight. Insects do not fly in the same way as birds and planes. We have probably all heard the tale that scientists have proved that a bee cannot fly. Well, they do, although not like birds,

and high-speed photography played a part in the discovery of novel modes of propulsion used by insects. The illustrations in this chapter and the next, on birds, are not only things of beauty, they illustrate points being made about the miracle of flight. Dalton has mastered an impressive amount of knowledge about insect anatomy and physiology that explains why bird flight would not be suitable for insects. The complex circulatory and respiratory systems of vertebrates cannot be fitted into creatures the size of insects.

The bird chapter contains a lot of detail about those unique and wonderful structures, feathers. Other less striking adaptations also participate in making the amazing ability of birds to be so at home in the air. Skeletons, lungs, circulatory systems, and musculature are all greatly changed from those of ground dwellers. The varied modes of bird flight - flapping, hovering, gliding, soaring, taking off, landing - are all discussed and illustrated with fine art.

The final chapters are devoted to manned flight, beginning with fanciful drawings of artificial flapping wings and early ballooning. The road to flight by heavier-than-air craft actually opened at the beginning of the nineteenth century, when experimental studies of the forces experienced by surfaces in moving air began. Experiments became more sophisticated and progressed to the use of unmanned and manned gliders by the end of the century. Observations of bird wings and bird flight aided these studies. The efforts culminated in the historic flights by the Wright brothers in 1902.

Dalton apparently loves technology for the sake of technology and is infatuated with the Concorde. He states "In the United States the Concorde is second only to the space shuttle." By whom in the United States, one wonders. Neither has much relevance to the practical world of avionics. The shuttle cannot take off and can land at only a few spots in the world. The Concorde is an economic failure that no one is anxious to duplicate. (See *The Simple Science of Flight* by H. Tennekes [1997] for another view of Concorde.)

Dalton published a book with the same title and organization in 1977. The present volume is expanded from that and contains many more striking colored images. It is worthwhile reading for anyone interested in birds and the natural history of flight and will be valued for its photographic triumphs. It is both instructive and a work of art, a rare combination.

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CONNECTICUT FIELD NOTES

Greg Hanisek

WINTER, DECEMBER 1, 1999 THROUGH FEBRUARY 29, 2000

This season served up a varied buffet of avian goodies, highlighted by a chilled helping of raptors. A major flight of Rough-legged Hawks, followed by a spectacular staging of Bald Eagles, provided centerpieces for a broad and deep showing by most of the regularly occurring birds of prey. The raptor show hit its stride during frigid weather after mid-January, but the early part of the season was mild, producing a lot of lingerers (see especially the warbler reports). A good selection of rarities was topped off by the state's first record of **Brambling**, and recent upward trends of several species, such as **Tundra Swan** and **Greater White-fronted Goose**, continued. So did the increase in observers making reports, a salutary effect of the Internet explosion.

GREBES THROUGH DABBLING DUCKS

A Red-necked Grebe was at Millstone Point in Waterford on February 19 (DPr). A good count of 20+ Northern Gannets was made off Hammonasset Beach State Park (hereafter HBSP) in Madison on December 12 (AG). One of the more bizarre occurrences in recent memory began with a report of a **Brown Pelican** flying over the Connecticut River in Windsor Locks like some weird pre-millennium dream on December 31 (fide MO). Most honest Connecticut birders will admit they dismissed this out of hand until an emaciated Brown Pelican was found and eventually cap-

tured a few days later at a pond in Westfield, Mass. An American Bittern was at Short Beach in Stratford February 20 (MS,GH), and at least one wintered at HBSP (m.ob.). As usual, a few Black-crowned Night Herons wintered in Stratford (BC et al.). Away from the western areas where they are now regular, two **Black Vultures** were at West Hartford Reservoir on December 10 (PCi) and two were in Ledyard on December 28 (FN); they still remain rare anywhere along the coast, so one in Bridgeport on December 31 was worth noting (DV). A roost in Ridgefield held 138 Turkey Vultures on January 1 (EJ).

A flock of 25 Snow Geese December 18 at White Memorial Foundation in Litchfield represented a good count for so late in the season (RN); as usual a few were scattered around the state all winter. Eight **Greater White-fronted Geese** for the season (with some possible duplication) continues the recent upward trend: two from December 7 to January 1 in the Mansfield area (HG,SM), one December 5 in Pomfret (SM), one December 28-January 4 at Bantam Lake in Litchfield (DRo,EB,TF); singles December 31 in both Tolland (CEk) and Enfield (MO); one January 16 in Ellington (DHa); and one February 20 in Old Saybrook (FA). An unprecedented group of up to 60 **Tundra Swans** alighted on North Farms Reservoir in Wallingford on February 29 and left early the next morning (RS,WSc, et al.). This species puts down in the state infrequently, although sightings have increased in the past few years. One was at HBSP December 31 (CR, et al.).

A smattering of Wood Ducks wintered, and by late February they were back in numbers, i.e., 34 at Station 43 in South Windsor on February 24 (PCi). The high count of Gadwall was 116 on December 29 in the Frash Pond area of Stratford (CB); one was unusual February 10 in Storrs (CEI). The winter's best counts of Northern Pintail

were six on December 23 at Bishops Pond in Meriden (DC) and five on February 29 in Simsbury (JMe). Four **Eurasian Wigeon** for the season were about normal for recent years, with reports of two from West Haven (TK,m.ob.), one from Stamford (PDU) and one from East Haven (DS). Single Northern Shovelers were at West Hartford Reservoir December 18 (PCi) and Holly Pond in Stamford January 4-21 (PDU); up to four were at Bantam Lake to January 16 (DTr, et al.); and up to 12 wintered at Bishop Pond in Meriden (BD). A **Common Teal** was present at various places along the coast during the season, from East Haven to Milford, moving around as ponds froze (FH,DPo).

DIVING DUCKS THROUGH RAPTORS

A **Tufted Duck** was in a large flock of Aythya ducks in Bridgeport on February 19 (CB), and what appeared to be a second one (based on the length of the tuft) was in the same flock the next day (MS, et al.). The flock, present to the end of the period, included up to 12 Redheads, 2000 Greater Scaup and 24 Lesser Scaup (CB,DV,NB). For the second year in a row, Redheads appeared at Bantam Lake in winter, with three present to January 15 (DRo,BD). Elsewhere three were at Grannis Lake in East Haven in

late December (RA), and five were at Holly Pond January 19 (PDu). The Milford shoreline produced a count of 5000 Greater Scaup on February 17 (DV). The best count of Canvasback was 350+ in the Thames River February 3 in the New London area (JTr). Of special interest was an apparent hybrid male *Aythya*, seen February 24 at North Cove in Old Saybrook, that appeared intermediate between a Canvasback and Redhead (DPr). Two Long-tailed Ducks, rare inland past their peak fall migration season, were on Bantam Lake December 8 (DRo). In the same category were two White-winged Scoters December 5 on Snipsic Lake in Tolland (CEk). A drake Black Scoter, difficult to find in winter, was off Burying Hill Beach in Westport February 5 (NC). The count of Common Goldeneye off Shippan Point in Stamford on February 12 was 300+ (EJ). The only report of **Barrow's Goldeneye** was of a drake on January 8 at Burying Hill Beach, a traditional location (JHu). High counts of Hooded Mergansers were 60 at Frash Pond in Stratford on December 29 (CB) and 65 at Bantam Lake on December 2 (DRo). The Ruddy Duck flock at Bantam Lake peaked at 215 on December 17 (DRo), and a massive total of 886 was logged on Candlewood Lake in Sherman and New Fairfield on January 1

(DRo,RN,BL).

An Osprey lingered inland to the late date of December 19 at Lake Zoar in Southbury (RN,DRo). A spectacular staging of Bald Eagles along the lower Connecticut River produced consistent counts of 50+ in mid to late February (m.ob.). Reports of at least a dozen Northern Goshawks added to the raptorial flavor of the season, as did numerous sightings of conspicuous Red-shouldered Hawks, which tend to bask on low sun-drenched perches during frigid weather. A massive cold front January 22-23 touched off a Rough-legged Hawk invasion that brought reports of more than 40 statewide, marking one of the largest flights in memory (m.ob.). The hotspots were the Stratford Great Meadows, with up to seven present at one time, and the lower Connecticut River, where eagle-watchers consistently found multiple Rough-legs through February. There were also a number of inland reports, including an excellent four on farmland in Ellington on February 6 (MO). The Rough-leg flight was accompanied by a strong influx of Northern Harriers. At least three Golden Eagles wintering in the state was a bit above normal; one was in the Canaan Mountain area (BD, et al.) and two or more were in the lower Connecticut River valley

(PP,CT, et al.), both traditional locations; in addition, one was reported as a fly-over January 21 in Newtown (PB). It was a good winter for American Kestrels, with at least 15 reported compared to 10 Merlins. During the past few winters, Merlins have outnumbered Kestrels. A white Gyrfalcon was seen well by an experienced observer on February 7 at Stratford Great Meadows, where it sent all the gulls in the marsh into a panic before heading out over the Sound (JZ); a few brief sightings were reported in the next few days (DV, et al.). Peregrines were present in Stamford, Bridgeport, New Haven, Waterbury, and Hartford, with scattered reports elsewhere in the state.

GAMEBIRDS THROUGH OWLS

Turkeys are a boom species throughout the state, but counts of 72 on January 23 in Sterling (RDi) and a staggering 159 on December 18 at Stearns Farm in Mansfield were noteworthy (CEI). The high count of American Coots at Bantam Lake, which holds the state's largest wintering flock, was 286 on December 19 (DRo). A Semipalmated Plover to at least December 11 in Bridgeport (DV) was the second latest on record (Zeranski & Baptist). The best count of Purple Sandpipers was 21 on January 23 at Harkness

Memorial State Park in Waterford (RDi). A Long-billed Dowitcher, giving repeated calls in flight, was at Griswold Point in Old Lyme December 5, a date in keeping with this species' tendency to linger a month or more later than Short-billed Dowitcher (TH). A count of 15 Common Snipe in Wallingford on February 29 was interesting in that it was an early date for a migratory push and a high count for a wintering group (RS, et al.)

With the closing of the Manchester landfill January 1, larophiles had to look elsewhere for the rarer species of gulls. Counts statewide, not counting Manchester in December, were: Iceland Gull - 12, including three first-years December 28 at Wethersfield Cove (PCi), and singles inland away from the Connecticut River on December 19, at Little Pond in Litchfield (RN), January 19-February 7, at Quinebaug fish hatchery in Central Village (GW,RDi), February 24-26 in downtown Willimantic (MS), and through February at North Farms Reservoir (m.ob.); Glaucous Gull - one in New London (RDe, et al.); Lesser Black-backed Gull - 10. At Manchester on December 18 there were three Iceland, four Glaucous, and two Lesser Black-backed, as well as reports of the following apparent hybrids, two Glaucous X Herring and two Lesser

Black-backed X Herring (PCo, et al.). Five Lesser Black-backs were at the landfill on December 27 (PCo) and three Glaucous X Herring (a.k.a. Nelson's Gull) were there December 31 (MS). Other species totals statewide were Black-headed Gull-three, one wintering in Stamford (PDu), one at HBSP February 14 (CR) and one at Old Saybrook February 23-24 (DPr); and **Little Gull** - two at Old Saybrook February 24-27 (DPr,LD). The biggest counts of Bonaparte's Gulls occur during the March-April staging period, but 616 on December 20 at Holly Pond was noteworthy (PDu). A Laughing Gull lingered to December 5 at HBSP (CR). Two **Razorbills** January 1 off Mystic marked one of the occasional alcid forays into the Sound that someone is fortunate enough to witness (CT,GZ).

The usual complement of coastal Short-eared Owls included at least two throughout the season at Great Island in Old Lyme (BY,PCi et al.). During the cold depths of the season, six+ Long-eared Owls were in roosts in the Milford-Stratford area (DV, et al.) The same January cold front that started the Rough-leg invasion also produced a number of sightings of Barred Owls on the move in search of food, including one in a courtyard in downtown New Haven in early Feb-

ruary (DS). To quote from Hartford Audubon's winter notes: "Faced with a long period of snow cover that provided small rodents with protection, Barred Owls traveled to the plowed roadsides that provided greater visibility and access to food. Unfortunately the owls are more likely to be hit by cars as evidenced by five birds brought to Canton's Roaring Brook Nature Center. . . two of the birds were subsequently banded by Gerry Mersereau and released where found in Avon and Suffield, respectively* (JK). A road-killed Barred Owl found in Kent on January 8 wasn't so fortunate (AD); one was seen eating a mole in Farmington on January 19 (PCi). The season produced scattered reports of Snowy Owls, following the early arrival of one last October in Stamford: one at HBSP on December 5 (CR, et al.), one (the same?) reported from Falkner Island off Guilford on December 10 (SRi fide PCo), one February 3 in Woodbridge (JHu), and one February 9 in Southbury being harassed by a Red-tailed Hawk (PB). This is the most during a single winter in this decade but probably not unexpected in a season that saw one make it as far south as Florida.

WOODPECKERS THROUGH WARBLERS

The most common of our resident species, such as

Downy Woodpecker, seldom make it into these reports, but eight Downies in a Simsbury backyard at one time in December is probably some kind of record (BK). Along the same lines, a yard in Rocky Hill held Downy, Hairy, Red-bellied, and Pileated Woodpeckers on February 27 (MH). A Red-headed Woodpecker found at a feeder in Chaplin on January 13 remained through the period (RG fide CEL). A **Western Kingbird**, probably the one found in late November at Stratford Point, was at Milford Point on December 4 (NB). The latest report of Eastern Phoebe was January 14 at Greenwich Audubon Center (TBa). It was another banner winter for Northern Shrike, with from 40 to 50 reported statewide. Stearns Farm in Mansfield held up to 120 Horned Larks throughout the period, a good inland total (CEL); 160+ were at Sikorsky Airport in Stratford on January 23 (FMa). Two Tree Swallows were early at Chester on the Connecticut River February 26 (FD,DS).

It was just an average winter for Red-breasted Nuthatches, but White Memorial Foundation, which has a breeding population, hosted up to six at its feeders (DRo), and up to four Brown Creepers wintered in the same area (DRo). A Marsh Wren lingered to at least January 3 at Little Pond in

Litchfield (DRo). A **Townsend's Solitaire** was reported from Colchester on December 19 (DTi), falling very closely into the seasonal pattern of recent state records. The season didn't produce exceptional numbers of American Robins, but 317 were reported at Bantam lake on December 24 (DRo); on February 18, a flock of 125 were eating holly berries on the Cigna property in Bloomfield (JMe). American Pipits were more widespread than usual deep into winter, including three on December 24 at HBSP (MK) and a flurry of them on January 15: Stratford produced six (BK), five were at HBSP (PCo), five were at Middle Beach in Westbrook (PCo), two were in Essex (PCo) and one was at Great Island (fide PCo).

An Orange-crowned Warbler was a good find in Kosciuszko Park in Stamford December 19-January 9 (TBu,PDu), as was a Nashville Warbler to December 12 at Cove Island Park in Stamford (PDU). A **Yellow-throated Warbler** was present at a feeder in Hamden from December 1 through January 7 (WSt). A photo shows it to have white lores, indicative of the more northerly ranging "sycamore" race, *albilora*. A Pine Warbler used a suet feeder to help it winter in Westport (JG). Single Palm Warblers were still present December 12 in Essex

(AG) and December 24 in South Windsor (PCi). Among this stellar array of warblers, the least expected was an American Redstart in Kosciuszco Park December 19-20 (TBu, PDU); this is the second-latest on record for the state (Zeranski & Baptist). A Common Yellowthroat made it to at least January 1 at Station 43 in South Windsor (PDe). It was a good winter for Yellow-breasted Chats, with singles at HBSP on December 9 (PCi), in Noank on December 18 (GW), and in a Guilford yard on January 3 (JL).

SPARROWS THROUGH FINCHES

An adult Chipping Sparrow was still in Sherman on January 1 (RN, DRo). Milford Point produced three Ipswich Sparrows on January 23 (J&LC); at least two were at Long Beach in Stratford throughout the season (m.ob.); and one was at Griswold Point on January 27 (HG). Inland, 40 Snow Buntings were in Morris February 2-3 (RBe), and 38 were in South Windsor January 8 (PCi); 85 were at Seaside Park in Bridgeport January 16 (DV), 55 were at Shippan Point in Stamford January 18 (EJ), and 41 were in Stratford February 6 (SK).

Eastern Meadowlarks, now quite scarce in winter, included five at West Rock Park in New Haven on January 24 (BBa), two in the Stratford Great Meadows

on February 12 (CB), and one January 23 at HBSP (JTo). Two **Yellow-headed Blackbirds** for the season included a male in late January at a feeder in Old Lyme (DJ) and an immature female on February 3 at a feeder in Plainfield (MS). A Baltimore Oriole that apparently wintered was in a yard in Southington February 4 (fide FG). The male **Bullock's Oriole** at a feeder in West Goshen returned for the third consecutive winter (DTr, et al.), a remarkable example of site fidelity by a long-distance vagrant.

The bird of the season for the state (and New England?) was a first-year Brambling that appeared sporadically throughout January and February at several feeders in a Weston neighborhood. Photos and sketches were obtained (EL, et al.). Pine Siskins and Common Redpolls were widespread in moderate numbers, mainly in December, with siskins failing to reach the numbers suggested by their heavy fall flight. There was another flurry of redpolls at the end of the season, i.e., 35 at Station 43 in South Windsor on February 16 (RDl) and 60 in Middletown on February 27 (JMo). A feeder in Litchfield attracted high counts of 40 redpolls and 80 siskins in February (TF). Crossbills, mainly Red, were noted a number of times in small flocks, mainly along the coast and primarily at HBSP

(m.ob). Of special note was a single White-winged Crossbill visiting a feeder in Bloomfield on December 31 (J&LC). Evening Grosbeaks were extremely scarce and Pine Grosbeaks were absent.

EXOTICS: Ruddy Shelducks were in West Haven on January 15 (BK), Wallingford February 15 (DRu), and Middlefield February 29 (RS).

[Editor's Note: Reports of rare or unusual bird species in Connecticut (species marked with an asterisk on the most recent COA checklist) require that documentation be submitted to the Secretary of the Avian Records Committee of Connecticut (Mark Szantyr, 145 Farmington Ave., Waterbury, CT 06710) if they are to be included in the field notes].

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PHOTO CHALLENGE

Julian Hough

ANSWER TO PHOTO CHALLENGE 31

A small thrush skulks in the undergrowth, affording brief and unsatisfactory views. It is hard to assess true colors below the dark understory. Patiently, you piece together a few clues: a relatively small thrush, pale legs, a 'spotted' breast, and most strikingly, a pale area around the eye. Unfortunately, these features are shared to some extent by at least two of the three likely contenders: Veery, Hermit, Swainson's, and Gray-cheeked Thrush. The larger, non-Catharus thrush, Wood Thrush, is easily eliminated by that species' strikingly white breast with bold, heart-shaped spots.

Finally the bird hops into the open and offers an unobstructed view. The facial pattern is the most important feature to concentrate on. Veery often looks plain-faced, with the bold, dark eye standing out. Gray-cheeked Thrush is similar in facial pattern, though there is no eyering, to speak of, though some birds do show a diffuse gray area around the eye. The prominent and well-marked eyering on our mystery bird leaves us with either Swainson's or Hermit Thrush. The latter species shows a thin, but well-defined creamy-white eyering, separated from the bill base by darker lores. This doesn't match our bird which shows a broader eyering which extends forward to meet over 'the bridge of its nose' forming a more 'spectacled' look. This is classic Swainson's Thrush, and that is what this bird is.



Further, more subtle clues to its identity would be more apparent in color. Swainson's Thrushes are a dull olive brown bird with obvious buffy tones to the ear coverts, supercilium, and upperbreast. They lack the warm russet tones (especially in the tail) of Veery and Hermit Thrushes. Gray-cheeked can be very similar,

but have a colder, more gray tone to their ear coverts and upperparts. The spotting on the upperbreast is also variable, but generally it is blurry and browner in Swainson's, and slightly more contrasting and better defined in Gray-cheeked. Hermit Thrush has the most contrasting breast spotting of all four small thrushes, while that of Veery is more muted and blends in with the rest of the underparts. The breast spotting on our bird is hard to see but seems pretty well-defined, though from the photo it could fit any of the species mentioned above.

Structurally, there are a few notable differences. Swainson's, Hermit, and Gray-cheeked appear stocky and compact, while Veery is larger and has a more noticeable 'long-legged' look. Hermit Thrushes while tiny have a few features which readily identify them. Their foxy red tail stand out, they have noticeably rufous bases to the primaries which stand out as a panel on the closed wing (have a look next time you see one!) and they have a habit of drooping their wings and slowly cocking their tail!

However, in fall there will be some birds which do not fit into this narrow view of plumage traits, and some birds will be considerably harder to identify. If you are lucky, you may hear it call: a liquid "plip" in Swainson's, A "veeeeer" for both Veery and Gray-cheeked, and a low, soft "chuk" for Hermit Thrush.

This adult Swainson's thrush was photographed by me on the Dry Tortugas in April 1998.

JULIAN HOUGH, 72 Quentin St., Waterbury, CT 06706



Photo Challenge 32. Identify the species. Answer next issue.

THE CONNECTICUT WARBLER

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Send manuscripts to the Editor. Please type double spaced with ample margins, on one side of a sheet. Submit a copy on a computer disk, if possible. Style should follow usage in recent issues. All manuscripts receive peer review.

Illustrations and photographs are needed and welcome. Line art of Connecticut and regional birds should be submitted as good quality prints or in original form. All submitted materials will be returned. We can use good quality photographs of birds unaccompanied by an article but with caption including species, date, locality, and other pertinent information.

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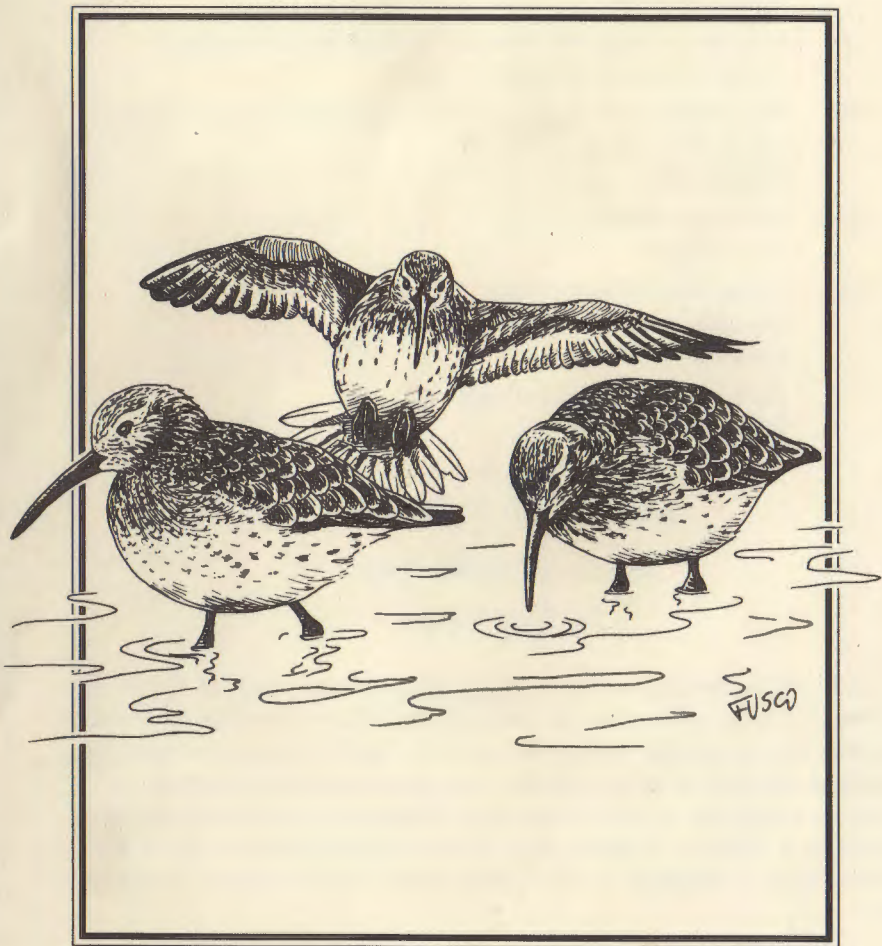
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THE CONNECTICUT WARBLER

A Journal of Connecticut Ornithology



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The Connecticut Warbler

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ABOUT OUR COVER

Dunlin (*Calidris alpina*)

by Paul Fusco

The Dunlin drawing on the front cover of this issue of *The Connecticut Warbler*, is the work of multi-talented Paul Fusco. Besides his excellent artistry, especially with pen and ink, Paul likes to photograph birds and his photos have appeared in a number of publications.

Paul is employed by the Connecticut Department of Environmental Protection's Wildlife Division as a Visual Media Designer. He is also Conservation Chairman of the Connecticut Ornithological Association.

THE MABEL OSGOOD WRIGHT AWARD

The Mabel Osgood Wright Award was presented at the Annual Meeting of the Connecticut Ornithological Association, held March 18, 2000. It is appropriate for this very special award, that all members of the Connecticut Ornithological Assoc. be made aware of this year's recipient and his accomplishments.

Although the actual presentation speech is not available, I shall attempt to summarize some of the accomplishments of our recipient for the year 2000, **Mark Szantyr**.

Mark is an artist, photographer, teacher, and author, and his contributions to Connecticut ornithology have been outstanding. He is a founding member and past Vice President of the Connecticut Ornithological Association. As a long-time bird bander, he has contributed meaningful data to the U.S. Fish and Wildlife Service. Mark has authored numerous articles for *The Connecticut Warbler* and other publications. His many identification articles, enhanced by his excellent drawings, have added greatly to our knowledge of birds and birding. Mark's colored renditions of female tanagers and orioles in the October 1998 (Vol. 18, No. 4) issue, were especially helpful in separating those species, as well as significantly enhancing that special issue of "The Warbler." He has also provided illustrations for other texts and for numerous ornithological journals.

Mark has served on the state's Avian Records Committee and is currently Secretary of that committee. He has also served on the Connecticut DEP's Endangered Species Advisory Board for Birds, The DEP Biodiversity Forum for Birds, and was recently the State Coordinator of the Silvio O. Conte National Fish and Wildlife Refuge Migratory Bird Stopover Habitat Survey.

Mark received his Master of Fine Arts degree in painting from the University of Connecticut in 1992 and is currently teaching art classes at Eastern Connecticut State University.

Betty Kleiner, Editor

HINTS TO THE IDENTIFICATION OF RUSTY BLACKBIRDS IN CONNECTICUT

Mark S. Szantyr

Brewer's Blackbird (*Euphagus cyanocephalus*) is a common icterid of western United States and southern Canada. Its normal summer range extends from the west coast to the western edge of the central plains and across the northern tier of the United States and southern Canada to about the Great Lakes. It winters across the southern states and Mexico from northern Florida westward. Brewer's Blackbird is an uncommon vagrant to the east coast, mostly occurring in the fall and winter, with reports increasing in recent years. As this bird's range moves eastward, we should expect more sightings. In fact, it may be more common in our area than currently accepted records show. Most Brewer's reports received by the Avian Records Committee of Connecticut are of individual birds at a feeder or, rarely, in the field. This presents the first problem in convincingly identifying this species. Brewer's Blackbird is very similar to the more expected Rusty Blackbird (*Euphagus carolinus*) and, in fact, Rusty Blackbird can show characters of plumage that superficially resemble Brewer's Blackbird. When a suspect blackbird shows up alone at a feeder, with no other icterid handy for comparison, it is all too easy to convince yourself that this is the much sought after Brewer's Blackbird. Common belief is that Rusty Blackbirds show varying degrees of rusty feather edging in the winter and Brewer's Blackbirds do not. In fact, older adult male Rustys may show little to no rusty edging and from a distance may appear all black, or even slightly iridescent. This situation recently presented itself to Greg Hanisek, Neil Currie, and me, while investigating a reported Brewer's Blackbird from the western part of the state. The bird, from a distance appeared very much as one would expect a winter male Brewer's Blackbird to appear: black, with maybe a slight iridescence, yellow eye. With some effort we were able to secure very good looks at the bird and photographs, and re-identified it as a male Rusty Blackbird. The "iridescence" was, in fact, slight rusty edging to the nape and mantle feathers that caused the appearance of a "sheen" when seen from a distance. This bird was carefully and critically identified using these more reliable structural characters:

Brewer's Blackbird has a small, round-headed appearance, with a longer tail, seemingly longer legs (Figure 1), and a very different



Figure 1: BREWER'S BLACKBIRDS

To my eye, Brewer's Blackbirds tend to appear "leggy" and, at times, round-headed compared to Rusty Blackbird. These drawings are from field sketches made on 10 November 1999 in Columbia, Connecticut.

bill shape than Rusty Blackbird. Rusty Blackbird's bill is long, or finely pointed and narrower at the base than that of Brewer's Blackbird. Brewer's has a shorter bill, not as finely tipped and broader at the base. Although there is variation for age and sex, this character holds true fairly regularly. Brewer's Blackbird will usually show definite, though sometimes limited iridescence, on the head and body plumage, with the head often appearing to have a purple sheen and the body more greenish. Brewer's Blackbird may show pale tips to the dark body feathering but rarely as rusty as on a Rusty Blackbird. If you can clearly see this detail, you should be able to study the bill structure to be more certain of your identification (Figure 2).

In the Fall of 1999, I was fortunate to find three male Brewer's Blackbirds in an enormous mixed flock of Common Grackles (*Quiscalus quiscula*), Red-winged Blackbirds (*Agelaius phoeniceus*), and Brown-headed Cowbirds (*Molothrus ater*). In this flock of 30,000 to 50,000 birds there were a few Rusty Blackbirds in the

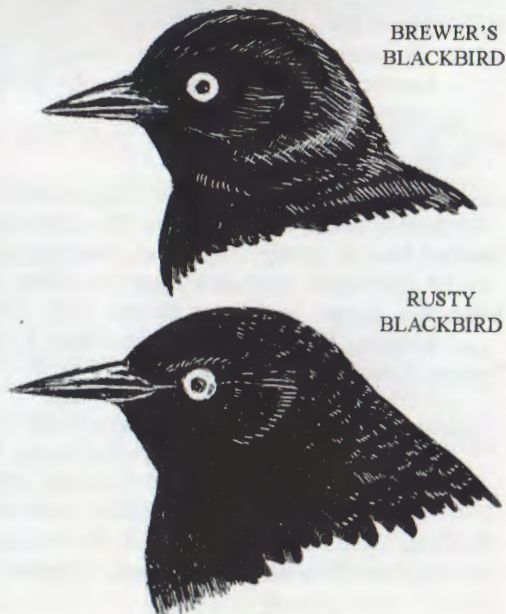


Figure 2

vicinity of the Brewer's trio. I was able to study these birds together on the ground for a while and noticed a character that seemed to be consistently different for each species. The Brewer's Blackbirds appeared to show a rangy, more long-legged appearance than the relatively squat Rusty Blackbirds. This seemed to coincide well with my recollections from studying this species at length out west. These three birds would often present a very bright, upright posture that seemed to accentuate their long-legged, small-headed build. The tail seemed consistently longer by comparison to the Rustys and to the Red-winged Blackbirds that were nearby. During this observation, the iridescence was readily observable and wholly different from that of Common Grackle or the lack of iridescence on Rusty Blackbird. Would I have identified them on posture alone? NO! But it sure clued me in to look for structural differences that would aid in confirming the identification.

The 1999 sighting was on the 10th of November in Columbia, Connecticut. This timing coincides well with other regional occurrences of Brewer's Blackbird, with the range of dates spanning very late October through March, and with early November showing as fairly regular norm. In general, this species should be looked for whenever very large flocks of blackbirds are moving through our area. Large agricultural fields or livestock impoundments seem to be likely locations.

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THE 2000 CONNECTICUT SUMMER BIRD COUNT

Joseph Zeranski

The Summer Bird Counts for the year 2000 were held on weekends in June as noted below. Below is a summary of each count, followed by species data in tabular form.

STATEWIDE COUNT TOTALS

Dates: June 4, 5, 11, 12, 18, 19, 25, and 26. Reported on Count Days (CD) were 188 Species (plus one additional Count Period species) consisting of 100,669 Individuals. Two hundred & forty-eight observers in 125 parties spent 1109 Party Hours (PHs) in the field.

INDIVIDUAL COUNT TOTALS

Barkhamsted Summer Bird Count (*founded 1992*)

Date: June 24 & 25 (Sat. & Sun.).

Totals: 125 Species, 14,562 Individuals. Twenty-eight observers in 16 parties censused over 185 PHs. Since 1992 150 species have been recorded and 118 of these have been found nesting.

Participants: *Bob Barbieri, George Boynton, Ayreslea Denny, Duncan Denny, Bud Dimmitt, Angela Dimmitt, Grace Kandefer, Peter Kandefer, Jay Kaplan, Dick Kellcher, Kathie Kellcher, Brian Kleinman, Lois Melaragno, John Melody, Jamie Meyers, Russ Naylor, Bill O'Day, Carol Parent, Andrea Pelletier, Paul Richardson, David Rosgen (84 Falls Terrace, Apt. D, Oakville, CT. 06779), Stanley Rosgen, J. Segal, Crarrere Tyrrell, Phyllis Winer, Sarah Winer, Francis Zygmunt, & Liz Zygmunt.*

Weather. 6/24: Sunny AM, Increasingly Cloudy PM, Day Temp 60° to 87°F. Wind SW, 0 - 15 mph., Night Temp. 69° to 57°F. Wind SW, 0 - 5 mph. 6/25: Cloudy, very Humid PM; severe Thunderstorms (0.25") after 7 PM. Day Temp. 57° to 84°F. Wind SW, 0 - 15 mph.

Count (a 13 mile east-west by a 15 mile north-south rectangle) Center: 41° 55' N 72° 59' W. Elevation: 285 to 1457 feet. Area covered: Barkhamsted, Burlington (northern 1/4), Canton, Colebrook (south half), Granby (southwest 1/4), Hartland, New Hartford, Harwinton (northern edge), Torrington (northern 1/4), & Winchester.

Greenwich-Stamford Summer Bird Count (*founded 1976*)

Date: June 17, 18, 24, & 25 (Sats. & Suns.).

Totals: 133 Species, 22,738 Individuals. Fifty-one observers in 33 parties censused over a period of 289 PHs. Since 1976 216 species

have been recorded and 138 of these have been found nesting.

Participants: Tom Andersen, John Askildsen, Pat Bailey, Ken Ballas, Mike Baptist, Tom Baptist, Trudy Battaly, Richard Becker, Gail Benson, Michael Bochnik, Lyle Brinker, Thomas W. Burke (235 Highland Road, Rye, NY 10580), Ioa Byrne, Al Collins, Diane Collins, Sandra Cullen, George Dremeaux, Patrick Dugan, Cynthia Ehlinger, Frank Gallo, Ted Gilman, Cyd Groff, Andy Guthrie, Carol Hartel, Paul Hinlicky, Erich Hotetz, Janet Mehmel, Joan Mish, Susan Moss, Daniel Mugaburu, Deena Myers, Frank Novak, Brian O'Toole, Gary Palmer (34 Field Road, Cos Cob, CT. 06807), Drew Panko, Matt Popp, Steve Potter, Paul Renken, Nancy Ross, Polly Rothstein, Meredith Sampson, Jonna Schaffer, Bob Shriber, Andy Towle, Patty Towle, William Van Loan, James Vellozzi, Bill Williams, Angus Wilson, Neva Winter, & Lynn Zeltman.

Weather. 6/17: Mostly Clear, Temp. 68° to 94°F. 6/18: Cloudy with Showers (0.5"), Temp. 62° to 72°F. 6/24: Clear, Temp. 58° to 90°F. 6/25: Overcast, and then Clearing, Temp. 62° to 88°F.*

Count (a 15x15 mile east-west square) Center: 41° 05' N 73° 37' W. Elevation: sea level to at least 740 feet. Area covered (Connecticut, 65% of area): Darien, Greenwich, New Canaan, & Stamford; and (New York, 35% of area) Armonk, Bedford (in part), Port Chester, Rye, & White Plains (in part).

Due to the unavailability of many field observers on the first weekend, the Greenwich count was held on two consecutive weekends, so that data for the count would be consistent with past years. (This is one time only).

Hartford Summer Bird Count (founded 1991)

Date: June 17 & 18 (Sat. & Sun.).

Totals: 115 Species, 7,667 Individuals, plus four Count Period species. Twenty observers in nine parties censused over 80.5 PHs. Since 1991 133 species have been recorded.

Participants: Bill Altman, Paul Cianfaglione (8 Glenn Lane, West Hartford, CT 06110), John Clancy, Linda Clancy, Ed Czapinski, Mary Czapinski, Steve Davis, Sue Davis, Buzz Devine, Ken Elkins, Michael Hamilton, Sylvia Halkin, Len Kendall, Betty Kleiner, Gil Kleiner, Caroline LeRoux, Stephanie Lovell, Mary Rudek, Shirley Smigel, & Judy Whittlesey.

Weather. 6/17: mostly Sunny, Hot, & Humid, Wind: NE, 5 - 10 mph., Temp. 76° to 88°F. 6/18: mostly Cloudy, late afternoon Showers (0.15"), Wind NE: 5 - 10 mph. Temp. 62° to 69°F.

Count (15-Mile diameter circle) Center: 41° 46' N, 72° 40' W. (Old State House). Elevation: 40 to 640 feet. Area covered:

Bloomfield, East Hartford, Farmington, Hartford, Manchester, New Britain, Newington, Rocky Hill, South Windsor, West Hartford, Wethersfield, & Windsor.

Litchfield Hills Summer Bird Count (*founded 1994*).

Date: June 11 & 12 (Sat. & Sun.).

Totals: 130 Species, 16,583 Individuals. Forty-one observers in 13 parties censused during 170 PHs. Since its 1994 founding 162 species have been recorded of which 87 have nested.

Participants: *Elliot Ashe, David Babington, Janet Baker, John Baker, Bob Barbieri* (183 Laurel Lane, Harwinton CT 06797) *Ray Belding, Debbie Bishop, George Boynton, Eileen Cooper, Ayreslea Denny, Duncan Denny, Angela Dimmitt, Curt Edgar, Dave Emond, Larissa Graham, Greg Hanisek, Rita Hannon, Karl Holtzshue, Gordon Loery, Carolyn Longstreth, Marion Lyga, Deborah Martin, John Melody, Russ Naylor, Ann Orsillo, Ray Packard, Claranne Parker, Jim Parker, Virginia Peterson, Linda Potter, Sarah Quintard, James Restivo, Paul Richardson, Dave Rosgen, Nina Stein, Mark Szantyr, Dave Tripp, David Wakefield, Leigh Wells, Lyle Whittlesey, & Fran Zygmunt.*

Weather: 6/11: Hot, Humid, 90° to 95°F. 6/12: Hot, Humid, 85° to 90°F.

Count (15-Mile diameter circle) Center: 41° 43' N 73° 14' W. Elevation: 450 to 1658 feet. Area covered (in whole or in part): Cornwall, Goshen, Kent, Litchfield, Morris, Sharon, Torrington, Warren, & Washington.

New Haven Summer Bird Count (*founded 1991*)

Date: June 3 & 4 (Sat. & Sun.).

Totals: 129 species, 8,676 Individuals, plus one Count Period (CP) species. Twenty-seven observers in 15 parties spent 101 PHs in the field. Since 1991 140 species have been recorded.

Participants: *Lee Aimesbury, Marion Aimesbury, Ralph Amodei, Andrew Brand, Steve Broker, Fritz Davis, Richard English, James Gladden, Sherri Grant, Christine Hayes, Stacy Hanks, Mike Horne, Pat Horn, Katherine Hubbard, Carol Lemmon, Gary Lemmon, Christopher Loscalzo, Steve C. Mayo* (27 Tuttle Court, Bethany CT 06524), *Florence McBride, Judy Moore, Scott Pierce, Frank Ragusa, Nancy Ragusa, Nancy Rosenbaum, Arne Rosengren, Lee Schlesinger, & Deborah Tenney.*

Weather: 6/3: partly Sunny, Breezy, Temp. 55° to 74°F. Wind NNE, 0 - 10 mph. Night: 68° F. 6/4: partly Sunny, Temp. 54° to 76°F. Wind WNW, 0 - 10 mph.

Count (15-Mile diameter circle) Center: 41° 18' N, 72° 56' W. Elevation: Sea level to 700 feet. Area covered: Branford (western), East Haven,

Milford, New Haven, North Haven, Orange, West Haven, & Woodbridge (in part).

Quinnipiac Valley Summer Bird Count (founded 1992)

Date: June 17 & 18 (Sat. & Sun.).

Totals: 112 Species, 8,745 Individuals. Eight observers in four parties spent 47.75 PHs in the field. Since 1992 141 species have been recorded.

Participants: *Dave Bryant, Mark Carabetta, Kevin Clark, James McBride, Marty Moore, Nancy Morand, John Schultz, & Wilford Schultz* (93 Harrison Road, Wallingford CT 06492).

Weather: 6/17: Sunny, Hot, Wind S, 0 - 3 mph., Day Temp. 68° to 92°F. Night 80° to 62°F. 6/18: Cloudy, Rain midday, Wind NW, 0 - 5 mph., Day Temp. 62° to 68°F. Night 68°F.

Count (15-Mile diameter circle) Center: 41° 28' N, 72° 44' W (Intersection of routes 68 & 157). Elevation: 30 to 600 feet. Area covered: Cheshire (in part), Durham, Guilford (in part), Killingworth (in part), Meriden, Middlefield, Middletown, North Branford, North Haven, & Wallingford.

Salmon River Summer Bird Count (founded 1992)

Date: June 10 & 11 (Sat. & Sun.).

Totals: 95 Species, 2,594 Individuals. Eleven observers in six parties counted over 27 PHs. Since 1992 132 species have been recorded and 84 of these have been found nesting.

Participants: *Mary Augustiny, Carrie Conrad, Dan Drega, Michael Good, Debbie Goodrich, Jack Halibozek, Nancy Lawton, Joanne Luppi, Joseph Morin* (8 West St Terrace, Cromwell CT 06416), *Ed Reneson, & David Titus*.

Weather. 6/10: Clear, Hazy, & Humid, Temp. 72° to 92°F. 6/11: Clear, Hazy, & Humid, violent PM Thunderstorms, Temp. 72° to 92°F.

Count (15-Mile diameter circle) Center: 41° 33' N, 72° 26' W. Elevation: 5 to 550 feet. Area covered: Colchester, East Haddam, East Hampton, Haddam, Middletown (southeast), & Portland.

Storrs Summer Bird Count (founded 1990)

Date: June 17 & 18 (Sat. & Sun.).

Totals: 95 Species, 2,952 Individuals. Seven observers in five parties spent 36 PHs in the field. Since 1990 125 species have been recorded and 63 of these have been found nesting.

Participants: *Bruce Carver Jr., Dave Corsini, Douglas Hume, Steve Morytko, Jeff Rogers, Jim Rogers, Steve Rogers* (75 Charles Lane, Storrs, CT 06268).

Weather. 6/17: Clear, Sunny, Hot. Temp. 70° to 90°F. Wind SW, 0 - 5 mph. 6/18: partly Cloudy, then Cloudy; heavy afternoon Rain (1"), Temp. 54° to 74°F. Wind NW, 5 - 10 mph.

Count (15-Mile diameter circle) Center: 41° 48' N, 72° 15' W. (Junction of Route 195 and N. Eagleville Road). Elevation: 200 to 750 feet. Area covered: Andover, Ashford, Chaplin, Coventry, Mansfield, Tolland, Willimantic, West Willington, Willington, & Windham.

Trumbull-Bridgeport Summer Bird Count (*founded 1999*).

Date: June 10 & 11 (Sat. & Sun.).

Totals: 131 Species, 3,926 Individuals. Twenty-three observers in nine parties spent 42 PHs in the field. One hundred and forty species have been recorded during the last two years. Eighteen species showed evidence of nesting. The results of last year's count from this new SBC's were unfortunately received too late for publication. This is, in fact, its second year of existence. Species added this year to the count are noted in the tables.

Participants: *Buzz Devine, Ken Elkins, Chris Loscalzo, Steve Mayo, Mike Murphy, Tom Sharp* (22 Albions St., Waterbury, CT 06705), *Steve Spector, Maria Stackmahl, Will Storz, & Dennis Varza*.

Weather. 6/10: Clear, slight Breeze, Temp. 80° to 90°F. 6/11: Hazy, Humid. Temp. 70° to 85°F. Wind SW, 0 - 4 mph.

Count (15-Mile diameter circle) Center: 41° 16' 30" N, 73° 13' 45" W. Area covered: Bridgeport, western Derby, Easton, Fairfield, Milford (in part), Monroe, southern Newtown, southeast Redding, Shelton, Stratford, Trumbull, & Weston.

Woodbury-Roxbury Summer Bird Count (*founded 1978*)

Date: June 4 (Sat.).

Totals: 133 Species, 17,017 individual birds. Thirty-two observers in 15 parties spent 130.5 PHs in the field. Since 1978 175 species have been recorded.

Participants: *Elliott Ashe, David Babington, Ray Belding, Ron Bell, Polty Brody, Bob Cartoceti, Neil Currie, John Demkar, Buzz Devine, Angela Dimmitt, Jane Doe, Jean Doe, Larry Fischer, Ted Green, Susan Kirk, Nancy Liedlich, William Liedlich, Donna Marszak, Russ Naylor* (44 Church Street, Woodbury Ct. 06798), *Allan Root, Betty Root, Dave Rosgen, Fred Schroeder, John Sjveski, John Sjovall, Adele Taylor, Darcy Thurrott, Carol Titus, Daxe Tripp, Jaymee Welch, Leigh Wells, & Chris Wood*.

Weather. Partly Cloudy, Wind WSW, 10 - 15 mph. Temp. 45° to 75°F. Night-some scattered Sprinkles, Wind WNW, 10 mph. Temp. 50° to 58°F.

Count (15-Mile diameter circle) Center: 41° 32' N, 73° 16' W. Elevation: 110 to 1060 feet. Area covered: Bethlehem, Bridgewater, Brookfield, Middlebury, New Milford, Newtown, Roxbury, Southbury, Washington, & Woodbury.

JOSEPH ZERANSKI, 163 Field Point Rd., Greenwich, CT 06830

2000 Summer Bird Count Tables

SPECIES	Coastal			Ct Valley		Upland Counts					2000 State Total	% of 93-99 Ave.	1993-99 # / yr Ave. Min. Max.			
	GS	NH	TB	HA	SR	Mid-state		Northern								
						QV	WR	BA	LH	ST						
Red-throated Loon											0		3	0.7	0	3
Common Loon	1	1	1					3			6		7	5	2	7
Pied-billed Grebe	2	1									3		7	3	1	5
Horned Grebe											0		2	0.5	0	2
Red-necked Grebe											0		2	0.3	0	1
Double-cr. Cormorant	692	157	56	7	13	25	4	3	7		964	134	7	731	644	843
Great Cormorant											0		1	0.1	0	1
American Bittern											0		4	0.7	0	2
Least Bittern	1			1							2		7	2	1	4
Great Blue Heron	12	14	1	8	2	12	12	44	43	5	153	170	7	90	47	152
Great Egret	188	23	20	1		2					234	120	7	195	88	371
Snowy Egret	94	14	41			1					150	70	7	213	166	261
Little Blue Heron	2										2		7	3	1	5
Tricolored Heron		1									1		0	0.0	0	0
Cattle Egret											0		1	0.6	0	4
Green Heron	32	11		8	1	6	7	7	7	2	81	96	7	84	63	116
Black-cr. Night-Heron	418	28	10			2					458	163	7	282	161	426
Yellow-cr. Night-Heron		1	1								2		7	3.7	2	10
Glossy Ibis											0		3	0.4	0	1
Black Vulture						1	6				7		4	3.3	0	17
Turkey Vulture	17	15	4	20	6	32	80	63	67	6	310	123	7	251	186	309
Snow Goose											0		3	0.4	0	1
Canada Goose	1952	308	268	463	97	354	623	319	572	18	4974	114	7	4384	3379	5014
Brant	18		1								19		5	5	0	18
Mute Swan	65	26	52	2	4	233	13		24		419	116	7	360	297	409

Wood Duck	88	6	3	26	2	35	34	37	84	1	316	100	7	317	273	399
Gadwall		5	6								11		5	5	0	12
American Wigeon	<u>1</u>										1		5	0.7	0	1
American Black Duck	42	9	34			6	4		20		<u>115</u>	168	7	68	50	106
Mallard	852	169	82	336	9	448	133	136	125	28	2318	85	7	2713	2361	3075
Mallard x Am. Bl. Duck		1						1					7	9	2	24
Blue-winged Teal											0		4	0.9	0	3
Northern Shoveler											0		2	0.3	0	1
Northern Pintail											0		3	0.4	0	1
Green-winged Teal											0		1	0.1	0	1
Canvasback											0		0	0.0	0	0
Ring-necked Duck						1					<u>1</u>		3	0.6	0	2
Greater Scaup	1										<u>1</u>		7	2	1	4
Lesser Scaup											<u>1</u>		2	0.3	0	1
Common Eider											0		1	0.3	0	2
White-winged Scoter											0		1	0.1	0	1
Oldsquaw											0		4	1	0	3
Bufflehead											0		5	2	0	4
Common Goldeneye											0		2	1	0	6
Hooded Merganser						1	1	1	15		18	173	7	10	2	20
Common Merganser				CP		7	37	54	10		108	119	7	91	32	161
Red-breasted Merganser	<u>1</u>	1									2		4	2	0	7
Ruddy Duck	<u>1</u>	1									2		3	0.9	0	4
Osprey	<u>23</u>	20	6			1		1			<u>51</u>	240	7	21	9	41
Mississippi Kite											0		1	0.1	0	1

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XX

Noted on fewer than 5 years in last 10 yrs.

New Count Day Species (shaded box)

New 10 Yr. High Total (underlined)

New 10 Yr. Low Total (bold number)

2000 Summer Bird Count Tables

SPECIES	Coastal			Ct Valley		Upland Counts					2000 State Total	% of 93-99 Ave.	1993-99 # / yr			
	GS	NH	TB	HA	SR	Mid-state		Northern					Ave.	Min.	Max.	
						QV	WR	BA	LH	ST						
Bald Eagle				CP		1		11			12	179	7	7	3	10
Northern Harrier	2	1	1						1		5		4	1	0	3
Sharp-shinned Hawk	1			1	2		1	1	2		8	89	7	9	5	14
Cooper's Hawk	1	3	1	1			3	1	8	6	25	105	7	24	14	38
Northern Goshawk									2		2	23	7	9	4	18
accipiter species													5	1	0	3
Red-shouldered Hawk	3	3	2		4	3	16	8		8	47	155	7	30	25	41
Broad-winged Hawk	8	1	2	2		1	6	17	16	2	55	111	7	50	39	61
Red-tailed Hawk	41	16	2	16	4	24	52	33	45	4	237	119	7	199	140	272
buteo species													2	0.6	0	3
American Kestrel		1		2		5	1		6		15	82	7	18	6	30
Peregrine Falcon	1	2		3							6		6	2	0	3
Ring-necked Pheasant	5			2	1		1				9	18	7	50	22	93
Ruffed Grouse				1			3	15	5	3	27	62	7	44	16	77
Wild Turkey	57	28	12	26	5	41	84	145	111	9	518	174	7	297	97	508
Northern Bobwhite						1	1				2	35	7	6	1	11
Clapper Rail	5	6	4								15	184	7	8	5	13
King Rail		1									1		3	0.6	0	2
Virginia Rail	2		1	1	4	1	3		7		19	62	7	30	11	51
Sora				1							1		5	1	0	3
rail species		1					1						0	0.0	0	0
Common Moorhen											0		5	1	0	2
American Coot											0		4	0.6	0	1
Black-bellied Plover	2		2								4		5	2	0	5
Semipalmated Plover	1		34								35		3	9	0	30

Piping Plover		8	2								10	84	7	12	7	20
Killdeer	55	27	10	21	6	47	27	28	30	13	264	87	7	302	268	351
American Oystercatcher	25	2	3								30	150	7	20	11	37
Greater Yellowlegs		2	<u>1</u>								3		7	2	1	4
Lesser Yellowlegs											0		1	0.1	0	1
Solitary Sandpiper							1				1		4	0.7	0	2
Willet		1	10								<u>11</u>		5	1	0	4
Spotted Sandpiper	1	5	<u>1</u>	1		5	11	1	3		28	75	7	38	20	49
Upland Sandpiper				CP							CP		0	0	0	0
Ruddy Turnstone		10	1								11		6	6	0	16
Sanderling			<u>5</u>								5		3	2	0	9
Semipalmated Sandpiper		300	<u>49</u>								<u>349</u>	106	7	328	2	2020
Western Sandpiper			<u>1</u>								<u>1</u>		0	0	0	0
Least Sandpiper											0		3	0.9	0	3
White-rumped Sandpiper											0		1	0.5	0	3
small sandpiper species													2	0.4	0	2
Dunlin											0		4	2	0	6
Short-billed Dowitcher			<u>8</u>								<u>8</u>		1	0.6	0	4
Common Snipe											0		1	0.1	0	1
American Woodcock	1		<u>1</u>	1		1	3	8	9		24	150	7	16	8	24
Laughing Gull	30		<u>12</u>								48	103	7	47	1	119
Bonaparte's Gull			<u>1</u>								1		3	2	0	9
Ring-billed Gull	197	75	61	126		65	5	13	6		548	96	7	569	326	808
Herring Gull	527	109	206	58	3	7	3	1			914	86	7	1058	930	1229
Great Black-backed Gull	157	34	11	8	3	1	1	1			216	60	7	361	279	433

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XX

Noted on fewer than 5 years in last 10 yrs.

XX

New Count Day Species (shaded box)

XX



New 10 Yr. High Total (underlined)

XX

New 10 Yr. Low Total (bold number)

2000 Summer Bird Count Tables

SPECIES	Coastal			Ct Valley		Upland Counts					2000 State Total	% of 93-99 Ave.	# / yr	1993-99		
	GS	NH	TB	HA	SR	Mid-state		Northern						Ave.	Min.	Max.
						QV	WR	BA	LH	ST						
gull species												2	51	0	357	
Gull-billed Tern											0	2	1	0	3	
Common Tern	79	49	51								179	94	7	191	56	518
Forster's Tern	1										1	0	0	0	0	
Least Tern		152	130								282	83	7	339	209	560
Black Tern											0	0	0	0	0	
Black Skimmer		8	1								9	2	3	0	12	
Rock Dove	392	115	105	119	5	361	59	84	107	28	1375	101	7	1358	974	1543
Mourning Dove	413	177	84	345	57	365	304	227	280	104	2356	102	7	2310	2123	2682
Monk Parakeet	8	62	35								105	607	7	17	1	63
Black-billed Cuckoo	6	2	1	1	1	2	3		5	1	22	89	7	25	7	51
Yellow-billed Cuckoo	3	1	3		1		1			2	11	45	7	24	4	47
cuckoo species							1		1			4	3	0	12	
Barn Owl											0	3	5	0	19	
Eastern Screech-Owl	22			2	3	1	3	2	2		35	76	7	46	25	61
Great Horned Owl	5	1		1	3		1	6	9		26	84	7	31	16	40
Barred Owl	5		2	2	4		1	22	17	4	57	110	7	52	15	85
Long-eared Owl											0	1	0.3	0	2	
Northern Saw-whet Owl								2			2	6	2	0	5	
Nighthawk, Common		2					4	2	1		9	119	7	8	1	14
Chuck-will's-widow											0	1	0.1	0	1	
Whip-poor-will		3			7	1	2	7	4		24	160	7	15	8	22
Chimney Swift	47	24	8	26	20	51	152	147	136	50	661	108	7	614	492	736
Ruby-thr. Hummingbird	5	3	1	3	1		9	32	25	4	83	112	7	74	42	98
Belted Kingfisher	24	7	3	6	4	11	14	49	15	3	136	113	7	120	75	166

Red-headed Woodpecker											0			5	0.7	0	1
Red-bellied Woodpecker	141	29	20	34	17	28	65	39	44	9	426	125	7	341	239	465	
Yellow-bellied Sapsucker							<u>10</u>	137	104		251	174	7	145	31	311	
Downy Woodpecker	216	34	32	38	11	25	47	108	101	13	625	112	7	559	394	787	
Hairy Woodpecker	54	5	5	12		5	25	52	57	2	<u>217</u>	138	7	157	110	198	
Northern Flicker	168	54	23	68	16	50	56	66	71	18	590	82	7	721	657	828	
Pileated Woodpecker	7	1	2	2	3	1	9	31	23	1	80	93	7	86	63	107	
Olive-sided Flycatcher						<u>1</u>			1		2		4	0.6	0	1	
Eastern Wood-Pewee	77	38	34	30	16	10	106	97	123	28	559	116	7	483	423	618	
Yellow-bellied Flycatcher											0		4	0.7	0	2	
Acadian Flycatcher	3	4			1		4	3	1	3	20	68	7	29	22	39	
Alder Flycatcher				2			6	11	91	<u>1</u>	<u>111</u>	198	7	56	12	78	
Willow Flycatcher	37	24	7	19	3	10	20	11	98	4	233	99	7	234	186	281	
Least Flycatcher	1				1	2	25	43	48	9	131	84	7	156	121	223	
Empidonax species													3	2	0	10	
Eastern Phoebe	76	22	14	40	26	24	168	165	170	29	734	111	7	659	528	887	
Great Crested Flycatcher	51	32	16	25	29	35	79	51	104	18	440	116	7	378	270	483	
Eastern Kingbird	67	29	19	50	15	39	95	102	132	15	563	102	7	551	489	643	
White-eyed Vireo	9	2	1	2		3	3			1	21	50	7	42	26	52	
Yellow-throated Vireo	13	2	3	2	17	5	54	37	60	12	205	100	7	204	169	244	
Blue-headed Vireo							12	58	30		100	104	7	96	76	128	
Warbling Vireo	92	21	24	53	28	36	162	42	104	25	587	113	7	521	292	664	
Red-eyed Vireo	188	79	54	43	116	32	292	659	555	30	2048	118	7	1740	1273	2132	
Blue Jay	279	111	45	88	39	126	225	269	136	56	1374	87	7	1574	1346	1697	
American Crow	911	267	102	367	75	507	643	422	603	106	4003	102	7	3910	3169	4662	

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New Count Day Species (shaded box)

New 10 Yr. High Total (underlined)

New 10 Yr. Low Total (bold number)

2000 Summer Bird Count Tables

SPECIES	Coastal			Ct Valley		Upland Counts					2000	% of	1993-99			
	GS	NH	TB	HA	SR	Mid-state		Northern			State	93-99	# / yr	Ave.	Min.	Max.
						QV	WR	BA	LH	ST	Total					
Fish Crow	25	18	7	4	4	14		3	19		94	173	7	54	39	76
Common Raven	1					1		34	4		40	191	7	21	4	37
Horned Lark											0	1	1	0.1	0	1
Purple Martin	12	8				33		1			54	141	7	38	29	51
Tree Swallow	93	57	33	94	41	119	182	436	384	72	1511	94	7	1601	1194	1867
No. Rough-wngd. Swallow	106	49	8	12	1	28	47	50	12	13	326	98	7	333	259	414
Bank Swallow		56	9	11	9	7	91	67	11	6	267	77	7	348	202	529
Cliff Swallow	57		14	36			282	28	3		420	193	7	218	156	268
Barn Swallow	226	148	34	56	19	131	188	193	244	100	1339	95	7	1409	1184	1637
Black-capped Chickadee	246	76	39	69	40	78	290	404	337	100	1679	95	7	1770	1566	2120
Tufted Titmouse	371	74	53	81	81	44	331	263	240	46	1584	115	7	1380	1053	1640
Red-breasted Nuthatch	6		1	2				28	13		50	50	7	100	59	157
White-breasted Nuthatch	152	23	19	16	6	12	51	97	60	12	448	119	7	377	242	543
Brown Creeper	2	1		2		1	54	34	35	1	130	179	7	73	48	107
Carolina Wren	143	18	16	19	20	19	24		1	15	275	216	7	127	49	242
House Wren	245	33	26	54	44	48	130	166	125	67	938	111	7	842	742	927
Winter Wren	3		1					7	18	12	45	110	7	41	14	81
Sedge Wren											0	1	1	0.1	0	1
Marsh Wren	20	37	17	3					23		100	141	7	71	37	95
Golden-crowned Kinglet	1							5	3		9	109	7	8	4	16
Blue-gray Gnatcatcher	23	2	4	2	26	1	63	48	53	21	243	131	7	185	146	232
Eastern Bluebird	61	12	8	34	16	22	216	141	115	26	651	123	7	530	319	815
Veery	137	21	25	9	17	25	172	470	460	36	1371	105	7	1308	872	1668
Swainson's Thrush											0	4	4	1	0	2
Hermit Thrush	1		1	3			15	110	52	1	183	136	7	135	99	190

Wood Thrush	236	57	72	77	44	77	231	222	269	38	1323	103	7	1281	1089	1486
American Robin	1395	362	167	480	169	518	811	544	775	171	5392	92	7	5834	5048	6220
Gray Catbird	<u>1150</u>	158	125	252	87	212	498	447	621	69	3619	104	7	3491	3204	3914
Northern Mockingbird	159	63	34	123	26	83	105	41	27	32	693	91	7	764	593	981
Brown Thrasher	18	1	5	3	2	3	23	1	11	1	68	80	7	85	62	105
European Starling	1467	428	233	871	176	1251	707	626	721	273	6753	96	7	7019	5767	8174
Cedar Waxwing	111	152	68	115	89	120	246	345	358	45	<u>1649</u>	135	7	1220	568	1576
Blue-winged Warbler	37	41	17	6	33	30	67	48	99	22	400	65	7	612	498	716
"Lawrence's Warbler"													6	1	0	3
"Brewster's Warbler"													6	1	0	2
Golden-winged Warbler											0		6	1	0	2
Tennessee Warbler											0		4	1	0	2
Nashville Warbler											0		5	1	0	2
Northern Parula				1				1	3		5	159	7	3	1	5
Yellow Warbler	467	79	39	70	55	91	329	201	522	48	1901	92	7	2060	1593	2352
Chestnut-sided Warbler	5	4	12	8	7	14	77	232	287	4	650	101	7	641	375	777
Magnolia Warbler		2	1	1			4	74	10		<u>92</u>	139	7	66	52	86
Cape May Warbler											0		1	0.1	0	1
Black-thr. Blue Warbler							2	140	40		182	144	7	127	73	186
Yellow-rumped Warbler							1	94	31		126	103	7	122	77	183
Black-thr Green Warbler	10	4		3	4	2	33	134	98	12	300	133	7	226	103	318
Blackburnian Warbler							10	98	60	1	<u>170</u>	150	7	113	55	153
Yellow-throated Warbler											0		2	0.3	0	1
Pine Warbler	<u>42</u>	23	9	17	9	7	23	102	74	8	314	147	7	213	140	314
Prairie Warbler	4	11	2	24		14	69	12	1	8	145	65	7	225	176	259

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2000 Summer Bird Count Tables

SPECIES	Coastal			Ct Valley		Upland Counts					2000	% of	1993-99			
	GS	NH	TB	HA	SR	Mid-state		Northern			State	93-99	# / yr	Ave.	Min.	Max.
						QV	WR	BA	LH	ST	Total	Ave.				
Bay-breasted Warbler											0		1	0.1	0	1
Blackpoll Warbler		6						5			11		4	3	0	11
Cerulean Warbler					1			1	3		7	92	7	8	2	12
Black-and-white Warbler	47	36	18	6	18	18	76	187	166	28	600	106	7	565	506	668
American Redstart	39	18	3	8	39	20	170	311	306	12	926	99	7	936	634	1127
Worm-eating Warbler	66	18	22	5	18	19	13	3	1	5	170	108	7	157	114	223
Ovenbird	106	65	51	26	51	43	194	344	317	48	1245	98	7	1272	955	1484
Northern Waterthrush			3	1			10	5	33		52	115	7	45	8	69
Louisiana Waterthrush	19	5	11	2	3	1	42	29	17	6	135	101	7	133	111	157
Kentucky Warbler		1									1		4	2	0	7
Mourning Warbler											0		5	1	0	3
Common Yellowthroat	213	53	41	63	46	68	187	407	492	31	1601	88	7	1820	1415	2061
Hooded Warbler		2	1	CP	3		15	1	4		26	96	7	27	23	37
Wilson's Warbler											0		3	1	0	2
Canada Warbler					1		1	22	38		62	105	7	59	21	83
Yellow-breasted Chat											0		4	1	0	2
Summer Tanager											0		1	0.1	0	1
Scarlet Tanager	102	24	16	26	27	29	129	179	138	17	687	113	7	606	533	692
Eastern Towhee	75	52	12	20	36	16	119	124	117	14	585	79	7	741	660	887
Chipping Sparrow	335	29	29	63	81	62	381	350	303	68	1701	94	7	1807	1602	2149
Field Sparrow	8	16	1	26	18	15	46	8	6	4	148	83	7	178	143	206
Savannah Sparrow	2			7		3	4	1	8	16	41	128	7	32	12	54
Grasshopper Sparrow				2		1					3		5	4	0	8
Nelson's Sh.-tailed Sparrow											0		3	0	0	1
Saltm Sharp-tailed Sparrow	16	4	5								25	222	7	11	5	25

Seaside Sparrow		2	2							4	3	0.7	0	2		
Song Sparrow	448	130	58	158	54	100	369	376	491	54	2238	88	7	2549	2212	3007
Swamp Sparrow	14			3	5	9	16	60	258	2	368	129	7	284	140	457
White-throated Sparrow		CP						2	13		15	98	7	15	2	23
White-crowned Sparrow											0	2		1	0	8
Dark-eyed Junco				2				48	3		53	105	7	50	30	70
Northern Cardinal	385	112	48	129	65	112	318	157	179	60	1565	99	7	1574	1450	1734
Rose-breasted Grosbeak	46	24	13	15		21	92	102	78	9	400	103	7	389	302	476
Indigo Bunting	58	20	3	15	11	25	88	92	28	4	344	101	7	339	284	425
Bobolink				23	10	40	82	27	151	6	339	77	7	442	257	550
Red-winged Blackbird	603	358	155	282	75	526	596	281	898	136	3910	89	7	4413	3859	5247
Eastern Meadowlark				6		2	5		1	3	17	32	7	53	34	81
Rusty Blackbird											0	1		0.7	0	5
Common Grackle	1417	451	142	593	91	836	563	329	505	124	5051	105	7	4834	4047	5608
Boat-tailed Grackle			1								1	0		0	0	0
Brown-headed Cowbird	158	65	36	88		111	160	108	185	24	935	71	7	1310	1129	1450
Orchard Oriole	27	7		15	2	7	13				71	193	7	37	21	54
Baltimore Oriole	140	43	32	74	41	61	257	96	140	15	899	88	7	1025	837	1192
Bullock's Oriole											0	1		0.1	0	1
Purple Finch						10		73	70	2	155	159	7	97	66	142
House Finch	310	66	63	86	48	62	263	133	190	56	1277	59	7	2148	1312	3510
Pine Siskin									1		1	3		0.9	0	3
American Goldfinch	377	153	47	321	62	195	366	510	455	91	2577	133	7	1935	1476	2790
Evening Grosbeak											0	5		2	0	5
House Sparrow	1670	221	149	521	77	235	295	295	294	189	3946	137	7	2873	2373	3469

BA - Barkhamsted

GS - Greenwich-Stamford

HA - Hartford

LH - Litchfield Hills

NH - New Haven

QV - Quinnipiac Valley

SR - Salmon River

ST - Storrs

TB - Trumbull-Bridgeport

WR - Woodbury-Roxbury

XX

XX

XX

XX

Noted on fewer than 5 years in last 10 yrs.

New Count Day Species (shaded box)

New 10 Yr. High Total (underlined)

New 10 Yr. Low Total (bold number)

2000 Summer Bird Count Tables

SPECIES	Coastal			Ct Valley		Upland Counts					2000 State Total	% of 93-99 Ave.	1993-99			
	GS	NH	TB	HA	SR	Mid-state		Northern					# / yr	Ave.	Min.	Max.
						QV	WR	BA	LH	ST						
Unidentified and/or Hybrid	69					1							2	3	0	21
TOTAL INDIVIDUALS	22738	6876	3926	7667	2594	8745	14103	14562	16583	2952	100746	102		99231	91345	112679
CD Species	133	129	131	115	95	112	129	125	130	95	188	97		195	190	205
CP Species	0	1	0	4	0	0	0	0	0	0	1	60		2		
DEGREE OF EFFORT:																
Party Hours		101	42	80.5	27	47.8	131	185	170	36	1109	99.03		1120	1051	1192
Day Party Hours		99	42	80.5	24	47.3	126	178	164	36	1062	99.38		1068	1015	1130
Night Party Hours		23	0	0	3	0.5	5	7	6.5	0	47	91.71		51	36	65.5
Observers		51	27	23	20	11	8	28	41	7	248	104.6		237	230	257
Parties		33	15	9	9	6	4	16	13	5	125	102.9		121	115	130
Indiv. birds per 10 PH		787	681	935	952	961	1831	787	975	820	908.6	105.9		858	805	1024
Indiv. birds per Observer		446	255	171	383	236	1093	520	404	422	406.2	98.76		411	373	490
% Observers		20.6	10.9	9.27	8.06	4.44	3.23	11.3	16.5	2.82	100					
% Party Hours		26.1	9.11	3.79	7.26	2.44	4.31	16.7	15.3	3.25	100					
% Individual Birds		22.6	6.83	3.9	7.61	2.57	8.68	14.5	16.5	2.93	100					

BA - Barkhamsted	NH - New Haven	TB - Trumbull-Bridgeport	XX	Noted on fewer than 5 years in last 10 yrs.
GS - Greenwich-Stamford	QV - Quinnipiac Valley	WR - Woodbury-Roxbury	X	New Count Day Species (shaded box)
HA - Hartford	SR - Salmon River		XX	New 10 Yr. High Total (underlined)
LH - Litchfield Hills	ST - Storrs		XX	New 10 Yr. Low Total (bold number)

All the above statistics are given for individual SBCs (GS, WR, & ST) at least ten years old.

For local SBCs held on fewer than 10 years, only species first seen this year are shown.

In state totals new and rare (found on fewer than four of the last eight years) species are noted.

For species averaging over 5 birds during the previous seven years, this year's total is given as a percentage of that average

The column labeled "% of 93-99 Ave." shows (for species averaging over 5 birds during the previous 7 years and seen annually) this year's total as a percentage of that average.

NORTHERN GOSHAWK NESTING ECOLOGY IN CONNECTICUT

Trevor Becker and Dwight G. Smith

Long-term (1973-2000) studies of Northern Goshawk (*Accipiter gentilis*) nesting in Connecticut are summarized. Despite its occurrence as a breeding species within the state, surprisingly little is known about its nesting ecology and distributional status. Studies in other parts of their North American range indicate that Northern Goshawks typically nest in mature and old growth woodlands mostly in more remote and rugged locations of their range. A concern of our long-term study is how Northern Goshawks adapt to smaller and more restricted woodlands and what level of human activities can they tolerate in Connecticut's much modified landscapes.

Northern Goshawk Status in Connecticut

The Northern Goshawk was considered a rare species in New England for most of the last century. Forbush (1925-1929) listed the goshawk as rare to casual in summer. A decade later Bagg and Eliot (1937) considered it to be exceptionally rare throughout New England. Sage et al. (1913) reported only a single instance of Northern Goshawk breeding in Connecticut and suggested that this accipiter was an irregular winter visitor.

Our long-term studies from 1973 to the present suggest that the nesting population of Northern Goshawks is slowly but steadily increasing and spreading throughout Connecticut. This increase may be due to extensive reforestation, the maturation of state woodlands which Northern Goshawks prefer for nesting, and the protection of this species.

Summary accounts that detail Northern Goshawk ecology are presented in Johnsgard (1990) and Palmer (1988). An earlier comprehensive summary published by Bent (1938) reviewed much of the known information regarding this species along with many anecdotal accounts. Root and Root (1978) compared Northern Goshawk nests with those of Cooper's Hawk (*Accipiter cooperii*) and Red-shouldered Hawk (*Buteo lineatus*) in Connecticut.

The state breeding bird atlas survey, conducted in 1982-1988, found breeding evidence in 13.8 percent of all blocks surveyed in the state (Smith and Devine, 1994). Of these, 46.3 percent were confirmed, 18.3 percent were listed as probable, and 35.4 percent were

considered as possible. Smith and Devine summarized information on 38 nesting attempts and also described areas where Northern Goshawks were likely to nest in the state (Devine and Smith 1996).

Methods

Field surveys coupled with aid from birders and wildlife enthusiasts provided information on breeding territories of Northern Goshawks in Connecticut. Searches were made of traditional nesting territories, beginning in February and continuing at monthly (or more frequent) intervals through June. If a pair was discovered occupying a breeding territory, they were observed to determine breeding status. State parks and forests, wildlife management areas, public reservoirs, and private rural areas with woodland cover were surveyed on foot. During each search we stopped at periodic intervals to listen for communications between the members of a pair and to detect aggressive behavior.

We also located nesting pairs with playback of Northern Goshawk broadcasts using a portable tape cassette (Contec portable stereo cassette tape deck, Model V83). Two detachable speakers (10-watt output) were mounted back-to-back and positioned in a low branch (about 1-1.8 meters off the ground). Playback broadcasts lasted over 1-1.5 minutes. During playback broadcasting, observers positioned themselves 18 meters away using shrubs and saplings for partial concealment. Playback broadcasts were conducted every 10 - 15 minutes, or about every 0.25 miles along the surveyed route.

RESULTS AND DISCUSSION

Seasonal Phenology

At least some Northern Goshawk pairs are permanent residents in the state. By mid February adults paired from previous years establish their nesting territory. The building of a new nest or refurbishing of an old one begins almost immediately and continues into early March. Within the last week of March to the first week of April, eggs are laid.

Incubation continues through much of April. The female does all or most of the incubating and is supplied with food by the male. She may occasionally hunt, especially in early morning hours. Hatching occurs from late April into early May. Following hatching the female remains in or near the nest tree for several weeks, protecting the highly vulnerable young. During this time she is extremely aggressive toward intruders. In early June the young

branch out in the nest tree and make short hopping flaps to adjacent trees. By the last week of June, juveniles have vacated the nest but remain in the nesting territory and can be heard begging for food. The juveniles remain with the parents for another two months following fledging—even in early September we have observed young in company with the adults.

Nest Site History

If undisturbed, Northern Goshawks may return to the same nesting territory over many years. Such areas are termed traditional nest sites and illustrate the fidelity of this species. Pairs returning to these traditional nest sites construct new nests each year or refurbish old nest sites. At one traditional site, Northern Goshawks used the same nest for three consecutive years. At other sites, however, several nests were constructed in successive years, all within 100 m of each other. One of the six traditional nesting territories was active for 10 consecutive breeding seasons. One nest was used twice, but new nests were built in other years. Choice of nest site within the traditional nesting territories varied from year to year and pair to pair. At one site, for example, four alternate nests and the active nest were all placed in conifers. In two nesting territories consisting of mixed woodlands, all nests were placed in deciduous trees. However, in a third territory nests were constructed within conifer or deciduous tracts from year to year.

Nest Construction and Productivity

The bulky nests of Northern Goshawks are constructed with large and medium-sized twigs and branches closely interlocked. Nest placement was either next to the trunk with axial limbs for support, in a primary crotch with a few main limbs aiding support, or in a secondary crotch.

Active nests were lined with bark chips and fresh sprigs of coniferous or deciduous greenery. Typical dimensions of nests in Connecticut ranged from 0.60 - 0.91 m wide and 0.45- 0.60 m deep. Comparatively, nest dimensions given by Johnsgard (1990) were 0.45-0.50 m wide by 0.24 m high.

The tree species in which the nest is placed can affect the dimensions of the nest. When in a primary crotch of a deciduous tree, the twigs often filled the crotch to create a very sturdy and bulky nest. These nests were often very wide, up to 1.2 m in diameter, and deep. Nests built in secondary crotches were generally also wide but not as deep (0.30-0.45 m) and supported by several branches. Similar differences can be seen in nests built in conifers.

Nests constructed next to the trunk were generally large, often continuing nearly 180 degrees around the tree and supported by several limbs. These nests also had large diameters, ranging from 0.91-1.06 m and depths of 0.30-m-0.45 m. Nests built in primary crotches, with a few main limbs aiding support, have lasted over ten years. In these cases, some of the nest was gone, but the evidence of the nest was still evident. Nests placed in secondary crotches of deciduous trees were less sturdy, generally falling apart within 3-5 years or so. Traditional nests supported by several branches routinely kept their shape and size for many years following nesting. Most often, one side of the nest was blown out and dangled down, pulling a portion of the nest out with it.

Northern Goshawk nests are sometimes appropriated by other raptors such as Great Horned Owls (*Bubo virginianus*), Barred Owls (*Strix varia*) and Red-tailed Hawks (*Buteo jamaicensis*). In Connecticut, gray squirrels (*Sciurus carolinensis*) also sometimes claimed ownership of unused nests.

Known productivity of 23 nesting pairs totaled 45 young for an average near two young per nest (range 1-4 young). This compares with an average productivity of 2.2 young per nesting attempt reported for several localities in Arizona, Nevada, and Oregon (Bosakowski 1999).

Factors that caused nesting failures included human interference and predation by Great Horned Owls on adults or young. The female Northern Goshawk is very vulnerable when remaining still on the nest during the incubation period. Northern Goshawks were killed by Great Horned Owls at two of the 16 active nest sites located in 1999. At four traditional territories, Northern Goshawks claimed territories but did not nest because Great Horned Owls nested in adjacent woodlands. The relationship between Great Horned Owls and Northern Goshawks is illustrated by the history of a specific breeding site. Active for three consecutive years, a goshawk pair was unsuccessful in the fourth year when the remains of an adult Northern Goshawk which had been killed by a Great Horned Owl were discovered beneath the nest tree. Great Horned Owls subsequently took over the nest and used it for several years until it deteriorated. Sixteen years later (from the first observations of a nesting pair), a new pair of Northern Goshawks claimed the breeding territory and nested successfully in the same tree. At another active site located near a house, the pair disappeared early in the nesting cycle. Neighbors had reported being attacked in the yard just prior to the disappearance of the pair.

Nest Trees

Most nests were constructed in live trees. No significant differences were found in nest placement in coniferous (52.5%) or deciduous trees (43.8%), suggesting that Northern Goshawks select the larger wooded habitat rather than a specific tree within a wooded area. This nest site selection can be considered even more opportunistic as Northern Goshawks nests in predominately deciduous woods were constructed in a deciduous tree 100% of the time; nests in conifer stands were in coniferous trees 90% of the time, but 10% were placed in deciduous trees located within the conifer stand.

Northern Goshawks placed their nests just below the upper live canopy and above the layer of shrubs and younger trees. Nest height averaged 14.8 m (range 9.7-18.2 m) above the ground. The average shrub layer measured 2.19 m in height. Comparatively, average canopy height around the nest site was 26.4 m. The mean percentage of nest height to canopy height of 56.1 % indicates that all nests were placed well within or very near the base of the canopy. When comparing the mean for the nest tree canopy (26.1 m) to the mean of the canopy of the plot (25.1 m), goshawks used the slightly higher tree in which to position the nest. This nest placement provides protective cover and also immediate access to flight corridors between canopy and ground cover.

Northern Goshawks often nested near trails and woods roads. Distances from the nest tree to the nearest hiking trails averaged 69.4 m (range 7.9-266.6 m) while distances to woods roads averaged 139.1 m and ranged between 22.2-247.6 m. Trails and woods roads provide vegetation-free flyways within the woodland interior. Some trails and wood roads may also provide corridors through the upper canopy in which to fly and landmarks when above the canopy. This result was not considered an artifact of "trail bias" since the field-work was almost always done without regard to trails. To underscore this point, we sometimes found nests first before discovering, on closer examination, that a woods road or trail was nearby.

Northern Goshawks frequently nested near quiet water sources, especially wetlands and streams. Northern Goshawk nests were significantly closer to streams and wetlands than random sites ($P < 0.00$). Distances of nests to wetlands and streams averaged 104.6 m (ranged 10.3-304.7 m) while average distances to lakes and reservoirs was significantly greater, averaging 207.7 m (range 71.6-533.3 m). The proximity of nest sites to wetlands may be connected to the favorable soil conditions which promote the

development of coniferous woodlands, or perhaps is a function of the stands of conifers that were seeded by water companies. Specifically, sites around reservoirs have had extensive plantings of conifers which act as wind breaks, reduce soil erosion, and help reduce evaporation (conifers absorb less water versus deciduous growth) throughout the year. Furthermore, wetlands and watercourses are typically less disturbed habitats which may also be a factor in Northern Goshawk nest site selection near these areas.

The Human Factor.

Distances from the nest tree to the nearest paved roads averaged 399.3 m (range 59.7-1,142.9 m) and were significantly different from random sites ($P < 0.05$), indicating that Northern Goshawks prefer to select nest sites removed from potential disturbance. Comparatively, distances to the nearest houses or other buildings were even greater at 413.3 m but ranged between 57.1-971.5 m. Some houses were unexpectedly close to active nest sites but buffering woodlands were always between the active nest and the establishment. The relatively short distance of some nest sites from disturbances (e.g., houses, roads) suggests that some goshawk pairs are increasingly more tolerant of human modifications within the landscape. This could possibly be due to a combination of an increasing Northern Goshawk population coming into conflict with an expanding residential development.

Northern Goshawks selected a nest site relatively close to edges and more toward a corner within the continuous tract. This supports the idea that Northern Goshawks will not build a nest deep in the forest, but rather select for a slightly inter-forest nesting site. Northern Goshawks selected nest sites with a wooded/forested buffer zone, but still close to edge habitats where a variety of prey would be available and selected.

Habitat Management

The goshawk's nature in repeatedly returning to an area can affect management practices over short and lengthy periods. Raptors' flying ability enables great distances to be covered over a short period of time, pointing out that management practices within the nest stand, nest territory, and home range can affect goshawk populations. Different habitat management plans have been proposed for protecting raptors in the western states. Yet there are few publications specifically on eastern states. Developed western forest management practices may have little application to eastern forests. The rugged wilderness located on the west coast

hardly resembles the little forest left in much of the northeastern United States. In western United States, large tracts of mature forest and some virgin forest are owned by the federal government. Developed civilization can be long distances away. The majority of forests and land in Connecticut are privately owned and it can be hard to get away from civilization. When logging activity took place in or near the nest stand of trees the goshawks reacted negatively; at two nest sites where regulated logging occurred the goshawks moved deeper into the remaining woodlands.

CONCLUSIONS AND SUMMARY

Most of the goshawk nests we have discovered in Connecticut are located in state or town lands, nature centers, nature conservancy lands, or other private sanctuaries. Two factors probably mitigate the placement of most nests in sanctuaries and state lands. First, logging and other disturbance activities are usually nonexistent, minimal or regulated so these locales support older and more extensive woodlands in which Northern Goshawk may nest. A second contributing factor is the relative degree of protection and isolation afforded Northern Goshawks nesting in these sanctuary woodlands. In a densely populated and heavily urbanized state like Connecticut these sanctuaries provide island habitats set in a sea of urbanization.

Our results combined with those presented by Reynolds et al. (1982) and Bosakowski (1999) suggests that Northern Goshawks prefer isolation and little human disturbance at the nest site. Given these habitat preferences, however, Northern Goshawks have also shown an ability to nest with equal success and flexibility in both suburban and rural landscapes of Connecticut. The close proximity to human settlement at several nest sites may be the result of closing hiking trails to humans and of other nests being located on lands where special permission to enter was needed. These factors help isolate the nest site from disturbance sources.

Natural competitors of Northern Goshawks in Connecticut include Great Horned Owl and Red-tailed Hawk. Great Horned Owls compete for nest sites and occasionally prey on incubating females and young Northern Goshawks, either in the nest or shortly following fledging before the young have acquired experience. Red-tailed Hawks and Northern Goshawks show similar woodland habitat requirements and use in some Connecticut locales, although the actual choice and position of nest sites differed significantly between the two species. Northern Goshawks selected larger nest trees in older woodlands and constructed the

nest below the upper canopy.

Nests located within the last decade reveal that this big accipiter may be more flexible in nest site selection than previously reported, especially in Connecticut's much modified landscapes. Within the state, most woodlands suffer from varying degrees of fragmentation and development. Roadways, power lines, gas lines, and other intrusive features of development fragment existing woodlands into various smaller tracts. Similarly, residential development has made heavy inroads on Connecticut's otherwise extensive wooded areas with varying results. In spite of these habitat modifications across the state Northern Goshawk nesting populations continue to increase, probably reflecting an expanding population and possibly suggesting an increased level of tolerance of nesting pairs to modified landscapes.

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SEPARATING FALL PLUMAGED NORTHEASTERN WOOD WARBLERS, USING HEAD PATTERN ONLY

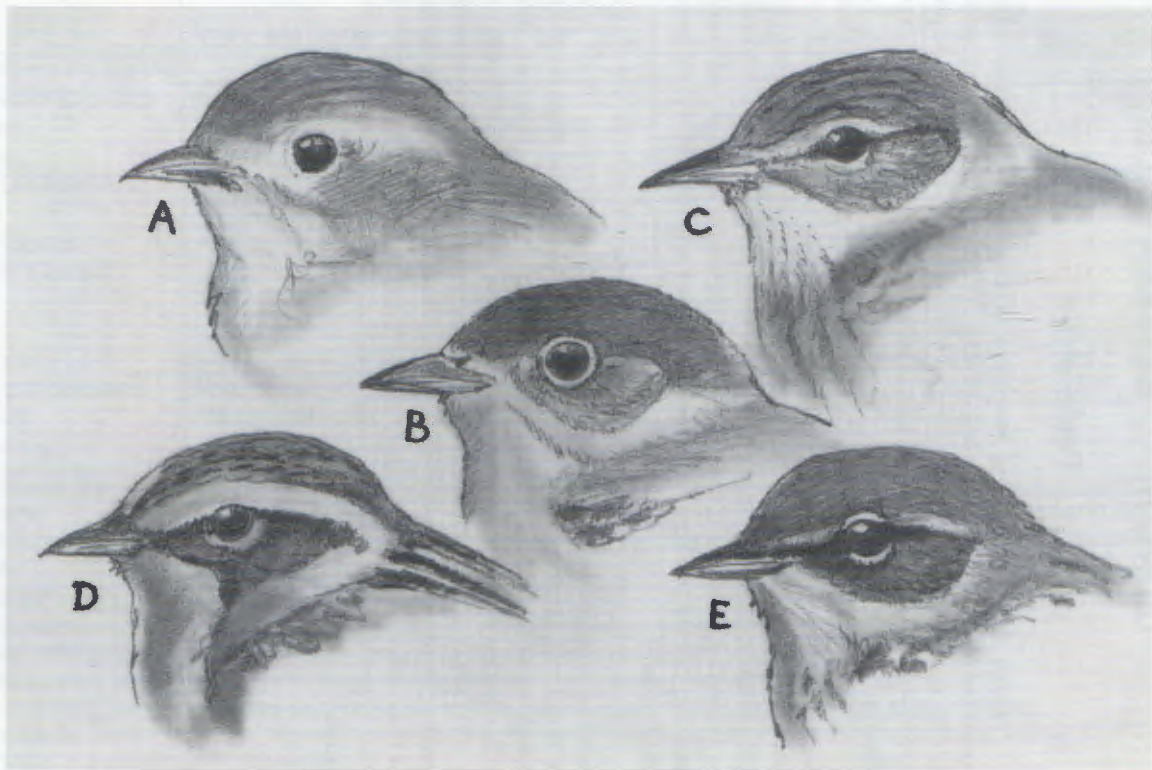
Paul Carrier

North American wood warblers of the genus *Dendroica* become more difficult to identify during fall migration because most adults molt into a fresh, but duller plumage. The more abundant young of the year wear a similar and even duller plumage at that season.

The bright colors of spring plumage often make identification easier, but in the autumn, colors become less important, and we tend to rely more on patterns and tones. One of the first clues to an autumn warbler's identification is its face pattern. Though variable in intensity, color and sharpness, face patterns are still apparent, and are one of the best field marks we can use during the autumn migration.

Shown below are 14 of the more common northeastern wood warbler species in the genus *Dendroica*, illustrated in black and white. I am attempting to show how species can be separated by using head patterns only. Once these are learned, you can add other, more subtle field marks to complete your identification.

To show all the subtle autumn differences within each species (males, females, immature males and females) is beyond the scope of this article. I have attempted instead to illustrate a more generalized form of each species, with emphasis towards the duller female.



A - Yellow Warbler:

Plain, pale face, lacking any dark areas around eye, causing a prominent beady eye look. Note also a very indistinct yellowish eye-ring.

B - Chestnut-sided Warbler:

One of only a few species that has a completely different head pattern than the spring breeding plumage. Darkish green crown, with all gray elsewhere. Within the all gray face, look for a prominent and complete white eye-ring.

C - Cape May Warbler:

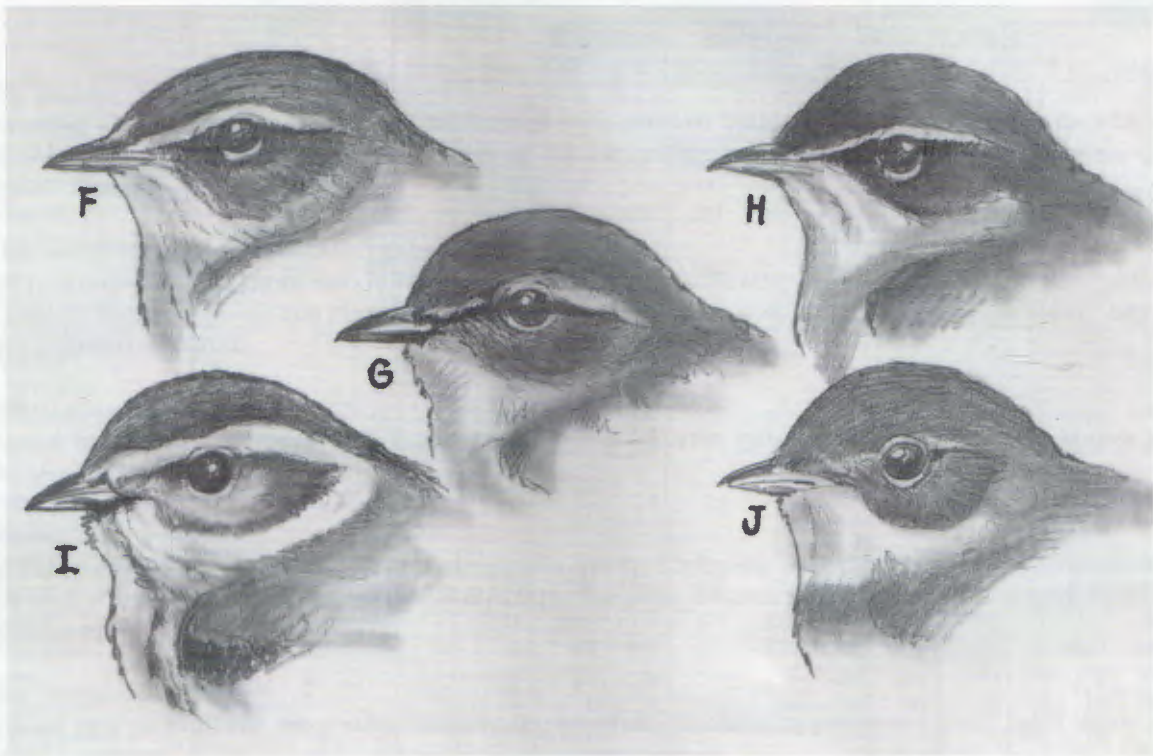
Look for a pale band extending from throat up into back of nape. Throat lightest. Sometimes shows light streaking in crown and/or throat.

D - Blackburnian Warbler:

Face pattern mimics closely the spring adult plumage, but paler. Most retain a hint of the small, pale orange median crown patch. Note also the dark cheek with open yellowish orange patch under eye. Supercilium bold, wide, and usually yellow. Throat often yellowish.

E - Yellow - rumped Warbler:

Head mostly brown to gray, with a distinct dark ear patch. Little, if any, pronounced supercilium. Note white crescent eye-rings, top and bottom, suggesting a continuous dark line from bill, through the eye.



F - Palm Warbler:

Whitish to light yellow throat. Crown uniform to nape and back. Ear and cheek patch pale buff, lores and area below pale supercilium darkest, creating a dark line through eye. No noticeable eye-ring, but thin under eye crescent white. May have some faint streaking in crown and throat.

G - Cerulean Warbler:

Male similar to breeding, except has a faint whitish supercilium. Note dark cheek patch with darkest through the eye. Forehead and crown usually the darkest part of head. Throat whitish to yellow in first year females. Note also the short bill.

H - Black-throated Blue Warbler:

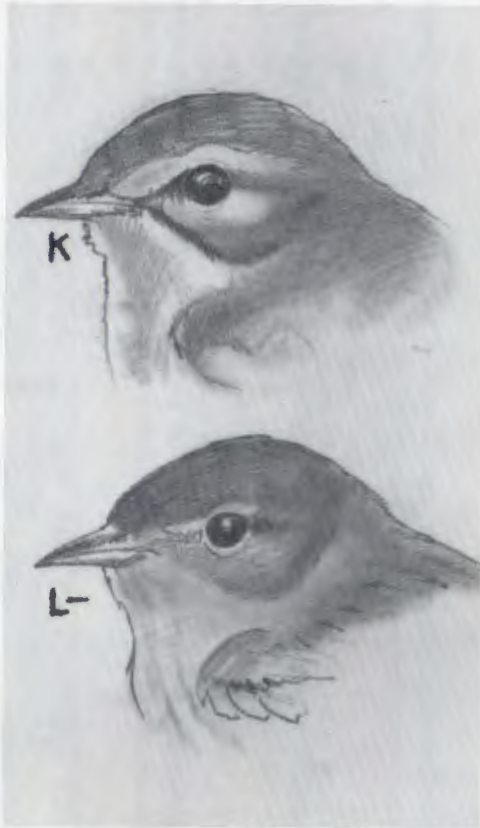
Generally dark brown crown and cheek with a thin light supercilium. Lores and area under thin supercilium the darkest. Throat lighter. Note incomplete lower eye-ring. Males change little in the fall.

I - Black-throated Green Warbler:

Note distinct but light ear patch, surrounded by a thick, light yellowish supercilium, throat, and under ear patch, creating a yellow triangle. Also note the absence of any eye-ring.

J - Magnolia Warbler:

Another species that does not mimic closely the spring breeding facial pattern. Whole head very uniform gray, with sometimes darker cheek and crown. Hint of an eye-ring, with an ever so faint and thin supercilium. Throat light, mostly yellow.



K - Prairie Warbler

Mimics spring face pattern closely, but paler. Note dark line through eye, with dark moustachial streak outlining cheek at bottom, showing ear patch under eye lighter. Supercilium usually yellow to orange, and fairly wide. Immatures off white.

L - Blackpoll; Pine; Bay-breasted Warblers

These three species are too similar to distinguish in the field by head pattern. Best to know more than just head pattern.

With a little study and field practice, you will find head patterns and tones are a good start

to identifying the more confusing autumn warbler species. As Roger Tory Peterson once said, "Learning to identify fall warblers often takes years," but learning the head patterns first will give you a very good start.

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BOOKS ON BIRDS

Jamie Meyers

Restoring North America's Birds, Lessons from Landscape Ecology, Robert A. Askins. Hard Cover, 320 pg., Yale University Press, New Haven, CT).

This important new work, by Connecticut's own Robert A. Askins, might well be subtitled "Bird Conservation 101". The spotlight is on a wide range of endangered bird species, from the Grasshopper Sparrow to the Marbled Murrelet to the Red-cockaded Woodpecker, but it goes well beyond the birds. His studies cover a wide range of habitat types across North America, with special emphasis on the bird species that are most threatened in each one.

In order to grasp fully what the issues are that face today's conservationists, Dr. Askins offers detailed and exhaustively researched looks into the history of each covered habitat, using evidence gleaned from an impressive variety of sources. He looks at the history of each specific habitat type, how it changed over the centuries, especially by human hands, and what the effects were. Only by taking such an approach, he argues, can intelligent and effective management strategies be developed. His studies cover a wide range of habitat types across North America, with special emphasis on the bird species that are most threatened in each one.

Those of us here in Connecticut will undoubtedly have special interest in the first chapter, which focuses on East Coast grasslands and challenges the traditional thinking that claims our grasslands are basically "sinks" that sprang up relatively recently as European settlers cleared the great forests, thus creating artificial habitat where none previously existed. Dr. Askins offers powerful evidence that grasslands have been a feature of the landscape here for many millennia. One of the most convincing revelations from this discussion is that bone remains, dating back as far back as 11,000 years in Pennsylvania and Virginia, reveal a fascinating array of grassland species, including bones of Sharp-tailed Grouse, Black-billed Magpies, Northern Bobwhites, and others, suggesting a very strong grassland component to the landscape of that time. Addi-

tionally, Dr. Askins draws upon the writings of the very first European settlers, who noted large expanses of grasslands in the 17th century, and details how the Native American populations that existed here before then used and shaped grasslands for their own benefit. Finally, he traces the various changes that have affected this habitat type more recently, and offers sound conservation strategies for the future.

Similarly detailed chapters cover eight other unique and threatened habitats across North America, from the boreal forest to the delicate riparian areas of the southwest, to the pine forests of the southeast. In each section, Dr. Askins explores the way these habitats have historically been maintained by natural events such as fires and floods, and details how they have been altered by human activities. Drawing on the history of the past and the experience of recent conservation efforts, he concludes with a number of compelling conclusions that might form the basis of conservation strategies across the continent.

An impressive amount of territory is covered in a relatively short space here, and there is plenty to glean here for nature lovers of all ilks, from weekend birders to conservation managers. Even those who aren't particularly conservation minded will find a lot of interest here. For instance, there is an extended discussion about the various forms of the Red Crossbill that the birder in me found fascinating on its own merits. But the conservation message is even stronger - while this is a species (or set of species) that most of us might not think of as in trouble, Dr. Askins draws some alarming parallels between it and other nomadic wanderers such as the Passenger Pigeon, and raises some interesting questions about the future of this and other species that move around a great deal for their food items in a world where suitable feeding areas are becoming fragmented and further separated.

This is an impressive volume that well covers our most pressing conservation issues. It should be required reading for anyone charged with making decisions that will affect the landscapes and species covered within, and in some cases, it sets a new standard in thinking about the ecology of those species and habitat types. Highly recommended.



CONNECTICUT FIELD NOTES

Greg Hanisek

SPRING, MARCH 1 THROUGH MAY 31, 2000

It was overall a cold spring, a wet spring, and a glorious spring for birds. Warbler migration is always the centerpiece, and this was a noteworthy one for both the number and variety of these little jewels, and for the duration of the good flight period. By May 2 observers were logging 15-species days at East Rock Park in New Haven, a classic urban migrant trap (DSo). The warbler species count there jumped to 20 by May 5, and from May 5 to May 15 observers throughout the state were wallowing in warblers. Some examples included 20 species May 5 in Cornwall (MSz), 22 on May 6 in Manchester (PCo), 20 on May 11 in Fairfield (DV), 22 on May 12 at East Rock, and 20 on May 13 in Greenwich (TBa). Migrants continued to flow in through the end of the month, as birders devoted the last two weeks of May to digging out the rarer species. They succeeded by reporting nine Yellow-bellied Flycatchers, seven Olive-sided Flycatchers, 14 Mourning Warblers, and 16 Lincoln's Sparrows. This bounty of passerines tends to give short shrift to the May shorebird flight, but birders who found time to partake of plovers and sandpipers were amply rewarded with the likes of 2,400 shorebirds of 16 species at Milford Point on May 26 (PCo). The report is also laced with a nice array of southern spring overshoots.

Most springs produce a few very early records. These tend to be single anomalous individuals, far ahead of their species' general arrival, and they invite us to draw broad conclusions at our peril. This season produced a few of those, such as a Broad-winged Hawk on March 23 in Madison (PCo), but it also offered suggestions that spring is arriving earlier, a conclusion that eases up to a concept we've judiciously avoided in these reports so far: global warming — and all the scientific controversy and political baggage that term trails behind it. Without concluding anything, it is interesting to note that the average arrival date for Chipping Sparrow in this observer's notes from 1972 to 1999 is April 13. This year the anomalous herald appeared on March 25 in Woodbury (RN), but it was soon followed by a widespread arrival almost two weeks ahead of normal with reports on April 2 in Canton (JMe), Orange

(NB), and Southbury (PB), and on April 3 in Litchfield (DRo). Thinking about it too much almost makes you sweat.

Following are first arrival dates for regular spring migrants: Glossy Ibis — April 7, Old Lyme (HG); Osprey — March 9, Old Lyme (HG); Semipalmated Plover — April 12, Milford (PCo); Piping Plover — March 14, Stratford (DV); Solitary Sandpiper — May 1, Orange (NB); Willet — April 7, Westbrook (WK); Spotted Sandpiper — April 25, Mansfield (MSz); Least Sandpiper — April 27, Milford (PCo); Pectoral Sandpiper — April 9, Madison (TK); Short-billed Dowitcher — April 7, Milford (PCo); Common Tern — April 29, Milford (RJ); Common Nighthawk — May 8, Canton (JK) and New Haven (MSc); Chimney Swift — April 23, New Haven (TS); Ruby-throated Hummingbird — April 30, Newtown (PB); Alder Flycatcher — May 20, Litchfield (DRo); Least Flycatcher — April 30, Southbury (AB); Eastern Phoebe — March 9, Greenwich (TG) and Litchfield (DRo); Great Crested Flycatcher — May 4, New Haven (DSO), Killingworth (JHi) and Litchfield (DRo); Eastern Kingbird — April 22, Woodbury (RN); Blue-headed Vireo — April 22, Southbury (RN); Warbling Vireo — April 29, Woodbury (RN); Red-eyed Vireo — May 1, Hamden (AB); Purple Martin — April 8, Madison (GW); Northern Rough-winged Swallow — March 28, Mansfield (MSz); Bank Swallow — April 13, Watertown (GH); Cliff Swallow — April 22, Southbury (RN); Barn Swallow — April 7, Southbury (PB) and Mansfield (CEl); Marsh Wren — April 15, Lyme (HG); Veery — April 30, Ellington (CEk); Wood Thrush — April 28, Killingworth (EN); Blue-winged Warbler — April 23, Washington (DBa); Nashville Warbler — April 23, New Haven (MSc); Yellow Warbler — April 25, Branford (JHu); Chestnut-sided Warbler — May 3, New Haven (DSO); Black-throated Blue Warbler May 1, Cheshire (RSu); Black-throated Green Warbler — April 24, Killingworth (FG); Blackburnian Warbler — May 4, Westbrook (PCo); Pine Warbler — March 26, Killingworth (TK); Prairie Warbler — April 29, Manchester (PCo); Palm Warbler — April 2, Mansfield (SM) and Middlebury (KF); Bay-breasted Warbler — May 5, Hamden (AB); Black-and-White Warbler — April 25, Guilford (HG); American Redstart — April 30, Litchfield (DRo); Worm-eating Warbler — May 3, New Haven (MSc); Ovenbird — April 28, Westbrook (PCo); Northern Waterthrush — April 15, Hadlyme (DRt); Louisiana Waterthrush — April 8, Easton (CB), Southbury (RN) and Killingworth (GW); Common Yellowthroat — May 2, New Haven (DSO); Wilson's Warbler — May 6, New Haven (MSc); Canada Warbler — May 3, New Haven (DSO); Scarlet Tanager — April 23, Woodbury (RN); Eastern

Towhee — April 9, Woodbury (MSw); Rose-breasted Grosbeak — April 23, New Britain (DCr); Indigo Bunting — May 4, Killingly (GW); Eastern Meadowlark — March 15, Southbury (DRo).

GREBES THROUGH WATERFOWL

An alternate-plumaged Red-throated Loon slipped away from the coast to Lake Whitney in Hamden on April 26 (DBv). A flock of 20 Common Loons dropped onto Candlewood Lake in Sherman on May 11 (ADi). Of special interest because of its scarce and secretive status as a breeder was a report of a Pied-billed Grebe with two young on May 7 at Haddam Meadows State Park in Haddam (JMo). A good spring for Red-necked Grebes produced high counts of five off Shippan Point in Stamford on April 27 (PDu), and a very cooperative one that remained off Meigs Point at Hammonasset Beach State Park (hereafter HBSP) in Madison through March (CR), with two there March 19 (PDe). These were eclipsed by a stunning flock of 11 on Nepaug Reservoir in Canton on April 23 (JG,FDA,JK). Other inland reports included four on April 8 at Nepaug (JMe) and two the same day at Batterson Pond in Farmington (PCi). The last report was of one on Nepaug on May 9 (JMe). The high count of Northern Gannets

was 10 off Shippan Point April 3 (PDu).

Another productive season for American Bitterns brought a sighting of three on April 16 at Station 43 in South Windsor (PCo et al.), several reports in April and May in the Stratford marshes (CB et al.), one on April 7 at Lord's Cove in Lyme (HG) and one calling at Great Pond in Simsbury on May 13 (RBI). Away from the reliable breeding areas, Least Bitterns were noted in April and May in the Stratford marshes (CB,MSz). A Snowy Egret was far inland at Station 43 on May 20 (MH). The first Little Blue Heron was at HBSP on April 12 (CR), and the first Tricolored Heron appeared April 2 at Great Island in Old Lyme (GH). Other Tricoloreds included one April 8 at Barn Island in Stonington (FN), up to two in Stratford from late April through May (CB) and one in Quinnipiac Marsh in Hamden May 20 (FMc). The high count of Cattle Egrets was three on May 22 at Sherwood Island State Park in Westport (NC); others included singles on April 24 in Westport (FMa), May 9 in Ellington (CEk) and May 11 at Sherwood Island (SH). Two Glossy Ibis flew over River Road in Kent on May 17 (MSz); where were they going? Black Vultures have been slow to penetrate east of the Naugatuck River, so two in Bethany on

March 9 were noteworthy (JSt). A far-eastern exception is the Ledyard area, where two on March 20 continued a spate of recent sightings (FN), followed by one in Preston May 30 (DP).

Three Greater White-fronted Geese were on farmland in Mansfield March 9-10 (MSz et al.), with up to two seen on nearby Willimantic Reservoir March 4-11 (SM,CEI). The remnants of an unprecedented flock of 60 Tundra Swans, which dropped onto North Farms Reservoir in Wallingford on February 29, were five leaving the site early on the morning of March 1 (DP). A pair of Blue-winged Teal, a rare nester in the state, were seen copulating May 3 in the Great Meadows at Stratford, in the same location where Green-winged Teal fledged young two years ago (CB,PCo). The staging concentration of Green-winged Teal at Milford Point hit 600+ April 17 (GH), and a Common Teal was there April 8 (NB). Northern Shovelers were widely reported, with a high count of 10 in Stratford April 14 (PCo,CB).

Two drake Redheads were at Ash Creek in Bridgeport March 13 (MSz,GH). A strong flight of Ring-necked Ducks was punctuated by 150 on Babcock Pond in Colchester on March 13 (CT). Surf Scoter, the most common wintering scoter in most of the Sound, built to 200+ off Millstone Point,

Waterford, on March 9 (DP), and 250 were off Madison March 11 (LV). An excellent count of 360 White-winged Scoters was made off Shippan Point April 27, following two Black Scoters there April 22 (PDU). Inland, Bantam Lake held 13 White-winged Scoters May 21 (TBr), with 10 on Tyler Lake in Goshen May 23 (FM) and one on Nepaug May 10 (JMe). A Bufflehead lingered to May 8 at Nepaug Reservoir (JMe), and a Common Goldeneye was late May 21 at Milford Point (DV). The only inland reports of Red-breasted Merganser were singles April 28 and May 20 at Bantam Lake (DRo) and May 22 at Lake Winnemauw in Watertown (GH). This species regularly lingers into summer on the Sound, but 17 on May 19 at Menunketesuck Island in Westbrook was a large number for so late in the spring (PCo).

RAPTORS THROUGH SHOREBIRDS

The cream of the southern overshoots was a Swallow-tailed Kite soaring over North Stamford on May 8 (DCo). The state's only confirmed pair of breeding Northern Harriers nested again on property owned by the U.S. Fish and Wildlife Service in the Stratford Great Meadows. The protection that implies may be illusory, because the site is scheduled to be

flooded as part of marsh management plan (fide CB). Widespread reports of Northern Goshawk included three April 16 at West Hartford reservoir (PCi). A sky-watch in Harwinton on April 25 produced 24 Broad-winged Hawks and one very late Rough-legged Hawk in an hour (PCa). A few Rough-legs left over from the winter invasion were seen in March. A leucistic Red-tailed Hawk was in Southbury to March 3 (RN). An immature Golden Eagle, one of at least two to winter in the area, was along the Salmon River in East Haddam on March 1 (HG). It appeared to be a good migration for the regionally beleaguered American Kestrel, with reports including up to 10 at Station 43 in South Windsor on April 16-29 (SK,PDe).

Every season produces another Turkey story, this one from NR: "A new Yale bird for me. Walking down Hillhouse Avenue in New Haven I saw two female turkeys outside of the Admissions office. When I returned they were at the corner of Hillhouse and Grove surrounded by two Yale police and a maintenance person. I suggested they might fly away but was ignored." There were more King Rail reports than usual, with singles on April 14 at Station 43 (PCi), May 21 at Sherwood Island (RSo) and May 13 at Silver Sands State

Park in Milford (DV). At least 13 Virginia Rails were detected April 14 at Little Pond in Litchfield (DRo). Sandhill Crane reports have been increasing throughout the Northeast, and this season brought the following sightings, perhaps involving some overlap of individuals: one April 20 in Storrs (DW fide CEL); one May 3 in Ellington (DHa,MO,CEk et al.); and two reported from Stafford Springs on May 11 (fide GN).

The first individual in the typically light spring flight of American Golden Plovers arrived at HBSP on April 25 (GW). Staging Greater Yellowlegs built to 150+ at Milford Point on April 17 (GH). A Lesser Yellowlegs was quite early for an inland location March 28 in Mansfield (MSz). High counts of Solitary Sandpipers were 12 on May 7 at White Memorial (KF) and the same number May 8 at Station 43 (PDe). The first two Upland Sandpipers appeared April 26 at HBSP (HG). In a season noteworthy for the number of Whimbrel reports, the presence of 39 on May 21 at Sandy Point in West Haven was beyond all expectations (PDu), and 10 were reported May 24 from Milford Point (fide NB). Most state sightings involve single birds, and the three on May 19 at Menunketesuck would have been a high count most years (PCo). The good May shorebird

flight produced a number of inland sightings, including a single Dunlin May 14 in Ellington (CEk) and May 15 in Portland (TL). The best inland report was a single Red Knot May 20-21 at Bantam Lake (RBe). The first White-rumped Sandpipers were two on May 2 at Milford Point (PCo) with an excellent count of 30 there May 24 (fide NB). Although most birders associate Purple Sandpipers with frigid waves crashing over icy jetties, May actually produces the best numbers in Connecticut as wintering birds head north, i.e., 61 on May 5 at Menunketesuck flats in Westbrook (PCo). A good count of eight Stilt Sandpipers was recorded on July 27 at Sherwood Island (RSo). A Ruff, probably a first-year female, provided excellent views as it lingered in a rainpool at HBSP April 22-25 (JMa,EN et al.). A Short-billed Dowitcher was inland at Portland May 15 (TL) and two were at Bradley International Airport May 20 (MH). The best count of Common Snipe was 46 on April 13 in South Windsor (PCi). The shorebird of the season was a female Red-necked Phalarope that obligingly lingered in a tiny pond in Morris May 18-19 (BDe et al.); most recent records have involved short-staying individuals seen only by the original observer.

GULLS THROUGH VIREOS

A jaeger sp. was seen as a fly-by from Shippan Point on May 17 (PDu). The season's tally of the rarer small gulls, all coastal, were ten Black-headed Gulls and five Little Gulls (m.ob.). Eight Bonaparte's Gulls were still present on Sandy Point in West Haven on May 15 (FG). Counts for the rarer large gulls were eight Iceland Gulls and 12 Lesser Black-backed Gulls, the latter all coastal except for one March 28 on the Farmington River in Collinsville (PCa). Immature Glaucous Gulls were at Milford Point April 7 (PCo), Merwin Point in Milford April 9 (FM) and Stamford April 4-10 (PDu). Several of the Iceland and Lesser-Black-backed Gulls were found in the huge feeding flocks of large gulls that form in the Sound in late March and early May to gorge on plankton, possibly from the spawning of a marine worm. Some estimated numbers included 10,000+ off Long Beach in Stratford March 30 (PCo); 50,000 to 100,000 from Short Beach in Stratford to Seaside Park in Bridgeport on April 2 (FMa, LD); and c. 50,000 off Milford on April 14 (PCo).

A Common Tern at Bantam Lake May 10 was the only inland report (JGr,PL). A flurry of Black Terns in the Bantam Lake area included one on May 11 at Little Pond in Litchfield (NC) and two at the same site May 23-24 (GA,DM). Black Skim-

mers were getting ready for another breeding attempt at Sandy Point, with eight there on May 28 (DSo et al.); two were at Leete's Island in Guilford on May 10 (PDe). In a typically brief encounter, a Razorbill was off Enders Island in Mystic for less than a day on March 12 (FN), with the same or another there briefly on March 15 (FN).

A report of Monk Parakeets during the season from Middletown puts us on alert to see if the growing coastal population is ready to spread inland (fide JB). The only Barn Owl report was of one flying around in the lights at a New Haven Ravens night baseball game on May 13 (JF). The latest report of Short-eared Owl was April 13 at Barn Island (RD). A winter roost of Long-eared Owls in Milford held up to five in early March (PF et al.). A pair of Barred Owls were carrying food April 29 in Mansfield (MSz). The largest flight of Common Nighthawks was a stellar 200+ at Little Pond in Litchfield on May 24 (JR); 75+ were seen in Burlington the same day (RBr). Whip-poor-wills were reported from Guilford May 5 (DSo), North Stamford May 8-9 (PDu, MM,FG), Ellington May 11 (CEk), Harwinton May 17 (RBr) and Waterbury in May (GH). A Red-headed Woodpecker arrived at a feeder in Berlin April 30 and visited throughout the

period (AT). A Yellow-bellied Sapsucker on April 10 at Long Wharf in New Haven probably marked the start of this species' migration (JTr).

Eastern Wood Pewees staged a widespread arrival a bit earlier than usual, with individuals on May 6 in Hamden (RN), May 8 at Greenwich Audubon Center (TG) and East Rock Park in New Haven (DHo), and May 9 at Northwest Park in Windsor (PDe). Also early was a Willow Flycatcher May 8 at White Memorial Foundation in Litchfield (DRo). A Loggerhead Shrike was a stellar find May 21-22 in Groton, where it posed at close range on fences surrounding Groton-New London Airport (JR et al.); the species is much less than annual. The remains of a fine winter flight produced about ten reports of Northern Shrike in March and early April. An excellent movement of Blue-headed Vireos was underlined by the 47 seen by one observer at various locations from April 29 to May 10 (PDe). A Philadelphia Vireo was in its typical spring migration window May 26 in Naugatuck State Forest (MSz). As usual, White-eyed Vireos were found in very small numbers in most parts of the state. A Common Raven was observed eating a nestling Green Heron May 28 in Torrington (RBe). A House Wren on March 23 in Cromwell was almost a month early, sug-

gesting it had wintered farther north than normal (JMo). A Blue-gray Gnatcatcher on April 6 in West Simsbury beat the previous early arrival date for the state by three days (JMe). Gray-cheeked-type Thrushes were noted May 11 at Cove Island in Stamford (PDu) and May 11-12 in Litchfield (JG,DRo). On March 23 a Northern Mockingbird, which had been absent from Milford Point most of the winter, flew in off the Sound and immediately began singing (PCo). After a good winter showing, a flock of 25 American Pipits was in Lyme on March 13 (HG).

WARBLERS THROUGH FINCHES

Golden-winged Warbler continues to maintain a toehold in the far Northwest Corner. At the traditional Kent location, two singing males were present in May (m.ob.) and, encouragingly, at least two others were on territory at a location in Cornwall (AG). Brewster's Warblers were at West Hartford Reservoir No. 6 on May 7 (PDe), and Danbury on May 18 (JHi). Single Lawrence's Warbler reports came from Orange on May 14 (CLo) and Bluff Point in Groton on May 25 (TL). The only report of Orange-crowned Warbler, an inconspicuous May migrant, came from Cheshire on May 1 (RSu). A record-early Northern Parula

was singing in Watertown on April 7 (RN); the previous early arrival date was April 19. A male Cape May Warbler was very early April 30 in Milford (PDe). There were two reports of Yellow-throated Warbler, one April 17 at Caswell Cove in Milford (NH) and one May 8 at West Hartford reservoir (PCi). Single Prothonotary Warblers overshot north to Manchester April 25-May 1 (BA et al.) and to Nehantic State Forest in Lyme on May 6-7 (LV et al.). It was an unusually productive spring for Kentucky Warbler, with the following reports: May 6 in Manchester (PCo), May 9 in Hamden (AB), May 8-9 in New Haven (LG,DSO), May 15 at Fairchild Garden in Greenwich (TG), May 16 at HBSP (NC), May 16 in Southbury (PB), and May 25 in Lyme (JHa). Numbers were good for several common species, eliciting comments such as this: "I saw more Canada Warblers this spring than ever before." (CEk). A Yellow-breasted Chat was in East Rock Park in New Haven on May 7 (GH).

An immature male Summer Tanager was a window kill in Guilford on May 3 (AH); another immature male was at Cove Island in Stamford May 11 (PDu), and a female was reported from Bluff Point on May 25 (TL). The season produced a single Clay-colored Sparrow May 14 at a Sterling feeder

(RD). A very cooperative Vesper Sparrow at HBSP through the last half of March was early for a northbound migrant (m.ob.); more typical of birds on the move were three on April 27 in Storrs (CEI) and singles April 7 at Northwest Park in Windsor (PCi) and April 29 in South Windsor (PCi). A strong March movement of Fox Sparrows produced a count of 14 at the feeders at White Memorial Foundation in Litchfield (DRo). The lone report of Blue Grosbeak was a feeder visitor May 4 in Oxford (CWA), and the only Dickcissel was at Cove Island on May 8 (PDu,FG). Mallard Marsh in Litchfield held 150 Rusty Blackbirds on April 20 (DRo). Boat-tailed Grackles were present again at New England's only confirmed breeding locale in the Stratford Great Meadows, with two males and a female present from April 14 (CB).

The Brambling in Weston that caused such a stir for the winter season remained through March 24 (EL). An April flurry of Purple Finches included 19 at a Simsbury feeder April 21 (B&GK). A flock of 25 Common Redpolls was in Quinnipiac Meadows in Hamden March 6 (RSu), but there were few other reports. Pine Siskins were present in small numbers during all three months, including widespread

reports of a few birds deep into May (SK et al.). The handful of Evening Grosbeaks showed up in twos throughout the season: two in Torrington March 11 (JWa); two in Litchfield April 16 (DTr); two in Bloomfield May 1 (SFr); and two at White Memorial feeders May 2 (DRo).

EXOTICS: Single Ruddy Shelducks were in Wallingford March 30 (DSc) and in Wethersfield May 12 (SK).

[Editor's Note: Reports of rare or unusual bird species in Connecticut (species marked with an asterisk on the most recent COA checklist) require that documentation be submitted to the Secretary of the Avian Records Committee of Connecticut (Mark Szantyr, 145 Farmington Ave., Waterbury, CT 06710) if they are to be included in the field notes].

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PHOTO CHALLENGE

Julian Hough

ANSWER TO PHOTO CHALLENGE 32

Late fall/early winter on the East Coast and sparrows abound at your local birding spots. Feeding by the side of the track, a sparrow hops into view. The bold white wing-bars and longish, full tail indicate that this is one of the larger *Zonotrichia* sparrows; smaller 'wing-barred' *Spizella* sparrows such as Field, Chipping, and Tree can be ruled out by our bird's large size, pronounced dark lateral crown stripes and large-billed appearance. Field Sparrow, which shows a pale eye-ring similar to our bird has a small, all pale bill and a 'surprised' bold-eyed look. Chipping Sparrow is similarly dainty with a well-marked head pattern consisting of a well-pronounced blackish-brown eyestripe and prominent supercilium which almost connects at the nape. The solidly rufous crown and eyeline of Tree Sparrow is also lacking and quickly eliminates that species.

The obvious choice is White-throated or White-crowned, and judging by the bird's lack of white-throat patch and prominent white supercilium, we lean towards White-crowned. Indeed, the dark lateral crown stripes, pale central crown and pale-based bill are suggestive of this species. However, something doesn't seem quite right. The bird looks a little duller, or dingy and the head seems rather plain for a typical White-crowned. Is there any other species that we may be overlooking? Only one other species shows



such characters: Golden-crowned Sparrow from the West Coast and a proven vagrant to various East Coast states (including Connecticut!). So, what do we look for to eliminate this rare visitor from the typical White-crowns?

Golden-crowns in Fall often look grayer on the ear-coverts and are more dingy, olive-gray on the lower breast and flanks. White-crowns tend to be a brighter-looking, rich-tea browns with cold gray-tones to the nape and breast. On Golden-crowned, the dark lateral crown stripes are often broader and browner and are streaked when seen at close range. The central crown is a pale buffy-cream, sometimes more strongly marked on the fore crown. From the photo, it is difficult to ascertain whether the head pattern rules out either species, though the supercilium is rather narrow at the rear and doesn't seem to broaden or flare as in White-crowned. The bill pattern is a good clue. It appears dark with a paler basal third (on both mandibles). White-crowns typically show uniformly pale bills, although some immatures in fall can show dingy, duller bills. Golden-crowns appear similar, but unlike White-crowned, often show a noticeably two-toned bill which is fairly dark above with a contrastingly pale base. This pattern is shown by our bird, and taken with the bird's relatively plain head pattern and dingy appearance identify it as a Golden-crowned Sparrow. Some Golden-crowns may also show a weak malar stripe, but on many individuals it may be inconspicuous or, such as on our bird, lacking.

This Golden-crowned Sparrow was photographed on the West Coast by Mark Szantyr.

JULIAN HOUGH, 72 Quentin St., Waterbury, CT 06706



Photo Challenge 33. Identify the species. Answer next issue.

THE CONNECTICUT WARBLER

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