

THE CONNECTICUT WARBLER



Volume I

Number 1

TABLE OF CONTENTS

Editorial	Carl J. Trichka	3
1980 Connecticut Hawk Watch	Carl J. Trichka	4
1981 Connecticut Bird Conference		6
Review of the 80th Annual Christmas Bird Count in Connecticut	Dennis Varza	7

The Connecticut Warbler is a quarterly publication devoted to the promotion of bird study and conservation in the state of Connecticut. **The Connecticut Warbler** is published by the Natural History Services Department of the Connecticut Audubon Society, 314 Unquowa Road, Fairfield, Connecticut 06430.

Subscription:

Subscriptions to **The Connecticut Warbler** are based on the calendar year, from January to December, at \$6.00 per year. Back issues are available at \$1.50 per issue.

All correspondence should be sent to:
The Connecticut Warbler
Natural History Services Dept., C.A.S.
314 Unquowa Road
Fairfield, Connecticut 06430

The Connecticut Audubon Society invites your membership.

Membership Categories

Supporting	\$50.00	Benefactor	\$300.00
Sustaining	\$25.00	Donor	\$200.00
Family	\$18.00	Contributing	\$100.00
Adult	\$12.00	Organizational	\$35.00

The Connecticut Audubon Society has been declared a non-profit organization by the Internal Revenue Service. Any gifts to the **Connecticut Warbler** will be greatly appreciated and are fully tax deductible.

All Rights Reserved.

Suggestions to Authors:

The editors of the **Connecticut Warbler** invite you to submit articles, notes, black & white photographs, and line drawings. Manuscripts should be typewritten, double spaced, and on one side of the sheet with ample margins. All material will be returned upon request.

The Connecticut Warbler

Director & Tech. Editor: Milan G. Bull
Managing Editor: Carl J. Trichka
Editorial Board: Dr. George Clark
Paul Desjardins
Robert DeWire
Frank Gardiner
Art Gingert
Gordon Loery
Dr. Noble S. Proctor
Fred Sibley

EDITORIAL

Welcome to the first edition of the Connecticut Warbler. A few months ago we sent a questionnaire to all 37 licensed banders in the state. To date, 21 banders responded, which represents 57%. The results were very encouraging and we thank all who responded. Of the 21 respondees, about 15 had considered themselves active banders and stated that they would like to contribute to this publication. I have every confidence that it will be successful. Originally, we considered limiting this publication to banding information and any other factual data on bird projects in this state that we could gather. Well, the idea has grown into an ornithological journal format that encompasses all Connecticut projects devoted to the conservation and study of birds including field notes and special studies. We feel the time has come to gather the wealth of data floating around the state in various places and incorporate it into this publication. We will publish banding information as originally planned, but the greater need for a state-wide journal is long overdue.

In the future, I will be calling on you to supply us with biographical sketches of yourselves and your banding operations. Also to be included will be special projects, foreign banding returns, Christmas Count information, etc. In this issue you will find a comprehensive tabulation of the 1980 Christmas Count for all 15 count circles in the state. This is long before it appears elsewhere and while the count days are still fresh in our minds.

Hopefully, we will soon arrange field trips to various banding stations to observe operations and learn techniques. A picnic is also planned this summer to get together and discuss projects and goals.

In order to begin gathering information for future issues, I would like to ask all banders to please submit a list of recent foreign returns you may have encountered. Please include band number, species, date and place of banding and recapture. If you have any late or early dates for any species, please send them along to us. We would also like to solicit black and white photographs or pen and ink sketches that we can use as filler pieces. They will be returned upon request.

Join us to develop this bulletin promoting Connecticut ornithology. I'm sure you will all agree, it's something long overdue and sorely needed. Thank you.

Carl J. Trichka,
Managing Editor

1980 HAWK WATCH

by Carl. J. Trichka

Organized hawk watch efforts in this region were initiated in 1971 by Don Hopkins and Gerry Mersereau, coordinated by the Connecticut Audubon Council. A coordinated effort involving some 150 volunteers produced the first report on the hawk migration in this region. Over the years, the project grew and vast amounts of data were gathered.

In 1974, the Hawk Migration Association of North America was born, to combine the efforts of all the hawkwatchers in a coordinated front to produce more effective data on this phenomena called hawk migration. Advances in this study were originated in this region. The use of a motor glider discovered the thermal effect used by Broad Winged Hawks along with their sink rates and pattern of movement. Many of these advances are now in use all over the United States. The importance of this project has now involved the U.S. Fish & Wildlife Dept. with funding to continue the glider studies. The use of ground radar was also originated by the New England Hawk Watch.

In the past, as with all or most of the research and published data, one had to wait many months before the data was distributed. We now hope to have at least the preliminary figures available to us long before the final product is printed. It is only meant to distribute this information to those interested in the shortest possible time.



Broad-Winged Hawk

Hawk Watch—Larsen Sanctuary— Connecticut Audubon Society

A hawk watch was conducted this fall at Larsen Sanctuary, Fairfield, which covered the period of September 2nd to November 25th. The watch covered 52 days and totaled 190.5 hours of observation. The work was done by Joe Wall of Bridgeport, Connecticut and his efforts are greatly appreciated. It was the first time that Larsen Sanctuary was manned on a daily basis throughout the migration period. The report is as follows:

GOSHAWK	29
SHARP SHIN	1685
COOPERS	14
RED TAIL	514
RED SHOULDER	108
BROAD-WING	1070
GOLDEN EAGLE	3
BALD EAGLE	3
UNID EAGLE	1
HARRIER	68
OSPREY	176
PEREGRINE	2
MERLIN	1
KESTREL	232
UNID	225

TOTAL 4187

It has been known that this site is a productive one and is in line with the string of sites chosen by Neil Currie to monitor the Broad-Wing migration. Past coverage has been spotty, being confined to specific hawk watch dates and any other time someone had to man the site. Lack of volunteer help has been the other drawback. Hopefully, coverage can be expanded this coming fall. This site should be closely monitored due to its proximity to Long Island Sound and the general drift of birds towards the New York border. Neil Currie was ever so kind to send his preliminary figures to us for inclusion in this issue. Neil's figures covered the Broad-Wing flight for the month of September and covered the sites in Massachusetts, Connecticut and New York. Some of the more important hot spots had not completed their tallies at the time of our request but Neil sent us what he had. His efforts are greatly appreciated.

In general, the Broad-Wing flights are picked up at Quabbin Reservoir in Massachusetts and are tracked down through Connecticut to the Bronx Botanical Gardens in New York. As one peers over the tabulated data in geographical form, a picture of the migration unfolds. One can see the buildup of birds as they filter down from upper New England into Massachusetts. A concentrated flight begins to appear in northern Massachusetts and continues down through southern New England. Weather plays an important part in the migration picture, which accounts for the peak concentrations observed at different lookouts during the month. It appeared that the flight began early with 2600 birds reported across the area on September 12th. By the 15th, a flight of 1600 birds appeared and 9000 were counted on the 16th. This includes the areas mentioned above. It should be noted that the figure of 9000 birds was reported mostly from the Massachusetts area. On that same date, the 16th, one lone bird was observed in the Bronx, New York. Birds were concentrated in the Connecticut area when weather conditions were not favorable for movement. On September 23rd, the last big push was recorded. A total of 4600 birds were sighted, with 4000 of them recorded at the Bronx Botanical Gardens. The grand total of Broad-Wings from the Massachusetts, Connecticut area on that date was 3.

As one reviews the data on hawk migration, certain pictures form. Waves of birds can be seen progressing down the ridges southward to the wintering grounds. The data, at best, only serves as a barometer. Caution must be used in trying to determine population fluctuations. Only through the thousands of hours by dedicated hawk watchers all across the region can any kind of comprehensive data be established. No one has a solid hold on the mystery of migration yet and only through continued efforts by volunteers can the bank of knowledge be increased. All hawk migration reports from across the United States are being sent and stored at Hawk Mountain Sanctuary in Pennsylvania, where one day, researchers can begin to unfold this mystery of hawk migration.



Osprey

Hawk Watch—New Haven County— Lighthouse Point

Arne Rosengren was gracious enough to provide the following unofficial data from New Haven County, conducted by the New Haven Bird Club. We thank him for his efforts. The figures are taken from primarily two permanently manned stations, one at Lighthouse Point, the other at West Rock Park, both in New Haven, Connecticut. The remaining figures are from various hawk watch sights in the county, held on the specific dates set aside by the New England Hawk Watch Committee.

The totals are impressive and compare with Cape May, New Jersey and Hawk Mountain, Pennsylvania. In fact, it may be that Lighthouse Point is second only to Cape May in their numbers of hawks excluding Broad-Wings. The Northern Harrier count exceeded all previous years as did the Osprey count. The impressive Red Tailed Hawk numbers resulted from increased coverage at West Rock during the latter part of October and November. The single Swainson's Hawk was reported by Dr. Noble Proctor on November 2nd in East Haven.

Species	Light Point	West Rock	All Stations Total
GOSHAWK	5	9	18
COOPERS	87	41	156
SHARP SHIN	9150	704	11,360
RED TAIL	121	1091	1372
RED SHOULDER	25	41	94
BROAD-WING	2163	254	2693
ROUGH-LEG	8	7	21
SWAINSONS	0	0	1
BALD EAGLE	0	3	12
GOLDEN EAGLE	0	0	2
HARRIER	667	60	1006
OSPREY	836	56	1145
PEREGRINE	18	7	33
MERLIN	118	3	153
KESTREL	3584	141	4826
UNID	206	66	313
TOTALS	16,998	2,483	23,205

A meeting of the Connecticut Audubon Council, Hawk Migration Committee, was held on February 1, 1981 at the Arcadia Sanctuary in Easthampton, Massachusetts. A date of April 4, 1981 has been set by the committee for a Conference to be held at the Holiday Inn in Holyoke, Massachusetts. An impressive lineup of speakers has been gathered. Topics to be covered during the conference are tentatively scheduled and include a discussion of Accipiter Identification Problems, Nest Failure of Red Shouldered Hawks, Birds at the Wingtip of a Glider, Peregrine Falcons, Radar Studies of Hawk Migration and others. Feature speak-

er at the evening banquet will be William Clarke of the Raptor Information Center.

The dates for the Spring and Fall Hawk Watch dates have been established. The Spring Watch will be held on April 18-19 and again on April 25-26. The Fall watch dates are September 12-13, September 19-20 and October 3-4, October 24-25. Anyone interested in assisting on these weekends would be welcomed. You may contact Connecticut Audubon Society, Department of Natural History Services at 259-0416, or your local bird club or Audubon chapter in your area. You need not be a pro at identifying hawks, we need your eyes.

*

1st ANNUAL CONNECTICUT BIRD CONFERENCE

LOCATION: Southern Connecticut State College

DATE: Saturday, May 2, 1981... 8:00 am to 5:10 pm

The National Audubon Society is sponsoring this conference to bring together the birders in the state to discuss common interests and suggest some group projects. The major topics of discussion will include the Northeast Bird Atlas Projects, and Connecticut's Nongame Research Program.

There will be other talks on birdbanding, bluebird trails, the rare bird alert and more. Speakers include Noble Proctor, Robert Arbib and Roger Tory Peterson. There will also be field trips to East Rock Park and Long Wharf. For more details contact:

Marshal T. Case
Northeast Regional Office
National Audubon Society
Sharon Audubon Center
Route 4
Sharon, CT 06069

REVIEW OF THE 80th ANNUAL CHRISTMAS BIRD COUNT IN CONNECTICUT

by Dennis Varza

Christmas count aspirations were high in November with large flocks of winter finches in the state, mainly Evening Grosbeaks and Pine Siskins. Everyone was looking forward to a big finch year. But, as it turned out they did not stay. Bob DeWire commented that when he was in the Chesapeake Bay area, he saw siskins still moving south. As the count period approached, expectations diminished along with the finches, and we entered a period of unusual cold that did not break until January. The early counts were spared most of the cold weather but by the time Christmas came birding was tough.

Accidentals (winter range does not include Connecticut)

Eight species of accidental birds were reported, five from the west and three from the north. The northern species were a **Black Guillemot** from New Haven, a **Lesser Black-Backed Gull** from Greenwich - Stamford, and one from New Haven's count period, and a **Boreal Chickadee** for Westport's count period. The Guillemot was only seen count day. The Greenwich-Stamford Lesser Black-backed Gull was the resident that has been seen repeatedly for the past three years. The Boreal Chickadees were seen before the count but eluded two parties sent to record them count day. The western birds included six **Bohemian Waxwings** and a **Black-Headed Grosbeak** from the New Haven count. **Dickcissel** and **Lark Sparrow** were found in Greenwich-Stamford, with a second **Dickcissel** from Storrs. The Hartford count had a **Varied Thrust** during their count period.

Late Birds (normally found in this area at other times of year)

There were six species of Late Birds found and except for two, all were observed during the first weekend. There was a **Short-Billed Dowitcher** and a **Northern Oriole** from Greenwich-Stamford. Westport had a **Phoebe** and a **Rose-Breasted Grosbeak**,

New Haven had a second grosbeak. Stratford-Milford and Old Lyme-Saybrook each had a **King Rail**, while Hartford and New London each came up with an **Osprey**.

Rare Birds (expected to be found infrequently during the winter)

Two **Red-Necked Grebes** were reported, one in Greenwich-Stamford, the other in Westport, **Turkey Vultures** were seen in Greenwich-Stamford, Westport, and Woodbury-Roxbury. **Bald Eagles** were found in Lakeville-Sharon, Woodbury-Roxbury, Old Lyme-Saybrook, and Stratford-Milford. Two **Peregrine Falcons** were reported, one from Hartford, the other from Old Lyme-Saybrook. A **Merlin** was reported from Litchfield Hills. A **Barn Owl** was found in New Haven and a **Snowy Owl** in Stratford-Milford. Once again only one shrike was counted, a **Northern Shrike** at Litchfield Hills. Of the sparrows, an **Ipswich Sparrow** was seen at Westport, a **Vesper Sparrow** at Hartford and one at Greenwich, a **Grasshopper Sparrow** at Salmon River and two **Lincoln's Sparrows**, one in Westport and one in New Haven.

Population Changes

The herons were down in number with no straggler egrets reported. The American Bittern however was more common. The reduction in open water may have increased the likelihood of them being found.

Canada Goose populations were down inland and up along the coast. On the shore mallards were lower in number and black ducks higher than last year. Greater Scaup populations were also better than last year.

All hawk species were up in number. Two Peregrine Falcons and a Merlin were reported. Eleven counts reported 1 to 3 Red Shouldered Hawks each, while last year only one was reported for each of six counts. Seven Cooper's Hawks were reported, compared to four from last year.

All rails were down except for the two

King Rails. No Sora Rails or Common Gallinules were reported this year.

Blue Jays, Crows, Titmice, Chickadees, and Red-breasted Nuthatches were all up this year. Wrens were down in number except for the Carolina Wren. The cold weather may have driven them to the feeders where they easily counted. Mockingbirds, Catbirds, Thrashers, and Bluebirds may also reflect the same situation as the Carolina Wren. Waxwings were way up, with most compilers commenting on their abundance. Winter warblers were down in number.

Despite the bad weather, Cardinals continued to climb with some counts doubling their numbers over last year. The much anticipated winter finches were present but not in large numbers. No Crossbills, Pine Grosbeak or Redpolls were reported last year. This year six counts had Crossbills, seven had Pine Grosbeaks, and thirteen had Redpolls. Siskins and Evening Grosbeaks were reported on three and nine counts respectively last year. This year they both were on fourteen counts.

Juncos, Tree Sparrows, White-throated Sparrows, Fox Sparrows, and Song Sparrows were all up in numbers. Nineteen White-crowned Sparrows were reported this year compared to two last year. This year there were six Chipping Sparrows compared to fifteen last year, but one must note that thirteen of them were in one count.

Longspurs and Snow Buntings were up this year with most compilers reporting them as unusual. Longspurs were found on seven

counts compared to three last year. Snow Buntings turned up on thirteen counts compared to six last year.

Besides seeing the rarest birds it is interesting to note who has the most birds, particularly the "city birds". New Haven gets credit for having the largest populations of Rock Doves and Herring Gulls, 938 and 13,542 respectively. Stratford-Milford gets top honor (?) for Starlings at 58,080. Greenwich-Stamford can boast of 1315 House Sparrows thanks to their 106 feeder observers. Greenwich-Stamford put out a record 217 observers which may be a national high. They also counted 2251 Blackcapped Chickadees which may be a national high. Another possible record is 502 Purple Sandpipers found on the New Haven Breakwaters by George Zepko.

The above review and list of Connecticut's Christmas Bird Counts could not have been possible without the cooperation of the many compilers which devoted their time and energy to provide the necessary information. The results were the efforts of the following organizations: Connecticut Audubon Society, Darien Audubon Society, Greenwich Audubon Society, Hartford Audubon Society, Housatonic Audubon Society, Litchfield Hills Audubon Society, Matabeseck Audubon Society, Natchaug Ornithological Society, Naugatuck Valley Audubon Society, New Canaan Audubon Society, New Haven Bird Club, Potopaug Audubon Society, Quinnipiac Valley Audubon Society, Saugatuck Valley Audubon Society, and the Waterbury Naturalist Club.



Saw-Whet Owl



Immature Bald Eagle

A Wodcok	1	1	CP	6	2	2						1				
Cm Snipe	3	1	11	27	2	1			2		2	2				7
G Yelleg		6		2												
Pur Sand	16		2	502	62	44										
Dunlin	35	96	143	95	123	10										
SB Dowch	1															
Sandling			15	6	15											
Glu Gull			1	1												1
Icl Gull				1												1
LBB Gull	1			CP												
GBB Gull	89	332	745	730	291	269		1	1			485	14	29		
Hrg Gull	6542	1026	3900	13542	2095	4690	177	278	296	38		1549	154	909	83	
RBi Gull	1956	995	1510	3722	157	300	55	23	43	CP		485	35	51		
Bon Gull	63			39	5	26										
Gull Sp	52	8														
Bl Guiln				1												
Rck Dove	546	485	625	938	325	441	137	74	664	240	245	909	236	2057	751	
Mor Dove	865	649	132	1006	593	394	56	238	1108	541	592	582	291	1316	358	
Barn Owl				1												
ScrH Owl	76	45	4	13	10	7		27	66	35	7	38	5	20		
GrHo Owl	23	10	1	12	7	7	8	2	38	2	17	6	20	8	CP	
Snwy Owl			1													
Bard Owl	2	2		3	2	3	2		5	1	11	1	5	1	2	
LoEr Owl	1		3	7	3	1						1		4		
ShEr Owl			3		1									1		
SaWt Owl		1		3	1	1			3		7		1			
B Kingfh	22	5	9	17	32	20	2	7	10	9	5	1	8	18	2	
C Flicker	15	4	6	32	16	15	7	5	25	13	7	17	9	30	1	
Pil Wdpk	14	9		1	2		1		3	3	3	1	2	6		
RdB Wdpk	31	8		2	1				2			1	3	1	CP	
RdH Wdpk			1		1											
YB Spsuk	4		1	2		2	1		2	1	1		1			
Hry Wdpk	66	35	5	44	29	16	5	17	34	44	40	20	20	82	35	
Dwy Wdpk	416	174	48	221	149	68	29	69	182	184	131	47	54	335	91	
E Phoebe		1														
Hrn Lark			103	158	45	17	2		403	449	478	226		231	252	
Blue Jay	613	395	157	823	980	618	180	467	1438	1140	684	304	483	904	602	
Com Crow	1313	1940	298	1172	359	379	474	371	1721	720	388	642	175	12021	1255	
Fsh Crow		1	14	20												
Crow Sp		6														
BC Chcde	2251	1028	169	1176	926	699	222	399	1511	1379	827	322	557	1276	753	
Br Chcde		CP														
T Titmse	624	321	40	211	230	143	97	127	281	201	77	74	168	425	259	
WB Nthth	322	168	26	108	113	37	32	100	208	240	138	25	85	206	92	
RB Nthth	16	3	2	15	9	8	2		16	10	27	7	1	3		

Ev Grbk	114	101		294	177	157	105	17	157	637	767	34	255	53	428
Pur Finh	75	95	2	29	2	15	71	36	79	42	56	70	31	67	42
Hos Finh	782	527	131	549	512	448	112	175	706	362	158	193	132	1161	314
Pi Grsbk				3			1		1	CP	42	2		7	13
C Redpol	6	16	3	19	11		1		34	16	66	17	18	41	25
Pi Siskn	85	19	3	50	10	13		8	19	9	7	8	4	19	24
A Gldfnh	359	184	46	244	64	73	24	29	125	104	250	98	141	442	95
R Crsbil	1			19	1				4		CP		2		7
WW Crbil				1									5		
RS Towhe	13	5	4	12	20	25	4		3	1	1	6	3	1	1
Ips Sprw		1													
Sav Sprw		27	12	7	14	2			3						CP
Ghp Sprw													1		
ShT Sprw		6	1	1											
SeS Sprw			1	1											
Vsp Sprw	1													1	
Lrk Sprw	1														
DE Junco	1258	535	71	673	239	151	200	362	1011	680	400	316	475	1128	817
Tre Sprw	167	160	333	237	168	36	112	91	176	494	361	28	104	610	150
Chp Sprw			1			2	1							2	
Fld Sprw	26	99	131	215	83	52	17	30	14	8		9	68	41	17
WhC Sprw		2				1			2	5			1	8	
WhT Sprw	857	421	89	1236	339	366	156	164	552	165	160	165	274	514	268
Fox Sprw	50	12		20	8	21	6	1	4	1	1	8	2	8	3
Lcn Sprw		1		1											
Swp Sprw	14	18	44	120	33	16	5	2	7		4	10	5	19	1
Sng Sprw	484	357	262	780	333	227	76	190	202	184	43	80	155	588	54
Sprw Sp		26													
Lpl Lgsp		37	31	5	1	2			2		1			3	
Sno Btng	3	62	50	25	5	1	CP	10	282	9	30	21		151	11

*

THE CONNECTICUT WARBLER

Devoted to the promotion of bird study.



The Connecticut Warbler is a quarterly publication devoted to the promotion of bird study and conservation in the state of Connecticut. The Connecticut Warbler is published by the Natural History Services Department of the Connecticut Audubon Society, 314 Unquowa Road, Fairfield, Connecticut 06430.

SUBSCRIPTION:

Subscriptions to The Connecticut Warbler are based on the calendar year, from January to December, at \$6.00 per year. Back issues are available at \$1.50 per issue.

All correspondence should be sent to:
The Connecticut Warbler
Natural History Services Dept., C.A.S.
314 Unquowa Road
Fairfield, Connecticut 06430

The Connecticut Audubon Society has been declared a non-profit organization by the Internal Revenue Service. Any gifts to the Connecticut Warbler will be greatly appreciated and are fully tax deductible.

All Rights Reserved.

Suggestions to Authors:

The editors of the Connecticut Warbler invite you to submit articles, notes, black & white photographs, and line drawings. Manuscripts should be typewritten, double spaced, and on one side of the sheet with ample margins. All material will be returned upon request.

The Connecticut Warbler

Director and Tech. Editor:	Milan G. Bull
Editor:	Roland C. Clement
Managing Editor:	Carl J. Trichka
Editorial Board:	Dr. George A. Clark, Jr.
	Paul Desjardins
	Robert C. DeWire
	Frank J. Gardner
	James Hammer
	Thomas R. Hoehn
	H. James Mockalis
	Dr. Noble S. Proctor
	Fred C. Sibley
	Joseph D. Zeranski

TABLE OF CONTENTS

EDITORIAL	14
Carl J. Trichka	
THE BLACK RAIL: MYSTERY BIRD OF THE MARSH	15
Dr. Noble S. Proctor	
BANDING GULLS AT CHIMON ISLAND	17
Robert C. DeWire	
COMMON TERNS IN CONNECTICUT - A PROGRESS REPORT	18
Fred C. Sibley	
NOTES AND NEWS	24

EDITORIAL

Carl J. Trichka

Anyone who seeks information about Connecticut's birds soon finds out that there is a large time gap between the early writings and those of the present. The "bible" on Connecticut's birdlife is the work of Sage, Bishop, and Bliss, *The Birds of Connecticut* (1913), the only work which covers the entire state. Little has been published since except for material dealing with particular areas within the state.

With this issue, we begin the task of bringing into focus what is happening to Connecticut birds at present, and we will gradually seek to connect the past with the present. We begin with a coastal rarity. Dr. Noble Proctor's account of the Black Rail is a piece which will correct the record and inspire many a birder to try hard to get a glimpse of this elusive creature. Rather little is known about this bird's habitat requirements, so this new information opens the door for others to seek out this shy denizen of the marshes in other parts of the state. Good luck!

Fred Sibley provides an impressive status report of the Common Tern's principal nesting colony in Connecticut, the results of intensive study since 1978. The banding staff of Connecticut Audubon Society spent a weekend assisting Fred and his staff last summer. And work it was, from dawn to dusk! In walking through a tern colony (we hope not too often) you quickly inure yourself to the noise and defensive tactics of the birds, adapting yourself to peckings and droppings, or you get no work done. We must conclude that the survival of terns depends on the protection of their nesting grounds. Development or disturbance by recreation seekers will set back nesting success or drive the birds out.

Bob DeWire documents the wanderings of the large group of Herring Gulls that nest on Chimon Island. These data support previous reports about gull dispersal from nesting grounds during the first two years of their lives, when they wander southward prior to returning to their nesting island and producing young of their own.

Charles Shafer reports on the second New England Regional Hawk Migration Conference, and includes new information on one of the puzzling aspects of hawk-watching, the identification of Sharp-shinned and/or Cooper's Hawks. Peter Dunne of the Cape May Bird Observatory has interesting help for you in this regard.

Finally, Miley Bull provides a glimpse of the busy sessions of the EBBA meeting in Ocean City, one this editor also enjoyed sharing.

THE BLACK RAIL: MYSTERY BIRD OF THE MARSH

by Noble S. Proctor

Through the years, the Black Rail (*Laterallus jamaicensis*), has been one of the most sought, yet enigmatic, bird species for the avid birder in the Northeast. Its catalogued history in Connecticut spans some 100 years and during this time luck has remained one of the key elements of encounter with this species. Even its written history has an aura of mystique. C.H. Merriam in *A Review of Birds of Connecticut* (1877) reports what could be the first state record for this species. A bird was reportedly captured by Brewer at Hazardville, Ct. (no date listed). This record was reported in the 1956 A.O.U. Checklist as a Hazardville bird. John Bull (1964) states that he is most hesitant to accept the record. I also consider the record doubtful. With no date, no skin, and no outline of the habitat the bird was found in, I do not feel that the Hazardville record is acceptable. Hence, the first state record comes from Saybrook, where a neighbor of J.N. Clark reportedly hit a nest of the Black Rail while cutting hay on July 10, 1876. All but four of the eggs were broken and the adult bird was decapitated. In the ensuing years the skin was lost. J.N. Clark again reported a nest with nine eggs on June 13, 1884, also in Saybrook, but the adults went unseen. It is now believed that the area of this nesting is the Great Island region. Sage and Bishop (*The Birds of Connecticut* 1913) report three additional records.

On July 11, 1893 and on August 12, 1904, Bishop flushed single birds in the Quinnipiac Marshes of New Haven. On September 14, 1904, Whitney reported an immature bird at Essex. From that point to the present a long hiatus of mainly unsubstantiated sightings and "calls" enshroud the bird.

This may be a good point to review some of the information we have on habitat preferences that is a key to finding this species. The classic preferred habitat of East Coast birds is the upper limits of the Salt Marsh Grass (*Spartina patens*), community where Black Grass (*Juncus Gerardi*), Marsh Alder (*Iva frutescens*), and Goldenrod (*Solidago sempervirens*), intermix. This type of edge effect seems to attract this species consistently, especially south of Connecticut. In such areas I have had excellent

success in finding the bird. Within Connecticut, we still have significant samples of this favored habitat in places like the Lordship Marshes, Stratford; Nell's Island, Milford; Great Island, Saybrook; and the marshes of Barn Island in Stonington. Dillon Ripley (*Rails of the World* 1977) shows a map depicting the range of the east coast subspecies. (Fig. 1) It can be seen that this range extends well out into the middle Atlantic states. Through this area fresh water marshes, wet fields and at times dry hay fields are used by this rail. This highlights a fact that one often overlooks when trying to find the bird in Connecticut. Most birders are attuned to looking for the species along the coast. But in migration and during the breeding season a wide range of inland wetland habitat may prove attractive for the species. This is a fact to note when we discuss recent occurrences later in this report.



Black Rail – Adult Male

Photo by N. S. Proctor

Turning to more recent reports, one finds the following: There are numerous word-of-mouth reports of birds calling from the Great Island area through the early part of the 1900's. Indeed, when afield talking to other birders, Great Island is invariably brought up when Black Rails are mentioned. All records seem to refer back to J.N. Clark's two reports that have sustained an endless retelling with no addition of substantial material. In addition, "sightings" have been reported of "tiny

black rails running across footpaths at the marsh edge." Many of these reports, I am sure, are sightings of young Clapper Rails that tend to be scampering about during the periods reported upon. L. MacKenzie (The Birds of Guilford, Connecticut 1961) made reference to two such reports. No reference is made to the birder who made the sightings. These reports are August 4, 1945 when one was seen near the Guilford Beach and on May 25, 1947, when one was seen running across an open area at Great Harbor. No other data are available concerning these sightings. Bulmer reported the species twice from the Lordship area in Stratford, first on August 14, 1953 and again on August 20, 1959. These dates fall within the movement period for this species, though, as yet, we are unable to say where the birds are moving from, or whether they are products of local breeding. On September 5, 1973, at last, an incontrovertible record was established when Muller collected a young bird in the grass-goldenrod edge along the Housatonic River, three miles above Milford Point. Was it a product of local nesting? A migrant? As always with this species, this is as yet an unanswerable question.

My first encounter with this species in Connecticut occurred in 1980. Dave Titus and John Maynard telephoned from Cromwell to report what they believed to be a Black Rail calling from Dead Man's Swamp. On June 25, Maury Covington and I went with Titus to the area and waited until twilight. Just before dark the bird began to call. Equipped with a parabolic reflector and a tape recorder, we waded out to record the bird. The call was the typical distinct "kickyki do" or "dee dee do" with a drop on the end "do". After extended taping, I replayed the tape and instantly the bird was running about our feet, calling and scolding in a loud and harsh "whirr, whirr, whirr" sound. Was it defending a territory? It would seem so. Was a nest there? We will never know! After dark, Covington and I returned with the recorder and a poncho. Spreading the poncho out I hoped we would see the rail cross it to interact with the tape recorder. Turning on the tape we had an immediate response. When the bird was very close we illuminated the poncho. I noticed a stirring beneath the poncho and immediately dropped onto the poncho, surrounding the area with my arms. Sliding one hand beneath, I picked up a rail. At last this elusive species was within my grasp. An adult male, it still showed some molt in the capital tract. Measurements and numerous photos were taken. The bird was then returned to

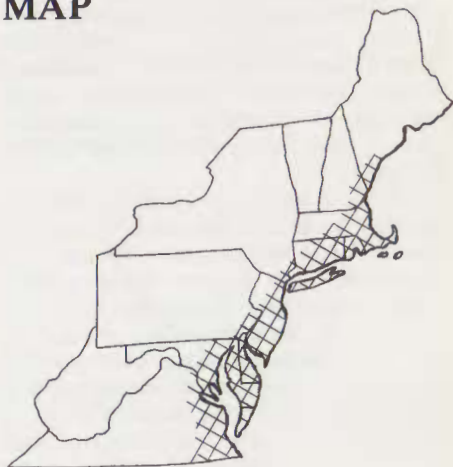
the marsh where it was heard calling a few nights later. Of particular note was the vegetation. In this backwater area of Connecticut feeder marsh, the dominant plants were river Bulrush (*Scirpus fluvialis*) and some Narrow Leaved Cattail (*Typha angustifolia*). So the inland fresh water areas of substantial size, overlooked until this point for the Black Rail in nesting season, now add a new promise for future investigations.

The scene switches back to Milford, and once again it is Muller obtaining an adult bird in the Nell's Island marsh on September 15, 1980. This time in predominantly *Spartina* grass.

This is presently where the story of the elusive Black Rail in Connecticut ends. June appears to be the best month for calling birds anywhere on the East coast. They sing from just prior to sunset and stop calling usually an hour or so after midnight. As for migrants, any time from late August through September appears to be the best time afield.

Perhaps once we were attuned to its habitat preferences and activities within the state, the first twentieth century nest will be located. What a treasure awaits that field naturalist! Or will it be a fluke, as the first nest find was? One thing for certain: "lady luck" will continue to play a major role in encounters with the gem of Connecticut's marshes — the Black Rail.

MAP



Range of the Black Rail in the Northeast.

Dr. Proctor is Associate Professor of Biology at Southern Connecticut State College in New Haven.

Banding gulls at Chimon Island

by Robert C. DeWire

Chimon Island, in the Norwalk Islands chain off Norwalk, is one of the most ornithologically significant areas in Connecticut. Its large heronry includes nesting representatives of almost every species of heron that occurs in the Northeast. On the south shore of the island there is a large colony of Herring Gulls, (*Larus argentatus*) with small numbers of Great Black-backed Gulls, (*Larus marinus*) as well. The colony numbers in the thousands and spills over to neighboring Grassy Island.

In 1973 I began to study the dispersal of gulls from Chimon Island. Two banding trips were made, in June and in early July. In June some of the young were still so small that the band size required for fully-grown Herring Gulls would slip off their legs. The second trip was made to band these young, by then grown enough to hold the band. The process is the simple one of picking up the young birds, banding them, and setting them down again. The adult gulls scream and dive at you in defense of their young, but few actually strike. Hard hats were worn as a precaution, however, and since the adults are rather accurate with their droppings, one always wears the oldest of clothes when banding. Staff members of the Nature Center for Environmental Activities of Westport assisted me. Transportation to the island was kindly provided by the Saugatuck Valley Audubon Society on its catamaran, CONSERVATOR.

In 1973 we banded 1,042 gulls, and the next year, 1,185. In 1975 a problem interfered. After the initial June trip, when 654 gulls were banded, the owner of Chimon Island suddenly prohibited use of the island, and we were not able to continue the project beyond this point. It was not until 1980 that we resumed banding on the island, and we now hope to make an intensive study of the colony during upcoming years.

During the three years that banding was done we did obtain interesting information on the movements of these birds. Since 1973, a total of 66 birds have been recovered by the public, and their band numbers reported to the banding office. This is a recovery rate of 2.3%; it may seem low but is actually twice as high as the expected recovery rate for songbirds, a mere 1%.

Of the gulls banded in 1973, there have been 22 recoveries to date, more than half of them being of birds found by people within a year of banding, mostly in 1974. At the other extreme, four of the recoveries were made in 1980, two of them in the New York City area (South Brother Island, and Palisades), one at Southport Beach in Fairfield, and one on Chimon Island itself. Herring Gulls are notably long-lived birds, so these 7-year-old birds are by no means exceptional. Records exist of Herring Gulls recovered after 29 and 34 years.

The birds banded in 1973 and recovered in their first winter ranged widely: from nearby Calf Pasture Beach in Norwalk, to the New York City area (4 birds); to southern New Jersey (2); and to as far away as Cape Hatteras, North Carolina (2). All recoveries but one have been of birds found south of their nesting island. The one exception was recovered at Plum Island, Newburyport, Mass., in August of 1975. The long-distance traveller of the group was found at Harkers Island, North Carolina, in April of 1975.

The birds banded in 1974 travelled even more widely, but once again the movement was southerly, with no birds recovered north of Stratford, Conn. A total of 29 of these birds have so far been recovered, ten of them that first winter. Eight were found locally, and the two that wandered beyond the limits of our 1973 birds went to Sullivan Island, South Carolina, and Sapelo Island, Georgia. The following year (1975), this cohort showed up in the New York City area, Sandy Hook, N.J., North Carolina (two birds), Florida (3), and — our current record — a bird was picked up near Vera Cruz, Mexico in June.

In 1975 fewer birds were banded and, consequently, there have been fewer recoveries — only 15 as of April 1, 1981. Except for those found between Norwalk and New York, birds were recovered at Cape May, J.J., Virginia Beach, Va., and Gulfport, Miss. Once again, a single bird went north to be taken along the Charles River, West Roxbury, Mass., in May of 1978.

The 1980 banding totalled only 384 birds because we started late in the season, and many of the young were already to well developed to catch easily. Only one of these has been reported to date.

Our banding data show that there is a substantial dispersal of gulls once they leave the nesting site. Our recoveries confirm the strong southerly drift earlier reported by others. The greatest

distance covered appears to be during the first two years of the gull's life, when they are immature and unattached. Birds five years old, or older, have been taken no farther away than the New York City area. This is to be expected because all the birds banded in the 1973-75 period are now of breeding age and would tend to "home." The 1981 nesting adults will be observed carefully to determine what proportion of them are already banded. It may be assumed that the majority of those already banded will be birds we banded here since 1973.

Let me stress the importance of checking any dead gull you may find on the beaches. If the bird has a band, you may remove it and save it for reference. It is not necessary to remove the band, however, so long as the entire number can be read. The number is long and it is important to be sure that every digit is correctly recorded. Banded gulls may be reported directly to the Bird-Banding Laboratory, Laurel, Maryland 20811, or you may contact me at the Denison Pequotsepos Nature Center, P.O. Box 122, Mystic, Conn. 06355.

ROBERT C. DeWIRE obtained a bachelor of science degree in wildlife management at the University of Massachusetts in 1967. From 1967 to 1970 he was Naturalist and Acting Director at the Thames Science Center in New London. He was then Chief Naturalist at the Nature Center for Environmental Activities, in Westport, from 1970 to 1976. Since 1976 he has been Director of the Denison Pequotsepos Nature Center in Mystic.

He received his federal banding permit in 1963. He has been compiler of the New London Christmas Count since 1962. He is on the Editorial Board of *North American Bird Bander* (the joint publication of the Eastern and Western Bird-Banding Associations), is Coordinator for Region III of the Atlantic Flyway Review for this publication, reporting all banding station activities for Connecticut, Long Island, New Jersey, and Delaware. He is on the Board of Councilors of the Northeastern Bird-Banding Association, and is "the voice" for the Connecticut Rare Bird Alert.

COMMON TERNS IN CONNECTICUT

©1981 Pat Lynch



A PROGRESS REPORT

by Fred C. Sibley

The Common Tern (*Sterna hirundo*) is alive and doing well in Connecticut. A 1977 survey of the state's tern colonies (Erwin and Korschgen, 1979), and a 1980 survey by the Connecticut Dept. of Environmental Protection (Rozsa, 1980) found 1600 pairs nesting on 17 islands (Table II). Terns have probably nested on most of the Connecticut islands, but Falkner's Island has always been home to 70-80% of the population. This four-acre island, three miles off the Guilford-Madison coast has evidently always been a tern colony. Adrian Block found terns there when he reported the island in the early 1600's; there were terns there when the Coast Guard took over in the 1700's; and terns were present in 1976 when the Coast Guard automated the lighthouse and moved off. However, in 1977 there were still no reliable base line data against which population changes could be measured.

The need for a more intensive study of Connecticut terns was apparent. Helen Hays, Director of the Great Gull Island Project, was particularly interested in the movement of birds from her study area off Orient Point, Long Island, to other colonies in Long Island Sound, and had encouraged numerous volunteers to band birds on Falkner's Island (Table I). Finally, in 1978 she persuaded us to set up a more ambitious project, and in May we arrived at the island in an overloaded Boston Whaler to initiate a three-year study. This paper reports on that study and the general health of Connecticut terns.

Initially a large amount of cleanup work was needed to make the area safe and marginally liveable for overnight volunteers. Next, the island beach was marked off in 72 ten meter sections and these were gridded to allow easy mapping of nests. Visits were made to the island from early May until early or mid-August, with volunteers present from mid-May to early July. Every two or three days a total nest check was made, new nests were marked with individually numbered tongue depressors and the following information recorded: nest coordinates, date eggs laid, date and cause of egg loss, date chick hatched, date and cause of chick loss, chick band numbers and adult band numbers.



©1981 Pat Lynch

Juvenile Common Tern

ACKNOWLEDGEMENTS

First we wish to thank Dr. Jeffrey Spendelow, Yale University, who provided invaluable assistance as project co-leader, also the 70-plus volunteers who spent one or more days working on the island, and for 1980 in particular, Maury Covington (coordinator of volunteers) and Jeff MacKenzie (boatman). Helen Hays inspired the whole project and has been the major booster and

supporter. Thanks are due the U.S. Coast Guard for permission to work on the island and to Connecticut DEP for permission to work with the tern colony. The Peabody Museum, Yale University, provided numerous assists and Matt Reed of the Museum's field station was invaluable in keeping the Boston Whaler running through the summers.

RESULTS AND DISCUSSION

Table III presents a summary of the 1978-1980 study. In those three years almost 8000 chicks were banded, 5500 adults were trapped and the history of over 7000 nests was recorded. The goal of the study was to assess the interchange of birds between Falkner's and Great Gull Islands but information on nesting success, nest loss and disturbance, accrued as a result. In retrospect, a major plus in the study may be that of providing information on the present health of the colony.



©1981 Pat Lynch

Adult Roseate Tern

On Falkner's Island the first terns arrive just before May 12, with a rapid increase in numbers during the following two weeks. By May 15 the first eggs have been laid and within a week over 1000 pairs are nesting. A first nest usually contains three eggs (extremes 1-5) and is more successful than later nests. The young start hatching some 20 days after incubation, and in another 25-30 days are ready to leave the island. In a good year—one without storm tides or torrential rains—the bulk of the population has left the island by July 1. The young are still dependent on the adults but go with the adults to feeding areas and stay there. Renesting by unsuccessful pairs, and first nestings of younger birds, extend the laying period into early August. Although birds remain in Long Island Sound well

the number of birds remaining on Falkner's Island after August 1 is small.

The low nesting success in 1978 (52% vs. 66% in 1979 and 1980) and the large number of nest starts (2650 vs. 2480 and 1921 in the next two years) was due to a storm tide and torrential rains in late May. Most of the nests are on a four meter wide strip of beach, the rest on the steep slopes. A storm during a period of high tide will sweep across most of the beach and a heavy rain will produce mud slides that sweep away nests on the slopes and bury those on the beach. The 1978 storm came at a period of maximum nesting density and resulted in the destruction of half the active nests (nearly 600). In 1979 and 1980 there were storm tides and heavy rain after the first week of June and thus after most of the early nests had hatched. The nesting success in 1979 and 1980 was higher as a result, renesting was limited, and the peak of activity was earlier. By comparison, such losses are zero on Great Gull Island, where all nests are above the storm tide line and on level ground. Other Connecticut colonies (except Frisbee Is.) are plagued by storm tides but not by slope erosion.



©1981 Pat Lynch

Adult Common Tern on Nest

Human disturbance is a potentially serious problem for the Falkner's Island ternery. It has been prevented by the nearly continuous presence of volunteers during the peak nesting periods, but as many as twenty boats, some with dogs, have been turned away on a weekend. Table II suggests that human disturbance is the major cause of nest loss in small colonies elsewhere and disturbance may result in zero production. Any

successful tern colony in an area receiving as much recreational use as Long Island Sound needs a caretaker during the nesting season.



©1981 Pat Lynch

Adult Common Tern

Egg losses resulted from a variety of causes, mainly failure to hatch, but predators have never been a provable fact. Aside from 1978 when 100 eggs were lost in one day to human vandals or Black-crowned Night Herons, the number of eggs unaccounted for in a season has been less than 100. Gulls are the only predators that regularly cross the water gap and these are actively driven off by the large number of terns. Only late in the season is the population small enough so that a gull can sneak in and steal an egg or chick. We remove all abandoned eggs and dead chicks and this may reduce the desirability, for gulls, of visiting the island.

After the age of three days chicks move away from the nest area and we have no mortality figures after that period. The mortality of 1-3 day old chicks is from a variety of causes, but in 1978 over 50% of the mortality was due to ants. Probably many of the chicks dying of unknown causes were also killed by ants. The 30% reduction in "banded young per successful nest" and "young banded" figures in Table III is mainly due to chick mortality caused by ants. We still do not know why ants were a problem in 1978 and not in the following years.

After the seemingly disastrous 1978 nesting season we experimented with habitat modifications to reduce nest loss. These changes were not universally successful, but indicated that nesting density can be increased and indicated that nesting area was the limiting factor on colony size. Any attempt to modify enough area to increase the population or productivity would require a tremendous labor force. However, the information on habitat modifications described below may be important at a later date.

An artificial beach constructed on the upper level of the island by removing a 10 x 4 meter patch of sod and replacing it with beach gravel was used by five pairs the first year. Hay initially spread to reduce nest loss from mud flows was found to increase nesting densities on many substrates. Digging trenches in order to channel the mud flows did not work because terns preferred the trenches as nest sites over any of the elevated areas. Old tires, partially buried, provided protection from the mud, plus a depression, and were highly successful. Removal of beach drift to reduce the attraction of nesting at the high tide line involved too much work. Terracing of slopes and smoothing of beach areas increased nesting but did not solve tide and mud problems.

Our original question concerning interchange of birds between Great Gull and Falkner's Is. is hiding in the 3000 trappings of previously banded birds. This information is now being analyzed. As an example of the amount of data available, in 1978 we trapped 305 birds banded on Great Gull Is., 13 from other New York colonies and 4 from other Connecticut colonies. Even allowing for the difference in number of birds banded on Great Gull vs. Falkner's, more birds seem to move to Falkner's. Many birds switch islands after losing a nest. One bird nested unsuccessfully three times in a year, first on Falkner's, then on Great Gull and finally back to Falkner's.

Returns of bands from Brazil, Surinam, Guyana, Trinidad, Venezuela and Columbia give some indication of the loss on the wintering grounds. Nisbet (1980) suggests the harvest of Roseate Terns for food is a major cause of that species decline. A close watch should be kept on Common Terns for similar effects.

SUMMARY

Work from 1978 to 1980 on Falkner's Island has resulted in the banding of 13,000 Common Terns, a ten-fold increase in the reservoir of known-history birds available for research.

The records on 7000 nests provide information on preferred nest sites, differential success of nesting habitats, importance of mortality factors and numerous other items. The trapping of 3000 previously banded adults provides the data for a series of papers on inter-island movement, fidelity to nest site and fidelity to nesting island.

Experiments with habitat modification have revealed a number of methods for increasing nesting density and nesting success. The mere presence of researchers on the island from 1978 to 1980 greatly reduced human disturbance and may be primarily responsible for the high productivity of the island.

The Connecticut colonies are reproducing adequately and maintaining their numbers. There have been no obvious signs (such as die-off, unshelled eggs, birth defects) of serious environmental problems.

For a variety of reasons, 1981 will not be one of intensive activity on Falkner's Island. The first three years of data will be fully digested and plans laid for 1982. It is important to continue to monitor Connecticut's only large tern colony since it is the mother colony for all the others. Colonies can decline very rapidly and infrequent visits, as in the past, can miss such declines.

If you would like to work as a volunteer contact Maury Covington (543 Orange Ave., Milford, CT, 06430 or Fred Sibley. If you would like to support the project financially the Great Gull Bird-A-Thon also supports the Falkner's Island project.

LITERATURE CITED

- Erwin, M.R. and C.E. Korschgen. 1979. Coastal waterbird colonies: Maine to Virginia, 1977. An atlas showing colony locations and species composition. U.S. Fish & Wildlife Service, Biological Services Program, FWS/OBS-79/08.
- Nisbet, I. 1980. Status and trends of the Roseate Tern, *Sterna dougallii*, in North America and the Caribbean. Office of Endangered Species, Department of the Interior.
- Rozsa, R. 1980. Connecticut colonial waterbird survey, 1980. Coastal Area Management, Connecticut DEP.

TABLE I - Common Terns banded on Falkners's Island

Year	Bander	Young	Adults
1970	Noble Proctor and Davis Finch	1	-
1972	David Duffy and volunteers	189	48
1973	Noble Proctor and Fred Sibley David Duffy and volunteers	76	-
1976	David Duffy and volunteers	34	26
1977	Jamie Canfield and volunteers	772	80
	Subtotal 1970-1977	1303	156
1978	Project volunteers	1899	1073
1979	Project volunteers	3228	957
1980	Project volunteers	2694	614
	Subtotal 1978-1980	7821	2644
	Total	9124	2800

TABLE II - Common Tern Colonies in Connecticut

Town and Island	1977	1980	Success in 1980	Remarks
STONINGTON				
Lyddy I.	17	44	poor	recreational use
Rock I.	-	64	good	partial protection
GROTON				
Black Rock	22	17	poor	recreational use
H Hobbs I.	-	6	good	maximum protection
Shore Rock	47	143	no information	
WATERFORD				
Waterford I.	73	129	poor	gulls? human?
EAST LYME				
North Brother	40	22	no information	
Wigwam Rock	3	5	no information	

TABLE II continued

WESTBROOK				
Menunketesuck I.	-	4	no information	
MADISON				
Tuxis I.	-	43	fair	recreational use
Gull Rock	28	3	fair	recreational use
Falkner's I.	1100	1127	good	heavy protection
BRANFORD				
Big Mermaid	26	53	poor	recreational use
Frisbee I.	32	43	good	heavy protection
Umbrella Is.	-	13	poor	tide, use?
NORWALK				
Long Beach I.	3	9	no information	
GREENWICH				
Bluff I.	-	1	no information	

Totals are for nests or nesting pairs found on June 1 - 2

TABLE III - Falkner's Island Tern Colony*

Nest Starts	1978	1979	1980
	2650	2480	1921
Nest Success ₁	52%	66%	66%
Young Per Nest ₂	1.41	1.98	2.13
Young Banded	1899	3228	2694
Adults Trapped ₃	1474	1859	2289
Unbanded	1073	957	614
Falkner's	79	518	
Foreign	322	384	1675
Percent Trapped	27.8	37.5	59.6
Percent Banded	27.2	48.5	73.2
Estimated Populations ± 100 pairs	1400	1500	1300

TABLE III continued

1. Percent of nests with at least one chick surviving past 3 days.
2. Young per successful nest.
3. The three categories are: birds trapped without a band, banded previously on Falkner's, banded previously elsewhere.
4. This percentage is the number of adults trapped divided by twice the number of nests starts.
5. Percentage of birds trapped that were already banded.
6. This estimate differs from the June 1 count because additional birds use the island later in the year, probably as nest sites are vacated.

**These are preliminary data and may be slightly different in a final analysis.*

Fred C. Sibley received a B.S. degree from Cornell University in 1955 and, after some time in the army and teaching high school science, an M.A. in 1959.

After two years of teaching at University College, Ibadan, Nigeria, and a year at Adelphi University, he joined the Smithsonian Institution's Pacific Project. During the next four years he visited over forty islands in the central Pacific and banded over 150,000 birds. Joining the newly-formed Endangered Species Program

of the U.S. Fish & Wildlife Service in 1965, he moved to California to focus on a field study of the condor for another four years. He became associated with Yale's Peabody Museum in 1971.

He is a past president of the New Haven Bird Club, co-compiler of the New Haven Christmas Count, director of the Falkner's Island Tern Project, leader of an annual summer seminar in field ornithology in Trinidad, and has two sons who are better birders than he is.

NOTES AND NEWS

THE SECOND ANNUAL HAWK CONFERENCE

by Charles Shafer

On April 4, 1981, the second annual New England Hawk Migration Conference was held in Holyoke, Mass. Reports from Maine, Vermont, Massachusetts, and Connecticut were presented, and several talks on special facets of hawk-watching were given.

One such talk dealt with the identification of Accipiters, the Sharp-shinned and Cooper's

Hawks, in particular. While most people still rely on the tail to identify these birds, Peter Dunne of Cape May, N.J., suggested that this is not the most accurate way. He has recorded enough instances of Sharpshins with rounded tails to disprove the common notion that all Sharpshins have squared or notched tails. His preferred mark is size. The male Cooper's is at least slightly larger than a female Sharpshin. Dunne feels that the Cooper's Hawk holds its wings more stiffly, and straighter than the relatively relaxed Sharpshin. The best field mark, though, is had in drawing an imaginary line, an arc, along the leading edge of the wings. If the head is bisected by this line, the bird is a Cooper's Hawk. Dunne went on to say that the color of head, tail, and body offers poor field marks, because the age of the bird, and the light in which it is seen will sometimes give false clues. The best way, ap-

parently, is to have seen so many thousands of these Accipiters that there is no longer any doubt in your mind as to the identity of the animal.

Paul Karlinger, in an interesting talk, dealt with the frequency of water crossings by migrating hawks. He spent three weeks at the tip of Cape May, observing hawk behavior as they approached the bay. Some species cross under any conditions, others cross under few conditions. Here is a summary of these species traits:

Species	% Who Cross
Peregrine	100
Harrier	96
Sharpshin	81
Merlin	78
Kestrel	68
Turkey Vulture	5
Broadwing	2

Flapping birds are more likely to cross since they are accustomed to the expenditure of energy. Birds which soar, like the vultures and buteos, are less likely to cross, apparently because they are not prepared to invest in the extra work involved. Kerlinger's study showed that a headwind is less a deterrent than a lateral wind because the lateral wind forces a bird to expend energy simply to stay on course. Altitude is also a factor. The higher the bird is when a crossing must be decided, the more likely is it to attempt a crossing.

Bill Welch spoke about tracking hawks with a motorized glider. His studies are confined to the region from Mount Tom, Mass., to northern New Jersey, but here migrating hawks apparently follow the same pattern year after year, though he is not sure whether the pattern is due to geography or prevailing winds. Broadwings fly at about 36 mph and lose altitude at the rate of 200 feet per minute. When assuming a gliding posture, also, they give up a lot of lift. This loss of altitude requires a constant search for thermals in which they can regain lost altitude. Welch feels that they find thermals simply by looking at other hawks who have lift, and heading in that direction. This may also explain their rather definite path across Connecticut. The thermals may form in the same areas year after year, over particular fields, parking lots, or other "hot spots."

One sentiment expressed by every speaker was the need for more watchers during the migration period. Since effective visual range is less than two miles, more ground coverage, over a wider region is needed. Most people currently congregate around

known "hot spots," such as Mount Tom, Light-house Point in New Haven, or the Larsen Sanctuary in Fairfield. What is needed now is observers who will cover the less glamorous areas; who will sacrifice the likelihood of seeing a big flight in order to contribute to scientific understanding of this marvelous phenomenon. Not all areas will be active, but until all are counted, there will be too many unanswered questions as to why hawks migrate as they do.

ANNUAL MEETING OF E. B. B. A.

by Milan G. Bull

Ocean City, Maryland, extended its hospitality to some 200 members of the Eastern Bird-Banding Association attending the 58th annual meeting during the first weekend of April. A great deal of information is presented at these conferences and banders at all levels of experience bring pointers home with them, in line with the theme of the conference, "Learning Never Ceases."

Workshops were offered on a rotating basis so that we could attend those of particular interest, and not miss any. "Banding as an Educational Tool," was an exchange of ideas on teaching school children the role which banding plays in research. Skull pneumatization as an aging technique, and the determination of degree of molt in song birds were reviewed. Used in conjunction, these two techniques can help determine the age of most any captured bird. Banders were familiarized with the several methods for using pocket calculators in treating their data statistically. A session on bird rehabilitation concluded the workshops.

Mary H. Clench of the Florida State Museum discussed her Bahamas search for wintering Kirtland's Warblers. Little has been learned since the birds were collected here in the 19th century, so Mary's quest took her to dozens of large and small islands, and after several years of study, she confirmed the importance of these brushy islands for this endangered species which nests primarily in Michigan.

Kathy Klimkiewicz, federal biologist from the Banding Lab in Laurel, Maryland, presented highlights of the past year and explained that proposed budget cuts by the Reagan administration have not as yet affected operations. Of concern was the problem of backlogged band supply orders, especially in sizes 0 and 1B. Difficulties

in obtaining alloys, delays in filling orders by the manufacturer, and budgetary problems, plus over-ordering of bands by some banders, created the shortages.

The principal speaker, Dr. John Tarborgh of Princeton University, discussed the status of North American migrants that winter in the tropics. This was a well-illustrated talk. Those birds which occupy specific habitats in the northern breeding grounds tend to seek out similar habitats in the tropics. There are exceptions to this rule, but his work in distinguishing migrant populations from endemic groups was most interesting.

Several birding trips were organized, not one of the "hotter" times of the year for birds, but they provided exercise and worked up appetites.

BOOKS ON CONNECTICUT BIRD LIFE

Averill, C.K. Jr. LIST OF THE BIRDS FOUND IN THE VICINITY OF BRIDGEPORT, CONNECTICUT (1892) 19 pages. A listing of birds found in the Bridgeport area, with comments on seasonal occurrence.

Bull, John BIRDS OF THE NEW YORK AREA (1964) Harper & Row, New York. This is currently the standard reference on the status of birds in our region. Only the western "panhandle" of Fairfield County — from Westport to Greenwich — is reported upon in detail, however.

Linsley, James H. (Rev.) CATALOGUE OF THE BIRDS OF CONNECTICUT (1843). Published in the American Journal of Science and Arts. Vol. XLIV, No.2.

MacKenzie, Locke THE BIRDS OF GUILFORD, CONNECTICUT (1961) Peabody Museum, Yale Univ., New Haven, Ct. A 110 page annotated list.

Manter, Jerauld A. BIRDS OF STORRS, CONNECTICUT, AND VICINITY. (1965 and 1975) The Natchaug Ornithological Soc., Storrs, Ct. An 86 page annotated list now in its second edition.

Merriam, C. Hart A REVIEW OF THE BIRDS OF CONNECTICUT (1877). With remarks on their habits. Trans. Conn. Academy of Arts & Sciences. 4:1-150 (July).

Sage, John Hall: THE BIRDS OF CON-
Bishop, Louis Bennett;NECTICUT (1913)
and Bliss, Walter ParksBulletin No. 20, State Geological and Natural History Survey, Hartford, CT.

This 370-page report is the extant work on Connecticut birdlife. Every public library in the state presumably has a copy of this publication even though it may be catalogued only as the Geological and Natural History Survey's important series, rather than under birds. We hope to see it replaced by a modern summary ere long.

Subsequent issues of the CONNECTICUT WARBLER will provide selected lists of scientific articles about Connecticut birds from the periodical literature, as well as a reference to currently available check-lists for various parts of the state.

The Connecticut Audubon Society invites your membership.

Membership Categories

Supporting	\$50.00	Benefactor	\$300.00
Sustaining	\$25.00	Donor	\$200.00
Family	\$18.00	Contributing	\$100.00
Adult	\$12.00	Organizational	\$ 35.00

TABLE OF CONTENTS

EDITORIAL	14
Carl J. Trichka	
THE BLACK RAIL:MYSTERY BIRD OF THE MARSH	15
Dr. Noble S. Proctor	
BANDING GULLS AT CHIMON ISLAND	17
Robert C. DeWire	
COMMON TERNS IN CONNECTICUT— A PROGRESS REPORT	18
Fred C. Sibley	
NOTES AND NEWS	24

THE CONNECTICUT WARBLER

Devoted to the promotion of bird study.



The Connecticut Warbler is published in January, April, July and October. Subscription is \$6.00 per year, based on the calendar year. Individual issues may be purchased for \$1.50 each, when available. All Rights Reserved.

The editors invite the submission of articles, notes, black and white photographs and line drawings for use in The Connecticut Warbler. Manuscripts should be typewritten, double-spaced and on one side of the sheet only, with ample margins. The editors must reserve judgement as to how much of this material to use and return postage should be provided if materials are to be returned.

THE CONNECTICUT WARBLER

Editorial Staff:

Milan G. Bull
Roland C. Clement
Carl J. Trichka

Editorial Advisory Board:

Dr. George A. Clark, Jr. - Storrs
Paul Desjardins - Windsor Locks
Robert C. Dewire - Mystic
Frank J. Gardner - Hartford
James Hammer - Danbury
Thomas R. Hoehn - State D.E.P.
Gordon Loery - Litchfield
Frank Mantlik - Norwalk
H. James Mockalis - Middletown
Dr. Noble S. Proctor - New Haven
Lee A. Schlesinger - New Haven
Fred C. Sibley - New Haven
Christopher Wood - Woodbury
Joseph D. Zeranski - Greenwich

EDITORIAL

Our apologies to our readers for the mechanical and typographical errors that marred the first issues. We hope with this issue of *The Connecticut Warbler*, to effect that smooth-working relationship with our typesetters and printers that will minimize these in the future. We think the substance of our articles will be full compensation for the demands on your patience.

As we went to press we had enrolled over one hundred and thirty subscribers with minimal promotion. We need three or four times as many subscribers, however, so we hope you will call the publication to the attention of your birding friends who really want to know about the ornithology of Connecticut. Your local librarian should also be urged to subscribe, along with school biology departments. Mail promotions are now so expensive that we hope you will help by doing the local promotion on our behalf.

Those of our readers who attended the First Annual Connecticut Bird Conference listened to Dr. Noble Proctor speak about the birds of Connecticut. Needless to say, his reputation is well known throughout the ornithological community. I am especially proud of this issue because we are publishing in its entirety, Noble's review of the birds of Connecticut during the 1970's. His review points up how many trends there are in bird populations of such a modest geographical area as Connecticut in such a short span of years. Birders need to be much more aware of these changes, some of them temporary, some worrisome and thereby sophisticate their conversation concerns and statements. There are many problems involved in these changes, but it helps to inquire whether they are due to real fluctuations in numbers, or changes in our observational output, or whether climate, food supplies, habitat changes or the sheer take-over of space for growing human numbers is involved.

The Canada Goose — a nuisance bird? Thomas R. Hoehn presents some views on the status of this goose as a preview to an article by Kathryn A. Converse. Tom points out that not even hunting pressures have eased the population growth. Unsubstantiated reports have stated that the southern states have much lower populations than were known in the 1950's. It has also been said that the Delmarva peninsula is shortstopping the geese that used to winter further south. An interesting point, and I'm sure one that plays a part, however small, in the plight of some of the state's residents with non-migratory goose populations.

Kathryn A. Converse's article concerns non-migratory Canada Goose populations in this state. Her study focuses on their wintering and breeding distribution within the state. Not that long ago, these beautiful geese were strictly migrants in the Atlantic coastal region and conservation efforts to establish breeding populations in several states did fairly well. However their residency in the state has caused much consternation as they no longer migrate.

In our Notes & News section, Dennis Varza, Curator of Birdcraft Museum, summarizes the First Annual Connecticut Bird Conference. A project that is proposed in the near future for Connecticut is to initiate a bird atlas survey. Douglas Kibbe of *American Birds*, spoke about such a project and its inherent problems. Without the support of the birders in this state, a project of this scope cannot succeed.

Bob Dewire recently attended the Northeastern Bird Banding Conference, held at Manomet Bird Observatory in Massachusetts. He has provided us with a summary of the events that occurred during that weekend.

For you shoreline birders, a note is included to be on the lookout for yellow dyed herons and egrets. Your help is invited in providing sightings of these birds as part of a study being conducted on Chimon Island.

Another note concerns the guidelines we have tentatively set up for a column entitled "Changing Seasons." Lee Schlesinger has suggestions that will make everyone's job much easier when this column begins to appear in future issues.

And finally, your editor reports on the banding operations at Birdcraft Museum, summarizing the spring migration through the eyes of a mist net. Reports from birders in the field indicated that the migration this spring was not up to what we have experienced in past years. The birds flew in, caught their breath and left very quickly. Unless you were in the field at the right time, you probably spent a lot of time observing leaves and flower buds.

A REVIEW OF THE 1970's

by Dr. Noble S. Proctor

It is often difficult to make judgements concerning something so dynamic as bird populations when viewed over a short span of time. However, over a decade it becomes a bit more feasible. So, with our recent entry into the 80's, and many wondering what the 70's meant, it may be of interest to look back at the bird populations of the state and review the status of selected species, statewide, but with particular emphasis on the New Haven area. The following, then, is an overview of some species that seemed indicative of rises and falls, cycles, encroachment and disappearance.

LOONS: A positive sight record for the Arctic Loon evaded us again, but Red-Throated Loons showed a distinct pattern. Increasing in numbers on Long Island Sound in winter during the early 70's, they began to "crash" after 1975. Prior to 1975, numbers ranging in excess of 100 or even 200 were frequently reported during a day afield. Now one must work to turn up birds in favored sites. We wonder why.

GREBES: Until 1975 Eared Grebes appeared with some regularity off the coast of West Haven with the spring build up of Horned Grebes. Later in the decade, however, these sightings dropped off markedly. Red-necked Grebes, though elusive, proved to be consistent with a pattern of 2-4 sightings per year, February being the month of most consistent occurrence. Western Grebes were recorded three times in the decade, with the wintering bird of 1978-1979 staying for many to see.

CORMORANTS: After a steady increase of summering individuals over the decade, Double-crested Cormorants finally nested in Connecticut for the first time in the summer of 1979, off Norwalk. Additional nesting and the spread of this species is expected as a number of sites are available to them.

HERONS: This group proved very exciting in providing rapid species expansion into the state. Chimon Island, off Norwalk, remains the only true heronry in the state.

Surveys over the decade revealed diminishing nesting sites for Black-crowned Night Herons. Using Chimon as the stepping stone, Great and Snowy Egrets became increasingly common in the coastal marshes. The Glossy Ibis started breeding on this island in the late 60's and numbers increased through the 70's, providing more frequent sightings all along the coast. Cattle Egrets established themselves as breeders on the island but due to lack of suitable farm habitat in the region, they remain local rather than becoming abundant, as happened elsewhere. Little Blue Herons continued the trend of the southern herons moving into the state. They also started nesting on Chimon in the 70's, and toward the end of the decade even Louisiana Herons began to breed there! It is hard to believe that the second state record for this species occurred in the mid 60's, and that they are breeding and occur in several locations throughout the summer. The White Ibis also continues to press northward and although we have not had the massive influx that Long Island experienced, we did have several records in the 70's, with a 1979 bird staying on into the new year.

WATERFOWL: Mute Swans surged in their spread during the 70's. It is again hard to believe that the first wild, state nesting occurred in Woodmont in the mid 60's, and now they nest all along the coast and have moved to inland reservoirs. Winter flocks of over 250 are now found in areas such as Mystic. This bird could pose problems for local waterfowl in the future. Distinct increases were seen in Wood Duck populations and Ring-necked Duck flocks. Gadwalls obtained a foothold and began spreading during the last four years of the decade. Shoveler numbers fluctuated. Until 1975 the population increased steadily during the fall and winter months. In 1976 and 1977 numbers began to thin and by the end of the 70's, they were hard to find anywhere in coastal ponds. Hooded Mergansers have done very well and have spread statewide in their nesting. Wintering groups of over 40 are now encountered in suitable open water areas.

This decade also saw the first nesting of Common Mergansers in the state, part of a trend for northern species to inch their way south. The King Eider proved to be more common on the Sound in winter than the Common Eider. Though both species were

reported for each of the ten years, the Kings outnumbered Commons by five to one, with a group of 7 Kings at one point. Scoters were the most enigmatic of the duck tribe. At the start of the 70's, coastal groups of 1500 to 2000 were seen. Suddenly, in the mid-70's, they thinned out, with White-wings and Surf about equal in numbers. In the last four years the cry is "Where have all the scoters gone?" The answer seems to be to Long Island and out in the open ocean off Rhode Island and Massachusetts. Because of shifts in shellfish beds or in bird numbers?

HAWKS: Of all the bird groups that attract attention, the leader for the 70's has to be hawks. Birders finally caught on to the fact that one need not go to Hawk Mountain to see large numbers of hawks. Simply haunt the Connecticut coast in the fall and many will be seen. No fall now passes without "Arne's Armies" manning spots such as Lighthouse Point and recording each bird as it swoops or soars past. Thousands are now seen each fall, and the numbers for some species continue to climb. The decade saw the virtual end of nesting by Sharp-shinned and Cooper's Hawks in Connecticut, with an influx of nesting Goshawks, as though to fill the vacant niche.

Red-shouldered Hawks, which suffered from pesticide problems at the turn of the decade, made striking comebacks to many an old nesting site, and now are in good numbers in the state. Golden Eagles, considered accidental in the 60's, were sighted with increasing regularity during the 70's. This is undoubtedly due to their nesting in upstate New York and northern New England in recent years. With a new critical mass of hawk watchers afield, the realization that Bald Eagles winter in fair numbers dawned on us. Regular mid-winter censusing now shows a rather stable 20 to 25 Bald Eagles spending the winter in favored spots throughout the state. But Marsh Harriers continued to frustrate us. Where and when do the males pass? With a consistent ratio of some 400 females and immatures to 15 to 20 adult males, an explanation still awaits us. Perhaps a variation in time, height of flight, or routes will be the answer. The Osprey wins the "dramatic comeback of the decade" award. From two or so nesting pairs at the turn of the decade, to over 35 pairs on the Sound's coast, it appears that this bird is well

on its way back to its old numbers. To support this forecast, over 1000 were seen migrating through the New Haven area during the fall censusing in 1979! Peregrines likewise show a dramatic increase in numbers during the migration, going from two to four sightings in the early 70's to more than 40 in our area this fall. How much of the increase is due to the birds, and how much to birders, we do not know.

GALLINACEOUS BIRDS: For the woodland birder, the dramatic effect of the 6 year cycle of Ruffed Grouse was obvious. Common in the early '70's, the population crashed at the mid-point, so that even an all day hike in favored areas gave no certainty that one would turn up. Late in the decade, numbers slowly increased and fair numbers can now be found. With the increased loss of suitable farmland due to construction and with other fields reverting back to woodland, Bobwhite continued their population plunge, slowly withdrawing to the northeast part of the state. An occasional escaped Chukar added spice to a day's birding. The early part of the decade saw the last stand for the now extirpated Gray Partridge in the state, whereas the last few years have been boom years for the recently reintroduced Turkey.

RAILS: Rails remained consistent in occurrence and numbers through the '70's, but alas, we saw the lumping of King and Clapper Rail by some taxonomists. Since the early '70's we had been aware that two species interbreed in the marshes of Milford, East Haven and Old Lyme. It was just a matter of time before proposals for lumping were made. Black Rails and Yellow Rails remained as enigmatic as ever. The only Black Rail record for the decade was an immature bird at Milford in September, 1973. Yellow Rail records were sparse but the handful of sightings fell in April and October.

Coot populations showed a distinct "crash." In the early 70's, groups of 200 or more were commonplace in a number of locations, but mere handfuls were scattered about the state in the late 70's.

SHOREBIRDS: In general, shorebirds populations showed marked increases over the ten year period. In addition, some exciting forms showed up and stayed long enough for many to see, such as the Black-

necked Stilt in the spring of 1979 in Guilford and an American Avocet in April, 1975, photographed in Stratford. Among the plovers, three records of Wilson's Plover were scattered over the ten year period. Piping Plovers showed the most dramatic effects of coastal disruption, beach abuse and other "people problems." A coastal survey in 1975 showed only 12 pairs nesting on the Connecticut coast. This is a trend witnessed along the entire eastern seaboard. Distinct increases in numbers and sightings occurred in several other shorebirds. Upland Sandpipers in the late 70's became increasingly common in both spring and fall migration, and in the mid 70's, Stilt Sandpipers in the fall often reached double digit figures. In the last four years Marbled Godwits have appeared with regularity in spring and fall. The American Oystercatcher is trying to establish itself here. Twice in 1978 and 1979, these birds tried to nest on Connecticut soil only to have their eggs eaten by Great Black-backed Gulls. In 1977, Willets nested once again in Connecticut at Hammonasset after a hiatus of nearly 70 years.

This coincided with nesting in other spots along the coast, from New Jersey to Nova Scotia, filling in the long-standing gap. With increased coverage and better knowledge of field characters, birders found that Western Sandpipers occur with regularity and in numbers along the coast and at inland bodies of water, especially in the fall. Purple Sandpipers appeared almost cyclic. They were common early in the decade, with numbers often ranging into the hundreds, but by the end of the 70's, they were hard to find even at the most favored spots. Buff-breasted Sandpipers showed a steady increase in numbers and occurrences, and are now a regular species in fall migration at select areas. A far cry from the 60's, when the first twentieth century record in the state was made! Rounding out the shorebirds is the Ruff. This European visitor has rapidly elevated itself through the ranks of accidental, then rare, and now regular during the spring and fall migrations in the state. It is a consistent visitor at certain spots on the coast and has occurred in all ten years. In the mid 70's, fall records exceeded 20 birds. All this leads one to suspect breeding somewhere in North America.

GULLS AND TERNS: The big gulls

continued their takeover of the coastal area. Spurred by open dumping in the first part of the decade, both Herring and Great Black-backed Gulls multiplied logarithmically. Their subsidized competition made serious inroads into nesting Common and Roseate Terns. If the worldwide pattern holds, we may expect Herring Gulls to move into coastal cities and start nesting on roof tops. After that, who knows? Black-headed Gulls and Little Gulls each reached a peak of over 20 sightings during the winters of the mid 70's at New Haven Harbor alone. This has leveled off to a consistent 5 to 10 records for each species along the coast from late fall to spring. Scattered sightings of Franklin's, Mew and Lesser Black-backed Gulls added to the excitement of "gulling".

Terns, as already mentioned, suffered from increasing gull populations. Helicopter surveys in the mid 70's confirmed this rapid takeover. Very few Common Tern nesting areas remained and Roseates were down to less than 300 nesting pairs. Study projects assessing population shifts, total numbers, survival rates etc., are presently being conducted by Fred Sibley of Peabody Museum to detail the fate of these birds. Caspian, Royal and Gull-billed Tern reports increased remarkably in the late decade, possibly as spill-overs from Long Island populations.

DOVES: Mourning Doves continued their rise in numbers, to a point where a flock of 200+ became rather commonplace. The only real excitement in this group was the White-winged Dove that appeared in November of 1973 at Milford Point and stayed for a while.

CUCKOOS: Both Black-billed and Yellow-billed Cuckoos followed their cyclic pattern of their food source, the Gypsy Moth, Linden Loopers and Elm Spanworms. When these increased greatly in the early and mid 70's the cuckoos peaked right after them. With fairly stable "moth years", the cuckoos leveled off in numbers. We are becoming aware that in peak years of the Gypsy Moth, its cuckoo attendants cross Connecticut in waves, from west to east.

OWLS: Owling became the "in thing" in the 1970's. Tape recorders and pursed lips took to the backroads in early morning, often to the surprise of the local police and farmyard dogs! It seemed that everyone wanted to see an owl. And see them they did

if they persisted. Owl prowling showed that there were plenty of birds out there. Several species took to giving daytime shows, such as the clump of evergreens around a house in West Haven where several Long-eared Owls attracted tremendous attention. Great Horned Owls showed a distinct cyclic pattern. Common at the outset of the decade they plunged to low numbers at the midpoint, which coincided with the cycle of the Ruffed Grouse. Numbers then increased so that in the fall and winter of 1979 it was hard to step from your car on a backroad in the state and not hear a Great Horned Owl calling. Saw-whet Owls spread to many bogs and swamps of the state over the ten year period, with distinct mass movements in the fall and spring of 1976, 1977 and 1978. Happily, I can also report that Barn Owls are back! From a point in the early 70's when no nesting was known in the state, sightings began to increase in 1976 and 1977 and in 1979 no fewer than 12 nests were under observation. It is great to see them back. We can hope that they will continue to increase. Close monitoring of nesting is going on and valuable data are being collected.

One of the big birding stories of the 70's will have to be the mass influx of Great Gray Owls. Alas, only two were recorded in Connecticut, and these by non-birders who gave perfect descriptions — after the fact! Snowy Owls did not live up to their four-year cyclic influx, at least not in this state. For us the common complaint was, "I think next year will be an owl year". But the real thing never came. Although they were reported every winter of the decade, no mass movement materialized. Well, wait till next year.

PARROTS: The infamous Monk Parakeet that made a big splash onto the scene in the late 60's and early 70's had almost disappeared by the middle of the decade. An occasional sighting now and then brings to mind the "big threat" of the past.

GOATSUCKERS: Whip-poor-wills followed an interesting pattern. In the 60's and early 70's we watched the Saturnid Moth (*Luna*, *Cecropia*, *Polyphemus*) populations literally disappear. With them went the Whip-poor-wills that feed on them. Why this loss is uncertain at this writing. However, starting in 1978 the Saturnids began to reappear and happily, so did the Whip-poor-wills. Now a visit to an old haunt in the

spring brings the delight of their famous call. Chuck-wills-widow's hung on tenaciously through the ten years at a few coastal locations and offshore islands.

WOODPECKERS: The Red-bellied Woodpecker added its name to the "assault" list from the south. By the end of the 70's it was a wide spread breeder in the oak forests of the state and an often-sighted visitor to winter feeders. Red-headed Woodpeckers, on the other hand, lost ground and remain only as hold-outs in a few isolated nesting areas in the northeast corner of the state.



Red-bellied Woodpecker (Melanerpes carolinus)
Sketch by Julie Zickefoose

FLYCATCHERS: Acadian Flycatchers began to spread out in the state as nesters from their only known nesting spot (at Devil's Hopyard) in this century! Now they are nesting in several sites. The 70's also saw the taxonomic splitting of the Willow/Alder Flycatcher and the two voice patterns could be compared at select spots, such as Durham and Litchfield.

SWALLOWS: Cliff Swallows lost ground as nesters, with a few pockets remaining in the western part of the state. Purple Martins, on the other hand, made a steady climb in nesting colonies from 1970 to 1978 and then predictably "crashed" or moved elsewhere for 1979. All 20 major colonies in the state reported this disappearance.

CROWS: Fish Crows made great gains in populations over the decade. From a confined group nesting at East Rock Park, New Haven, in the early 1970's, they spread all along the coast and even to inland areas, establishing several new nesting sites.

PARIDS: Boreal Chickadees were sporadic over the years, with fair influxes in the early 70's. Some remained faithful to locations such as the Smith Richardson Sanctuary in Westport, even in off years. Tufted Titmouse continued to increase in numbers throughout the decade. Remember that in the 50's it was a bird one went south to see?

WRENS: Winter Wrens showed their vulnerability to cold winters, and following harsh winters such as 1977 and 1978, few were to be found. Carolina Wrens, usually affected in the same manner, benefited from the moderating influence of salt water and held out in various strongholds along the coast. Sedge Wrens continued to be the mystery bird of the group. Very rare in migration, yet appearing in favored spots near the coast in summer. During the ten years, they nested in a couple of locations in the state but were not consistent, being away two or three years. This pattern has yet to be deciphered.

MIMIDS: Mockingbirds escalated yearly over the period to achieve record populations by the end of the decade. With favored Multiflora Rose thickets always at hand, they became one of the commonest roadside birds of the state. No longer does one get the feeling that "it should be in the south".

THRUSHES: Eastern Bluebirds continued to suffer from the loss of habitat and the conflict with more aggressive species for nesting space. However, nesting box programs instituted at the end of the 70's brings hope that the remaining population may take hold and bring this species back. In the northwest corner of the state the first nest of the Swainson's Thrush was found, adding this more northern nester to the breeding bird list.

OLD WORLD WARBLERS: The story of the Blue-gray Gnatcatcher in the state is one of supreme success. In the early 1970's it was still regarded as an unusual sighting in a day afield. By the mid-70's they literally poured in. In 1975, a morning's birding in the area produced over 100 sightings. They have now established them-

selves as nesters statewide. By 1979 one expected a gnatcatcher to be in any suitable habitat explored. A remarkable influx for a ten year period.



Blue-grey Gnatcatcher (Poliophtila caerulea)
Sketch by Julie Zickefoose

VIREOS: Yellow-throated Vireos and Warbling Vireos see-sawed in numbers. Yellow-throateds dropped markedly with the methodical removal of large roadside trees such as elms, once their favored nesting sites. The Warbling Vireo, on the other hand, slowly increased in numbers so that by the close of the decade it seemed that each stop on a spring mornings birding was sure to produce the languid repeated notes of this treetop singer.

WARBLERS: Warblers continued to hold the interest of the ranks of May morning "treetop watchers". There were good years and bad years, but the 70's did not produce the big waves of warblers that were seen in the 60's. Still there were stories of "trees of warblers" and the inevitable cry, "Where are they this year?" And always, the race of warbler arrival before the leaves, with the leaves winning in most cases. But the excitement of seeing the rare or elusive kept the birders coming and quite often the rewards were significant. Even the birding areas for warblers ran "hot and cold". Places like Clark's Pond were good in the early 70's but rather unrewarding in the later years. East Rock Park remained fairly consistent in producing warblers, but the hot

spots shifted from the lowlands to the ridge, depending on the day and weather conditions. All this kept everyone in suspense looking for the ultimate. That was exemplified by the Hermit Warbler that appeared on Trowbridge Drive, New Haven, in May of 1977! Probably the warbler of the century. Distinct trends included regular sighting of Prothonotary Warblers, with late April being the key time over the ten years. A pair even attempted to nest in Guilford in the mid-70's. Yellow-throated Warbler sightings increased through the seventies. The ten year block of time more than quadrupled the records for all previous years! Black-throated Blue Warblers and Yellow-rumped Warblers moved into the northeast part of the state and became regular breeders. The 70's saw a range extension of the previously rare Cerulean Warbler. After establishing a foothold in the state at Devil's Hopyard, several other nesting sites were located in statewide surveys. No longer did one have to go to Rhinebeck, New York to see this beautiful bird on its breeding grounds.

Kentucky Warblers also began to dribble into the state in the early 70's and by the end of the decade were presumed to be breeding in the southwest corner of the state, with numerous sightings in other areas of the state. Hooded Warblers increased in numbers over the same period and became regular nesters in several areas. Yellow-breasted Chats, on the other hand, dropped in numbers from former peaks in the 60's. They could only be found at the choice nesting areas in the state. Paradoxically, winter records of this large warbler more than doubled over the previous decade. To the end of the decade, the infrequently seen Orange-crowned Warbler put on a spurt and sightings increased dramatically, so that in December of 1979, eleven were seen in the New Haven area alone.

BLACKBIRDS: Our Baltimore Oriole became the Northern Oriole and wintering Bullock's Orioles still brought out the birders. Each winter of the decade produced at least one representative of this western form of the Northern Oriole at someone's feeder. Orchard Orioles slowly gained a foothold over the period and made inroads throughout the state. By the end of the 70's they were nesting in numerous locations in the southern half of the state. Yellow-headed Blackbirds

became a rather consistent species mixed in with fall blackbird flocks, some occasionally making it through the winter. They increased in numbers to a point in 1978 when 10 were reported from the state in one week!

FRINGILLIDS: Not much need be said about the expansion of the Cardinal. It is hard to believe that three decades ago it was still a "WOW" bird at the feeder. Two former accidentals increased in the fall migration periods as the years rolled on. Dickcissels became quite regular on fall birding trips and more and more seemed to spend the winters at feeders. Blue Grosbeaks at the end of the 70's appeared with consistency in September and October and now reports are expected each fall. 1977 saw the first official report of a Black-headed Grosbeak in the state when a bird was photographed at a feeder in North Guilford. It stayed for four months for many to see. The real success story for this group has to belong to the House Finch. In the 70's, the populations grew so as to make it one of the more common feeder birds in the state. In some pockets, 200 plus are seen with consistency. Tree Sparrows and to a lesser extent, Dark-eyed Juncos became another enigma. Both species, very common through the early part of the decade, "crashed" during the last few years. Even an anomaly showed up concerning one of these birds. In East Haddam, from 1972 to 1978 a Junco x White-throated Sparrow hybrid returned to the same feeder, offering the viewers a rather bizarre pattern. White-crowned Sparrows went from years of near abundance in the early 70's to a mere sprinkling of individuals in the fall. Off and on through the period, Clay-colored Sparrows appeared in the spring, set up territories, but always failed to find mates. To round out sparrow fluctuations, Fox Sparrows were far more common in the early 70's than at the close of the decade.

RARITIES: Aside from the common species trends, the rarities kept the active birder hopping. These ran the gamut from Magnificent Frigatebird to Frigate Petrel. American Avocets became more dependable in the spring and fall migration, but are still a rarity. Some visited for extremely short periods—such as the Rufous-necked Stint and the Sharp-tailed Sandpiper—others stayed for many to see, such as the Purple Gallinule in Madison that went to roost in a Maple tree or

THE CANADA GOOSE IN CONNECTICUT, 1981

by Thomas R. Hoehn

the Varied Thrushes that spent weeks at feeders. This thrush became an increasingly frequent bird at winter feeders throughout the state as the 70's aged. Once birders were aware of the field marks and knew they could occur, the reports started coming in. The "odd robin" now became a rarity. Following the same pattern was the Harris' Sparrow that was reported on numerous occasions throughout the mid and latter part of the decade. Redpolls remained as irregular as ever but when the big flights did come in, so did a few Hoarys. The close of the decade brought an unprecedented trio of Western Tanagers in December, 1979. The influx remains a mystery. The bird that holds the record for bringing out the birders must be the magnificent white phase Gyrfalcon that visited New Haven Harbor in February of 1977. We will long remember the battalion of birders with a "fusillade" of spotting scopes pointed out toward the harbor waiting for it to appear. What a thrill when it did! In all, over 60 accidentals occurred throughout the state over the ten years. A look at the recent updated checklist of New Haven shows most of them. A dramatic array, with 15 of the sightings representing first state records!

Ironically the decade ended with a puzzle: a Burrowing Owl at New Haven Harbor. Here was the Florida subspecies of a bird that was certainly a first state record IF it arrived here on its own power. But this question will never be answered. Did it come by boat, truck or manage to wing its way here on its own? A fitting end to a decade that itself seemed to end on a note of uncertainty.

Through it all, and more important than birds, was the lasting friendships made and good times spent together. Good birders left the state but were replaced by good birders. A flow and ebb equalling the movements of the birds themselves. How many friendships were made over a cup of coffee as one peered out a kitchen window hoping for that rarity to reappear at the feeder, or spent hours together checking a thicket in hopes that the "goal" would hop into view? This is the important core of birding through the decades. The 80's are sure to have their share of rarities as did the 70's, and new friendships are sure to kindle and glow. With this in sight, it's on to the 80's!

Since winter waterfowl inventories began in Connecticut in 1952, Canada Goose numbers have steadily increased. During the 1950's, the average mid-winter count in Connecticut was 138 birds, increasing to 358 in the 1960's and by the 1970's, 2,543 birds was the mean. This represents increases of 159% in the 60's and 610% in the 70's. The first two years of the 1980's have already shown a 24% increase. This picture is also reflected in the entire Atlantic Flyway region where a 51% increase was noted in the 1970's compared to the 1960's. The count in 1981 reached 955,000 individuals! These survey numbers do not represent a comprehensive count but the coverage is consistent. With other surveys and observations supporting the mid-winter survey data, the trend of increasing numbers is unquestioned.

There is no formal Canada Goose breeding survey in Connecticut but it also is apparent that breeding geese have been increasing in proportion to the winter numbers. Each year, additional geese are observed on ponds and lakes throughout the state. The more traditional goose breeding sites on rivers and wildlife management areas reflect a small increase in recent years but do not account for the large population growth. Since most of the expanding breeding population is on lakes, reservoirs and private ponds with adjacent lawns, it is apparent that they have adapted to man's landscaping practices. The geese appear to move into every location with the right combination of water, cover and mowed grass. The increase in this type of habitat since the 1950's, seems proportionate to the increased population. Connecticut land owners have inadvertently done a superb job of managing Canada geese, that is, if you consider the increase an asset as opposed to a liability.

As the geese increased, damage was imposed on agricultural crops, and by 1975 the state was receiving more than 100 nuisance

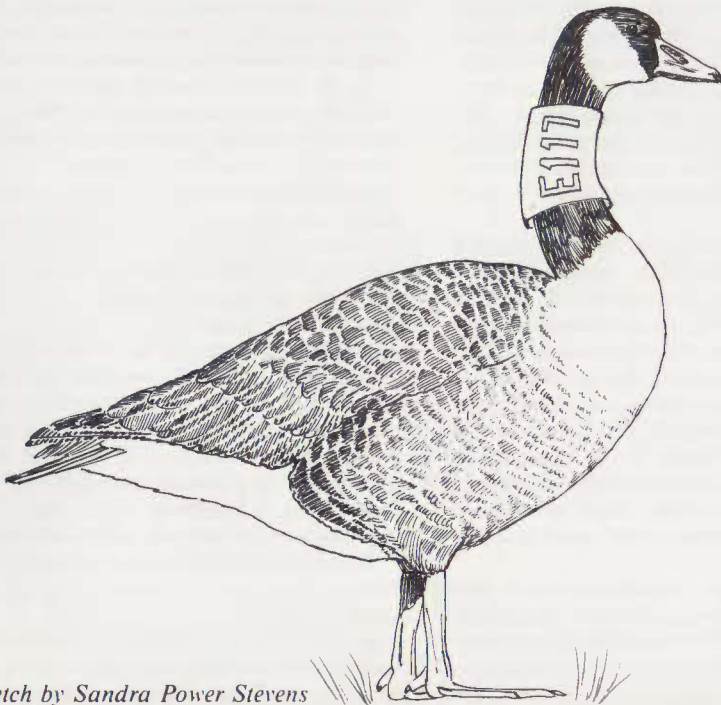
complaints a year. The U.S. Fish and Wildlife Service, Wildlife Assistance Office, responded to 18 requests for removal of goose flocks numbering more than ten birds in 1975. The "round-up" in Connecticut became an annual project involving about twelve State and Federal biologists for several days each year during the molting period.

It is interesting to note that Canada Goose sport hunting success in Connecticut has not increased in proportion to the population growth. In comparing five-year averages since 1969, Connecticut has had a 143% increase in the harvest of geese and a 188% increase in the winter population. The Atlantic flyway region experienced a 31% increase in harvest and a 21% growth in the population. Regardless of the credibility of harvest surveys, it seems apparent that the surplus in the goose population has not been offset by hunters. Without changes in goose management, it is likely that the surplus will continue to pose nuisance problems.

In an effort to develop these changes in the management of Canada geese populations, a

study was initiated in 1980, funded by the U.S. Fish and Wildlife Service, and in collaboration with the Massachusetts Cooperative Wildlife Research Unit and the states of Connecticut and New York. The following article written by Kathryn A. Converse presents some of the preliminary results of this study. We are hopeful that the results of research will be continued in spite of Federal budget cuts, so that a better understanding of our Canada Goose populations can be reached. A viable solution to the nuisance goose problem is becoming more essential since it is no longer restricted to Fairfield County. Practical management solutions and public understanding of our Canada Goose populations are necessary if we truly want them to be an asset in our wildlife community.

Thomas R. Hoehn is a member of our Advisory Board and a wildlife biologist for the Wildlife Unit of the Connecticut Department of Environmental Protection.



A CANADA GOOSE PROJECT IN CONNECTICUT

by Kathryn A. Converse

It wasn't so long ago that the wild cries of Canada geese overhead were enough to draw most people out of their homes to look skyward. It was a rare sound heard only in the spring and fall when migrating flocks of these magnificent birds marked the change of the seasons. But today the sound is less delightful to growing numbers of people as goose populations have become permanent residents of the Northeast and caused numerous problems.

Non-migratory flocks of Canada geese are now present from Cape Cod to Virginia. According to the Atlantic Flyway Council, these geese have provoked nuisance complaints from local communities in every one of the states involved, except Delaware. Delaware has had problems in the past but they are presently under control. These resident populations cause numerous sanitation problems in local communities. Examples are accumulations of feathers and droppings, odor, noise, landscape and crop destruction, the decaying-in of additional geese, and overfertilization of ponds, thus causing algal growth and concerns about health problems, especially in swimming and other recreational areas.

The numbers of geese have multiplied steadily since the 1950's, according to the midwinter surveys conducted not only in Connecticut but all along the Atlantic Flyway. With the changing of the landscape in many areas by creating parks, private ponds and large areas of grassy lawns, additional geese were probably attracted and have become resident breeding birds. Their tolerance of humans has not deterred their breeding success nor has it caused them to take up traditional migrations when cold weather arrives.

There are many hypotheses as to how these birds became permanent residents. Some of the possibilities mentioned are warming weather trends, year-round feeding, increased numbers of geese in the flyway, less

food availability in their southern range, increasing development and the establishment of breeding flocks on state and private lands. It is noteworthy, however, that a large majority of these resident flocks are located in areas where no hunting regulations are in effect due to the housing density and lack of adequate safety zones.

Restoration efforts were carried out by some individuals as recently as 1970. Tom Marshall, a long time local resident, returned to Connecticut with 10 pair of Canada geese that were captured in eclipse plumage at the Remington Farm in Chestertown, MD. Nine pair were distributed in suitable habitat around the state and one pair in Maine. With the help of the Curator of Birdcraft Museum, Frank Novak, and the late Milan J. Bull, one pair was placed in the pond at Birdcraft Museum. The female and her mate were fitted with a Connecticut Waterfowlers Association leg band. This spring the female returned to the Birdcraft pond, as she has for the past ten years, to breed and raise her young. She has had several mates during this decade.

As these flocks of resident geese grew, so did the complaints. Capture and transplanting operations from this region to other states were attempted but the cost of these relocation programs are becoming prohibitively expensive.

In an effort to develop effective control methods, a study was initiated in 1980. Representative resident populations were chosen for study in Fairfield County, CT, and Westchester County, NY. Four sites were chosen in Connecticut; Trap Falls Reservoir in Shelton, Saugatuck Reservoir in Redding-Weston, Aspetuck Reservoir and Hemlock Reservoir in Easton-Fairfield. The objectives of this study are to determine the population dynamics of the nuisance flocks, collect data on the daily and seasonal movement patterns, and to assess the effectiveness of alternative control measures by evaluating band recoveries since 1965 of all geese relocated from Connecticut and New York. In addition, a handbook of all current and potential control methods will be developed.

In order to identify these resident populations, the geese were captured with drive net traps during the post-breeding molt. Corral traps, with net wings extending to the shore, were positioned at access points used by the geese for feeding or traveling to neighboring

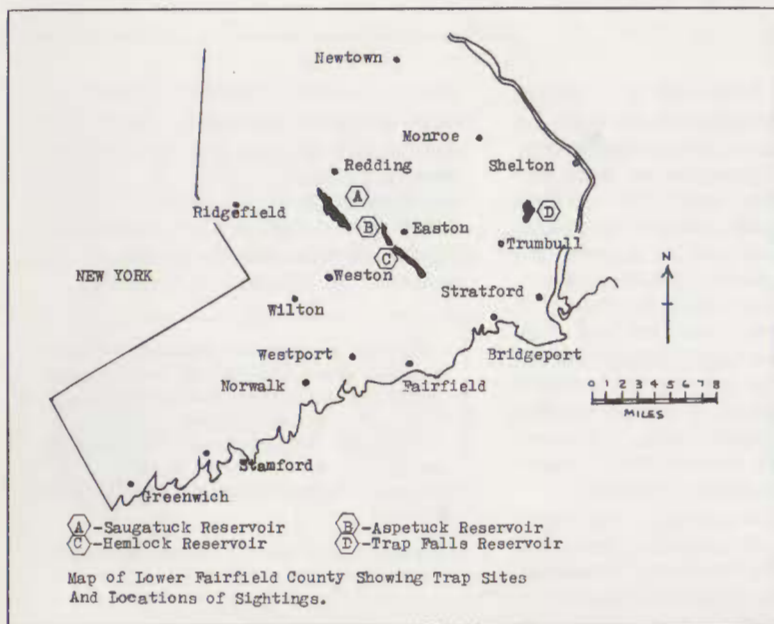
bodies of water. The geese were herded into the water by personnel along the shore and then into the nets using canoes. Once captured, they were banded and equipped with neck collars. In Connecticut, 213 adults and large immatures were banded with standard aluminum leg bands. Of these 213 birds, 166 were fitted with numbered plastic neck collars supplied by the U.S. Fish & Wildlife Service. The following table indicates the totals of geese banded and collared at each trap site.

Collared birds have been monitored since

July 1980 at three to four week intervals. Movement patterns were determined throughout the winter with particular attention paid to where the birds relocate. During the months of July to November 1980, the collared geese were found on or near their trap sites or on nearby golf courses and small ponds in Ridgefield, Redding, Trumbull, Easton, inland Bridgeport and Stratford. Sightings provided for the month of January 1981 indicated their travels ranged to inland Darien and shore locations in Norwalk, Southport, Westport, Fairfield, Milford and Mamaroneck, NY.

TABLE I TOTAL GEESE BANDED AND COLLARED BY TRAP SITE, JUNE 1980, IN FAIRFIELD COUNTY

TRAP LOCATION	NO. BANDED	NO COLLARED
Trap Falls Reservoir	44	35
Hemlock Reservoir	5	1
Aspetuck Reservoir	78	52
Saugatuck Reservoir	6	6
Private Pond (Easton)	80	72
TOTALS	213	166



From February to April 1981, the sightings reported indicated that the geese were mainly found on reservoirs and small ponds, where they were assumed to be selecting their eventual breeding sites. These were in the towns of Easton, Weston, Wilton, Redding, Westport, Shelton, Newtown, Fairfield, Monroe and Stratford.

tive pattern of paired birds, recruitment of the younger birds into breeding populations, and the overall fecundity of nuisance geese.

I wish to extend my thanks to those people who reported sightings of these collared geese. Their reports helped in the collection of data concerning the movements of these flocks and the location of breeding pairs. As the project

TABLE II COLLARED BIRD RECOVERIES ^a BY DISTANCE TRAVELED FROM TRAP SITES IN CONNECTICUT

Km.	DISTANCE IN KILOMETERS					
	(MILES)					
Mi.	0/2.5 (0/1.5)	2.6/5 (1.6/3.1)	5.1/7.5 (3.2/4.6)	7.6/10 (4.7/6.2)	10.1/12.5 (6.3/7.7)	12.6 (7.8)
MONTH						
July 1980	118					
August	82	22	1			
September	99	2	4			
October	85	12	4		2	
November	87	3				
January 1981	1	31	29	1	7	10
February	3	1				
March	15	5	1	1	1	

^a includes multiple sightings of individual birds.

As can be seen from Table II, the large majority of the collared geese stayed within 7.5 kilometers (4.6 miles) of their trapping sites. This was consistent throughout the study period, from July 1980 to March 1981. As fresh water froze and snow covered the grazing areas, the geese appeared to separate into smaller groups and traveled greater distances, but none were reported any further than 12.6 kilometers (7.8 miles) from the trap sites. Their movements fluctuated between fresh and salt water locations as the temperatures changed and the snow cover melted. The greatest distances traveled were in January during the long cold periods, and in March when the breeding season commenced.

During the summer of 1981, additional resident geese will be trapped, collared, and monitored for the next two years. In addition to their daily and seasonal movements, we hope to gain information about the reproduc-

expands, I would appreciate receiving continued reports of movements. Sightings may be directed to me at the University of Massachusetts, Cooperative Wildlife Research Unit, 204 Holdsworth Hall, Amherst, MA 01003, or to this publication or your local bird club. Reports should include the number of young geese with the collared bird, if possible.

Kathryn A. Converse is presently a doctoral candidate at the University of Massachusetts, Department of Forestry and Wildlife Management and a research assistant funded by the U.S. Fish & Wildlife Service. Acknowledgement of the data contained in this article is granted to Federal Project 83910-0125 (from NWHL).

NOTES & NEWS

THE FIRST ANNUAL CONNECTICUT BIRD CONFERENCE

by Dennis Varza

National Audubon Society's Northeast Regional Office, under the direction of Marshall Case, sponsored this inaugural conference, held May 2, 1981, at Southern Connecticut State College, New Haven. The program consisted of eight talks, a showing of natural history art by eleven Connecticut artists, and two field trips.

Among the speakers were Dr. Noble Proctor who spoke about the birds of Connecticut; Robert Arbib, editor of *American Birds*, who suggested a new format for Christmas Counts; and Douglas Kibbe, Regional Editor for *American Birds*, who discussed bird atlas-

ing. Dr. Proctor reviewed the history of bird study in Connecticut and commented that this state probably has more birds than any other similar-sized area in the country. He also calculated the state list at 395 species, greater than Massachusetts, and expected state birders to break 400 by 1985. He concluded by giving warm encouragement to all birders to make Connecticut one of the best-known birding areas in the country.

The heart of Mr. Arbib's talk reiterated the problems in the accuracy of Christmas Counts and reflected on ideas for an "ideal" Christmas Count. The problem of accuracy includes participants going beyond the prescribed count circle, overlapping counts, not updating changing habitat coverage, and underestimation of party hours and party miles. The ideal count would have a compiler committee instead of an individual to be responsible for circle verification, habitat coverage, party hours and party composition. Each count area would require fifty observers in twelve parties. Compilers and party leaders would satisfy minimum standards of credibility. Arbib suggested a possible reliability index: the number of hours of birding in one year times five, multiplied by the percentage of the state list

observed, then divided by 100.

No scale has yet been devised to determine what credibility index is acceptable to become a count compiler. He also encouraged more frequent use of the "unidentified species" classification, better documentation of rare birds, and more practice in estimating large numbers of birds.

Douglas Kibbe described bird atlas-ing as dividing the state into a grid system and listing the presence and the breeding status of all species observed within the quadrants. He reviewed how other states did their surveys and offered suggestions in the event this state wishes to proceed with one. The first decision to be made is to determine what type of map and size of grid block to use. The larger the state and the fewer the number of participants, the larger the block would have to be. Kibbe suggests the use of the U.S. Geological Survey maps instead of Dept. of Transportation maps because they contain more information and are easier to acquire.

Once the size of the block is selected, one needs to determine the sampling method. Does one census every block, as done in Massachusetts, or every fourth block as done in Vermont? Or perhaps a random sample should be chosen. The project then requires a regional coordinator and compilers to put all the observations together. This may require paying someone to accept the responsibility. Funding will be needed to publish the data. Kibbe stressed that several states have completed or nearly completed an atlas-ing project but have yet to publish it. The value of a project of this scope is that it helps map the breeding distribution of the state's birds and identifies unique habitats that may need protection. The information as a whole would become a data base for conservation organizations to use in regional planning guides.

Jean Case, Conference Director, has scheduled a Second Annual Bird Conference for the weekend of May 1, 1982. Workshops will be expanded, as will field trips. Considering that this weekend is one of the prime birding weekends of the spring migration, it may improve attendance if it were held in mid-April. The conference could serve as a catalyst for sparking enthusiasm among the state's birders and would allow the local bird clubs to publicize their upcoming field trips.

ANNUAL MEETING OF NEBBA

by Robert C. Dewire

The Northeastern Bird Banding Association held its 1981 Annual Meeting on May 2-3 at the Manomet Bird Observatory in Manomet, Mass., with 130-plus people in attendance. Early arrivals on Friday watched the banding operations at the Observatory. An evening slide program featured bird banding in Panama.

Saturday there was an early morning birding trip to a farm in nearby Marshfield where a Scissor-tailed Flycatcher had been present during the week. It was not found but enough birds were seen to make for an enjoyable trip. There was a display of an aerial net, the design of which was such that many left the conference seriously considering setting one up. Workshops by the Manomet staff included molt patterns in White-throated Sparrows, studies of the Red Knot, and data-gathering techniques.

The afternoon paper session was held in a church in Plymouth. Papers dealt with computer use in bird population studies, using the House Finch as subject, vocalization in birds, centering on song variations within a species in different locations, and a study of the Black-capped Chickadee. The report from the banding lab covered the same material reported at the Eastern Bird Banding Association's meeting. Federal budget cuts have not yet affected the Banding Office.

The evening banquet featured a presentation on the herons of Clarke's Island. The island is off Plymouth, Mass. and is a major heronry, including Glossy Ibis, Little Blue Heron and Cattle Egret along with the Common and Snowy Egrets and Black-crowned Night Herons. Recordings of heron vocalizations include territorial calls, food begging by young and others.

The Association elected Dr. George Clark, Jr. of the University of Connecticut at Storrs to succeed Dr. Robert Yunick as president.

YELLOW-DYED HERONS

Part of Birdcraft Museum's 1981 research on Chimon Island, Norwalk, included studies to identify the heron colony's feeding grounds.

To accomplish this, several young of the Common Egret and the Snowy Egret were marked with a yellow dye. We will appreciate reports of sightings of these birds after they leave the island. Please report the date and a fairly detailed locality, the species observed, number of marked birds, and what they were doing. If possible, add information about other herons present. Send this information to Birdcraft Museum, 314 Unquowa Rd., Fairfield, CT 06430.

LATE NOTE

The following two items crossed the editor's desk just prior to publication and were considered to be of interest to our readers to be included in this issue.

First, a sighting of a breeding plumaged, female Red Phalarope was reported by Jim Mockalis. The bird was observed by Jay Hand on the Connecticut River, north of Essex, CT. Hand was aboard a boat about 6 or 7 miles north of the mouth of the river and noticed the bird on July 6, 1981. Mockalis and Clay Taylor also observed the bird later on in the afternoon and also photographed it. Unfortunately, it was too late to include photographs in this issue.

This Holarctic species is rarely seen inland unless driven in by a storm. According to *Birds of the New York Area*, (John Bull, 1964), this species is considered rare during the summer months, especially inland. During the fourth of July weekend, a storm, producing heavy rain and easterly winds was centered over this area. It is quite possible that this storm may have driven the bird inland, up the mouth of the river.

Our second item concerns a coincidental encounter with a Barn Owl. On June 29, 1980, your editor banded two nesting Barn Owls at the Housatonic Marina in Stratford, CT. The nest was located under a tarpaulin covering the cockpit of a boat that was located in a storage rack at the marina. The unusual nesting location prompted an article which appeared in the *North American Bird Bander*, (Vol. 6, No. 1:18) describing the banding of these young owls.

Shortly after the issue reached its subscribers hands, Fred Sibley of the Peabody Museum called to report that one of the banded owls was observed at a nest site in the Middletown area by Clay Taylor. While

observing the nest site, Taylor noticed one of the parent birds was banded. It took several days to get close enough to the bird to record the band number. Sibley, who had just finished reading the NABB article, noticed the coinciding band numbers and called to report the encounter.

The Middletown area has in recent years become the Barn Owl nesting capital of the state. This species is the only member of the family Tytonidae that nests in the United States. It is a tireless night hunter of rodents, relying on its sensitive hearing to catch its prey. This fact was proven some years ago at the Hathaway School of Conservation in Boston. A live rodent was turned loose in a room that was made totally lightproof. Handfuls of leaves were scattered on the floor. Needless to say, the owl was successful in capturing the rodent by sound alone. This experiment was repeated several times with the same results and was further expanded upon by taking a wad of paper tied to a string that was dragged through the leaves. The owl unerringly homed in on the paper wad which had no body heat or scent, again proving the sensitivity of its hearing system.

CHANGING SEASONS

We hope to establish in the near future a new column in our publication entitled "Changing Seasons". The task of compiling and editing this section has been graciously accepted by Lee Schlesinger. In order to establish some guidelines for potential regional reporters and contributors, the following information is being outlined. It should serve as a basis for all involved and be followed as closely as possible when the program is put into effect.

In time, an organized and co-ordinated network for ornithological reporting in the state must develop. Ideally, it should cover the entire state. Above all, it should be consistently thorough within its boundaries, free of overlap among contributors, and reliable season to season. Each contributor should be individually responsible for establishing a network of observers whose reports are co-ordinated, defining (and making clear that definition) the territory covered and pre-

senting competent coverage of that territory.

Any information concerning ornithological activity in the state will be useful in the preparation of the column, however the following four items should serve as the basis for our reporting.

- 1) **TRENDS:** long-term movements of populations, shifts in numbers and locations, comparative data from one year to the next, cyclical changes, patterns of competition. It is obvious that common and even annoyance species such as Starling and Mute Swan must be watched, as well as threatened and marginal ones.
- 2) **RARITIES:** with some distinction as to what rare sightings are anomalous, which suggests significant ornithological developments.
- 3) **PLACES:** changes in the bird and birding environment and perhaps less specific development in the environmental situations in Connecticut.
- 4) **INFLUENCES:** factors which may have affected birding events—for instance, weather, crop conditions, reduced or increased birding activity or reporting, ecodisasters, etc.

We have established due dates for each season and these must be faithfully followed if important information is to reach the various regional reporters for inclusion into the column. The DUE DATE for seasonal reports will be **THREE WEEKS AFTER THE END OF THE SEASON.**

The seasons are further broken down into the following categories to coincide with our established publication dates:

SPRING—March, April, May

SUMMER—June, July, August

FALL—September, October,
November

WINTER—December, January,
February

It will be helpful to follow this outline in presenting information and it is more important that you be clear, organized and consistent. Reports are to be forwarded to LEE SCHLESINGER, 575 Orange Center Road, Orange, CT 06477.

SPRING BANDING AT BIRDCRAFT

by Carl J. Trichka

Birdcraft Museum and Sanctuary has long been known for its spring warbler migrations and since 1979 it has been the site of a permanent bird-banding station. Ninety-five species, including twenty-nine species of warblers, have been banded there since then. Our figures for 1981 are slightly lower as to individuals banded, but about the same in total species. Our net hours were about the same as previous years even though we added more nets, running as many as twenty on some days.

Starting about April 5th, the fore-runners began to appear, with Red-breasted Nuthatch, Brown Creeper, Chipping Sparrow and Ruby-crowned Kinglet being banded in small numbers. Migration proceeded slowly and rainy weather cancelled out any banding efforts. We began to net warblers during the last week of April, with Black and White Warbler and Blue-winged Warbler the most common. Our first big warbler wave arrived on April 29th, with thirty-two Yellow-rumped Warblers banded, along with Palm and Black and White Warblers. In addition, Swamp Sparrow, Northern Waterthrush, Tree Swallow, White-throated Sparrow, Hermit Thrush, Rufous-sided Towhee, Gray Catbird, Robin, Blue Jay and Common Flicker produced a total of 57 birds of 14 species banded that day. Our first-ever Hooded Warbler was banded on May 1, along with Worm-eating Warbler and Common Yellowthroat.

Only a few migrants appeared in our nets between May 14 and 22. American Redstart, Canada, Prairie, Yellow and Wilson's Warblers were banded in small numbers. Gray Catbirds were appearing steadily all throughout that period. The next large movement of migrants appeared on May 14th. Rainy weather occurred all week prior to that day and unfortunately other commitments prevented any of our banders from running the station. We missed a major movement. Reports from birders in the area indicated a large variety of migrants that day. The weather turned foul again and just a few birds trickled through the station for the next week to ten days. In fact, after banding Blackpoll

Warblers, and hearing reports of many more passing, we presumed that the migration peaked out by the 16th of May. Not so! Starting somewhat late on the morning of May 23rd, our first net check told us it was going to be a busy day. Warblers were again the predominant catch with Canada, Blackburnian, Common Yellowthroat, Wilson's, Parula, Chestnut-sided, Northern Waterthrush and Magnolia Warbler accounting for most of the birds handled. Thirty-five individuals were banded that day. Along with these migrants, we began to recapture some of our previously banded birds from the past two seasons, indicating that our breeding birds were beginning to arrive.

Memorial Day weekend was upon us and I decided to open the station on Monday. The weather was warm and humid and I thought about other days like this when I wished I had other things to do. However, the day was not without its share of surprises. One of our banders arrived looking for one of her children, who had strayed away from the parade being held just a block or so away. After reading through the banding sheets, she decided to stay and help. Her missing child was recovered and we began to process the birds I had just retrieved from the nets. Twenty-eight birds were banded, including Black-throated Green, Black-throated Blue and Blackburnian Warblers, along with two Lincoln's Sparrows. These were only the third and fourth of this species we have captured since 1979. The last bird banded that day was a beautifully plumaged Mourning Warbler, our third ever.

The last weekend of May opened with cloudy weather, threatening showers, and very few birds. The migration ended, but not before we banded a fourth Mourning Warbler!

We captured three foreign (not banded by us) birds this spring, a Brown Thrasher and two House Finches.

We accumulated a total of 2460 net hours this spring, processing 434 individuals. An additional 80 birds were trapped, bringing the total to 514. This represents 17.6 birds per 100 net hours. Despite the slight decline, the legacy of the spring migration through Birdcraft Sanctuary remained intact for another year.

A SHORT HISTORY

The conservation of birds and the Audubon Societies have a common history in the United States. Organizing first in Massachusetts and Pennsylvania in 1895-6, and in Connecticut in 1898, a growing group of State Audubon Societies organized a national committee in 1902 in order to speak with a common voice about bird protection needs. In 1905 this committee was transformed and incorporated as the National Association of Audubon Societies, with an office in New York City headed by T. Gilbert Pearson. For the background of that early period, see Pearson's book, *Adventures in Bird Protection* (1937).

After the passage of the Migratory Bird Treaty with Great Britain (Canada) in 1916, the crusading spirit abated and many of the State Audubon societies either went out of business or restricted their activities to smaller areas. With the advent of the environmental awareness revolution in the late 1960s and 1970s, however, several of these same groups rose to the occasion and provided new leadership.

Meanwhile, in 1940, the management of the National Association of Audubon Societies severed ties with the State societies and created the separate National Audubon Society, still based in New York City. After 1945, also, the National society began organizing local chapters, providing joint membership privileges at the local and national level (but not at the State level). This complex history makes for a somewhat confusing network of independent Audubon groups at several levels, but the several groups seek to complement each other's conservation message at local, State, and federal level.

For more information about these programs, write to Connecticut Audubon Society, 2325 Burr Street, Fairfield, CT 06430; and National Audubon Society, 950 Third Avenue, New York, NY 10022.

The Connecticut Audubon Society invites your membership.

Membership Categories

Supporting	\$50.00	Benefactor	\$300.00
Sustaining	\$25.00	Donor	\$200.00
Family	\$18.00	Contributing	\$100.00
Adult	\$12.00	Organizational	\$ 35.00

TABLE OF CONTENTS

EDITORIAL	27
Carl J. Trichka	
A REVIEW OF THE 1970'S	28
Dr. Noble S. Proctor	
THE CANADA GOOSE PROJECT IN CONNECTICUT, 1981	34
Thomas R. Hoehn	
CANADA GOOSE PROJECT IN CONNECTICUT	36
Kathryn A. Converse	
NOTES AND NEWS	39
CHANGING SEASONS COLUMN	41

The Connecticut Warbler is a quarterly publication devoted to the advancement of the study of birds and their conservation in the state of Connecticut. It is published by the Natural History Services Department of the Connecticut Audubon Society. Address all correspondence to 314 Unquowa Road, Fairfield, CT. 06430.

THE CONNECTICUT WARBLER

Devoted to the promotion of bird study.



The Connecticut Warbler is published in January, April, July and October. Subscription is \$6.00 per year, based on the calendar year. Individual issues may be purchased for \$1.50 each, when available. All Rights Reserved.

The editors invite the submission of articles, notes, black and white photographs and line drawings for use in The Connecticut Warbler. Manuscripts should be typewritten, double-spaced and on one side of the sheet only, with ample margins. The editors must reserve judgement as to how much of this material to use and return postage should be provided if materials are to be returned.

THE CONNECTICUT WARBLER

Editorial Staff:

Milan G. Bull
Roland C. Clement
Carl J. Trichka

Editorial Advisory Board:

Dr. George A. Clark, Jr. - Storrs
Paul Desjardins - Windsor Locks
Robert C. Dewire - Mystic
Frank J. Gardner - Hartford
James Hammer - Danbury
Thomas R. Hoehn - State D.E.P.
Gordon Loery - Litchfield
Frank Mantlik - Norwalk
H. James Mockalis - Middletown
Dr. Noble S. Proctor - New Haven
Lee A. Schlesinger - New Haven
Fred C. Sibley - New Haven
Christopher Wood - Woodbury
Joseph D. Zeranski - Greenwich

EDITORIAL

The Connecticut Warbler subscription list passed 200 in September. Thank you for your support, but please help us spread the good word so as to double readership and economize on printing costs.

Why not give a gift subscription to that friend or relative who is interested in birds but not already a subscriber? To encourage this we offer a BONUS: gift subscriptions received during December will not only bring the 1982 issues but all four 1981 issues also.

We have also established a cutoff date for new subscriptions received in 1981. Any subscription received after December 1st will automatically become a 1982 subscription and receive 1982 issues. Back issues will have to be purchased separately for 1981.

Since all 1981 subscriptions, no matter when entered, brought a full volume, we REMIND YOU that subscriptions are for the calendar year. Please, therefore, renew your subscription for 1982 by sending a renewal check as soon as possible after January 1st. Everyone will then be up to date and our billing task will be lightened. Postage is now one of our heavy expenses. You can help minimize this drain and stabilize our subscription rate at its present \$6 by complying with these two suggestions.

One of our 1982 priorities will be a reprinting of issue No. 1 for the few of you who did not receive a copy in 1981. It's coming, so please be patient.

The January, 1982 issue will carry a new "Letters to the Editor" column, so let us hear from you. What have you liked, or not liked, about Connecticut Warbler? What else would you like to see reported? Our ground rules are simple: if published, your letter will bear your initials and city unless you request that we withhold these. But we cannot consider anonymous letters in our mail box.

Also, new issues will carry guest editorials furnished by members of our Advisory Board.

We plan to reprint Linsley's 1843 paper on Connecticut birdlife, considered the first documentation of our State's birds. Because of its length, it will be published in sections. Meanwhile, this issue carries a brief biography of this extraordinary man.

The staff of Connecticut Warbler extends its holiday greetings to you, our valued readers: Happy Holidays!

Carl J. Trichka
Editor

BREEDING BIOLOGY OF WATER- THRUSHES

by Dr. Robert J. Craig

The life histories of the Louisiana Waterthrush (*Seiurus motacilla*) and the Northern Waterthrush (*S. noveboracensis*), members of the Wood Warbler family (Parulidae), have been summarized by Bent (1953) and studied in detail by Eaton (1957, 1958). The Louisiana breeds along rocky streams in the eastern U. S., while the Northern nests mostly in swamps in northeastern North America. Both species breed in Connecticut.

I herewith summarize some new findings on the breeding biology of these birds reported upon in my doctoral research while at the University of Connecticut in Storrs. The study site was a ravine known as Boston Hollow in the 3160-hectare Yale Forest in northeastern Connecticut. I observed these

birds from April to August in 1978, 1979, and 1980, and color-banded most of the breeding adults of both species.

During these three years, the order of arrival of males in spring was the same in five of seven cases (3 of 3 for Louisiana, and 2 of 4 for Northern). In addition, eight of eleven males reoccupied the same territory (2 of 4 Louisianas, and 6 of 7 Northerns). For comparison, Nolan (1978) found that 62% of male Prairie Warblers (*Dendroica discolor*) arrived in the same order, and 74% reoccupied former territories. A much larger sample population would be necessary to assess the ability of these birds to identify the quality of the habitat, as opposed to a preference based on familiarity with the site.

For birds banded before 1980, the return rates at Boston Hollow were 20% (2 of 10) for adult Louisianas and 61% (11 of 18) for adult Northerns. This difference suggests that the Louisiana suffers a higher adult mortality rate, a conclusion also suggested by its larger clutch size (see below); or this species may be more inclined to disperse away from nesting areas. Nolan (1978) suggested that high dispersal rates are adaptive



Northern Waterthrush: Buffy eye stripe, throat with brownish streaking beginning under the bill and extending into the belly. Breast streaked and washed with yellow. Photo by Dennis Varza



Louisiana Waterthrush: Eye stripe pure white, throat without streaking. Breast white with brown streaking. Photo by Dennis Varza

for species that inhabit ephemeral habitats. Small rocky streams probably fall into this category since they are markedly affected by annual rainfall. But it is difficult to say whether streams are more affected by climatic factors than swamps.

Courtship in these waterthrushes was described by Eaton (1957, 1958) as consisting primarily of chases. I saw such chases several times and knew them to be male-female chases because they involved banded birds I saw feeding together prior to the chase. On 17 April 1980, I also saw behavior described by Nolan for the Prairie Warbler. Termed a solicitation posture, it involved a female Louisiana walking slowly in front of the male who followed her. She tilted her head upward past the vertical (about 130° from the horizontal) as she walked, and held her wings partly open and vibrated them. This display was twice repeated and lasted about five seconds in each case. This posturing strongly resembles food-begging by young in the nest. However, the movements I describe here, particularly the head posturing, are more exaggerated than those of the Prairie Warbler.

I observed copulation only once in the Louisiana, and only twice in the Northern; on May 8, 1978 for the former, and on May 27, 1978 and May 5, 1980 for the latter. In all three cases this occurred on the ground. Copulation lasted two to three seconds, and for about a minute thereafter the two birds walked together, though about one meter apart.

Territorial Louisianas sang persistently until they attracted a mate; afterwards they sang only a few times each day. After mating a pair normally ranged together over a wide area. In two instances banding revealed that before the arrival of other territorial males, the first pair used up to three times more of the length of a stream than when all sites had been contested and settled.

The arrival of new birds caused neighboring pairs to engage in intense territorial disputes, particularly early in the season when territorial boundaries were first being established. A typical encounter on 17 April 1980 lasted fifteen minutes and involved male chases, typical songs, and the singing of long twittering songs.

Unlike Louisianas, male Northern continued to sing throughout the breeding season.

Neighboring males sang alternately, (song duels) frequently during the breeding season, but more intense disputes occurred just before and while the females first arrived. Disputes involved chases, vigorous chipping, singing, between chases, singing on the ground, flying at each other, and tumbling on the ground briefly. A particularly long dispute on 7 May 1979 lasted on and off from at least 7:45 to 9:15 a.m. More typical interactions lasted about ten minutes.

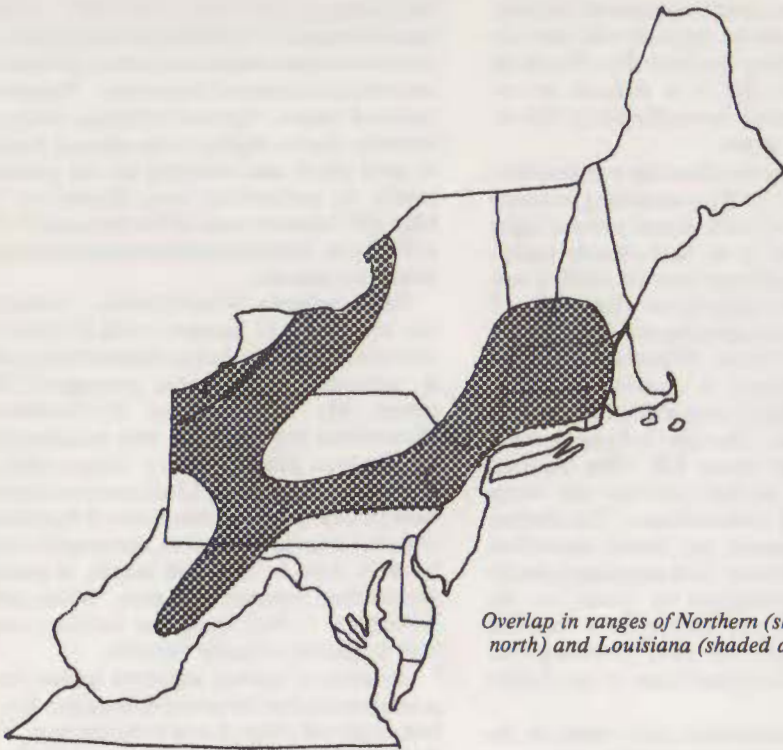
For Louisiana Waterthrushes, territory size averaged 0.67 hectares, while for Northern it was 0.48 ha. In Louisianas the length of territories along brooks averaged 358 meters. My measurements of Northern Waterthrush territory sizes were consistently smaller than Eaton's (1957). Eaton (1957, 1958) pointed out that Louisiana territories were generally linear, while those of Northern were rectangular. However, the range in size I found, both in area and length, is much greater than reported by Eaton. Wiens and Rotenberry (1980) found that territory size with a species is highly variable.

Initiation of nesting activities begins one to two weeks after the arrival of females. Earliest observed dates of nest building were 30 April 1979 for the Louisiana, and 8 May 1980 for the Northern. Much of the gathering of nesting materials by both species occurred on drier hummocks or in uplands adjacent to the wetland.

Of seven Louisiana nests examined, one was in an upturned root over water, five were on the ground beneath logs or branches in upland immediately adjacent to the water (from as much as seven meters to less than one meter away), and one was at the top of an old rock well about three meters from water. Three of these ground nests were on steep banks and two were on level ground. Only two of the nests were near a rocky, rushing stream, the other five being near pools or quiet streams.

Of nine Northern nests, eight were in upturned roots, and one was completely covered on three sides, as well as covered above by a small stump. Seven of the eight nests in roots were over water, and all the nests of both species were overhung by roots, soil, or logs. I saw no tendency for nests to be oriented with respect to sun or wind.

Mean clutch size was 5.0 for the Louisiana, and 4.8 for the Northern. These means are



Overlap in ranges of Northern (shaded area and north) and Louisiana (shaded area and south) Waterthrushes.

similar to Eaton's. On 26 May 1979 I watched a Louisiana nest for six hours and found that the female (the only sex seen incubating) sat for an average of 41 minutes before leaving for an average of 9.3 minutes to feed. On one occasion the male came to the nest and fed the incubating female. Eaton (1958) reported feeding of the female but considered it a form of anticipatory feeding of the young. Since my observation occurred at least six days before hatching, I suggest that occasional feeding by the male may help offset the heavy energetic burden that incubation places on the female.

I was unable to establish incubation periods in the Northern Waterthrush. Nests in dense cover made observation very difficult. In two attempts covering three hours, I did not see a female leave the nest.

I recorded details on the feeding of young Louisianas on six occasions during thirteen hours of observation at three nests. All my data were from nests at roughly the same stage of development, so the results were

pooled. Mean time between adult visits was 6.4 minutes. At one Louisiana nest the mean interval between visits decreased from 7.3 minutes on 6 June to 7.1 minutes on 8 June, and to 5.8 minutes on 9 June. This suggests that the feeding rate increases as nestlings grow, but the trend is not statistically significant. Time spent at the nest averaged 18.7 seconds. Mean interval between visits was 23.1, 18.5, and 16.8 second on 6, 8, and 9 June, respectively, indicating that feeding is also accomplished more rapidly as the young grow. This latter trend is statistically significant, with the difference occurring between each of these June dates. Males came to the nests for 44.8% of the visits, and females for 55.2%, but daily variation in feeding by the two sexes was considerable. At one nest the male fed the young 44.1% of the time, 53.3% and 36.4% on each of three successive days. It therefore seems likely that both sexes feed the young about equally. Fecal sacs were removed from the nest on 35.3% of the visits.

Of the six nests of the Louisiana Waterthrush with young that I examined, four (66.7%) produced fledglings. Of 30 eggs laid, predation took nine from two nests, and one egg was apparently infertile. In one instance a Brown-headed Cowbird laid an egg in a nest with a complete clutch of four eggs, but this nest was later preyed upon. In the Northern Waterthrush, 75% of the nests fledged young. Predation took five eggs in one nest, and there was one embryo death. I found two additional Northern nests under construction in which eggs were either not laid or which were preyed upon before I visited them. Nests were visited only three or four times to minimize the attraction of predators. Another Northern nest with full clutch, but no incubation, was also preyed upon, but this pair renested. In three other instances, involving both species, renesting apparently occurred after an initial failure, but I was not able to confirm this by finding the nest.

- Bent, A.C., 1953. "Life Histories of North American Wood Warblers. U.S. Nat. Mus. Bull. 203.
- Craig, R.J., 1981. "Comparative ecology of the Northern Waterthrushes." PhD. thesis, Univ. of Conn., Storrs.
- Eaton, S.W., 1957. "A life history study of *Seiurus noveboracensis*." Sci. Studies, St. Bonaventure Univ. 19: 7-36.
- Nolan, V., Jr., 1978. "The ecology and behavior of the Prairie Warbler *Dendroica discolor*." Ornot. Monogr. 26.
- Wiens, J.A., and J.T. Rotenberry, 1980. Patterns of morphology and ecology in grasslands and shrub-steppe bird populations. Ecol. Monogr. 50: 287-308.

Dr. Robert J. Craig graduated from Rutgers in 1973 and completed his studies at the University of Connecticut, attaining an MS degree in Biology. He worked for the Connecticut D.E.P. and the U.S. Soil Conservation Service before returning to the University of Conn. to complete his doctoral work on waterthrushes, which was completed in 1981. Among his publications is the Field Checklist of the Birds of Storrs, CT.

ORNITHOLOGICAL THESES AT THE UNIVERSITY OF CONNECTICUT

by Dr. George A. Clark, Jr.

Students working for postgraduate degrees have conducted some of the most detailed studies of birds in Connecticut, but their theses are often too lengthy and too detailed to be suitable for full publication in a widely distributed form. Consequently many interesting discoveries reported in theses often do not become widely known. Abstracts, particularly from the doctoral dissertations of recent years, have sometimes appeared in *Dissertation Abstracts International*, but this reference periodical is available only in the largest libraries and is not widely read. Because certain theses in the University of Connecticut Library at Storrs contain substantial information on Connecticut birds, I believe it useful to present a list of authors and titles together with some annotation of the content of the papers. The theses noted here were written by students specializing in a variety of fields including systematics, zoology, ecology, botany, wildlife management, and plant science. Theses using birds as subjects but emphasizing primarily biochemistry, diseases, embryology, nutrition, parasitology, and physiology, have not been included. The designation MS after the date of the theses indicates that the author received a Master of Science degree, while PhD indicates a doctoral dissertation. Total pages refer to the main body of the text and do not include introductory pages. J. A. Slater has provided helpful discussion in the preparation of this report.

- Bertin, R. I. 1975. MS. Factors influencing the distribution of the Wood Thrush and Veery in western Connecticut woodland. 138 pp.—a detailed analysis of habitats used in Litchfield County during one breeding season; a portion of this study appeared in *The Condor* 79:303-311 (1977).

- Boettger, R. W. 1955. MS. An ecological study of a typical Connecticut stream: factors affecting furbearers and related animals. 155 pp.—includes information on the Black Ducks and Wood Ducks of the Salmon Brook watershed in Hartland, Granby, and East Granby.
- Craig, R. J. 1975. MS. Distributional ecology of marsh birds of the Connecticut River. 62 pp.—contains considerable information on plants and birds of marshes along the Connecticut River in Connecticut; the birds were observed for 6 to 9 hours per day during the period 16 May to 2 August 1974.
- Craig, R. J. 1981. Phd. Comparative ecology of the Louisiana and Northern Waterthrushes. 116 pp—Study covering three breeding seasons in northeastern Connecticut indicates that direct competition between these two species is not very important in determining their ranges or abundance.
- Cronan, J. M., Jr. 1955 MS. A study of Scaup Duck wintering in Long Island Sound. 127 pp—biology and management recommendations based primarily on studies from Old Saybrook to Bridgeport.
- Gorski, L. J. 1969. Phd. Systematics and ecology of sibling species of Traill's Flycatcher. 82 pp.—no evidence for interbreeding between Willow and Alder Flycatchers over three breeding seasons at Litchfield; parts of this study appeared in *Bird-banding* 41:204-206 (1970) and *The Auk* 86:745-747 (1969), 88:429-431 (1971).
- Hall, A. E., Jr. 1947. MS. Ecological aspects of some salt marsh duck food organisms and their waterfowl management significance. 76 pp—emphasis on Barn Island, including the birds found there.
- Hungerford, K. E. 1940. MS. A wildlife management plan for the Natchaug State Forest. 96 pp.—Woodcock and Ruffed Grouse in Windham County.
- Mahler, P. 1976. MS. Ecology of park Mallards. 36 pp.—Breeders around the Storrs campus suffered relatively little reproductive mortality from predators.
- Marinaccio, J. 1968. MS. The survival and behavior of artificially-propagated Mallard ducklings on a Connecticut pond. 46pp.—Captive reared birds are tame and unwary and hence not favorable for release into the wild (see also Martin, below).
- Martin, J. T. 1971. MS. A laboratory study of wildness in the duck (*Anas platyrhynchos*). 79 pp.—If stocking is to be part of the management program, then the wildest possible stock should be used.
- McCamey, F. 1962. Phd. Survival and age structure in a sample population of the Black-capped Chickadee. 114 pp.—based on 2000 banded birds in a five square mile area over five years; the data supports the idea that mortality rate in small passerines is relatively constant for birds that survive to their first January.
- Proctor, N. S. 1976. Phd. Effects of shorebirds on dispersal and growth of algae in Connecticut. 78 pp.—evidence that bird droppings with algae provide nutrients that facilitate local algal blooms.
- Reynolds, R. P. 1974. MS. Blue Jay (*Cyanocitta cristata*) feeding deterred by methiocarb, an avian repellent. 36 pp.—Field and laboratory studies indicate the potential effectiveness of the chemical methiocarb for repelling birds from fruits (see also Whitmore, below); includes also information on American Robin, Starling, and Northern Oriole.
- Shepherd, J. D. 1980. Phd. An analysis of proposed avian perching mechanisms. 80 pp.—Contrary to traditional beliefs, all evidence points to the lack of any automatic perching mechanism in birds.
- Smith, C. F. 1978. MS. Distributional ecology of Barred and Great Horned Owls in relation to human disturbance. 104 pp—Studies at Mansfield, CT, and Hebron, NH, indicate that these species do react in their habitat selection to human activity even in primarily rural areas.
- Suchecky, J. 1975. MS. Seasonal energetics of a woodland avifauna in northern Connecticut. 56 pp.—Censuses throughout a year in two forest tracts in Union, CT, were used to estimate the total energy required by all birds present.
- Wanless, D. D. 1968. MS. An appraisal of waterfowl habitat development in Connecticut. 50 pp.—recommendations on how to appraise habitats.

- Welton, M. J. 1979. MS. Territoriality in the Song Sparrow: a comparison of three hypotheses. 33 pp.—data from coastal Massachusetts.
- Wetherbee, D. K. 1959. PhD. Artificial incubation of wild birds' eggs and developmental condition of neonates. 143 pp.—includes much information on the eggs and young of Connecticut species.
- Wilder, N. G. 1941. MS. A study of the pheasant on typical ranges in Connecticut. 132 pp.—observations from a number of towns.

Dr. George Clark, Jr. graduated from Amherst College and attained his Ph.D. in 1964 from Yale University. He is currently an Associate Professor at the University of Connecticut and President of the Northeast Bird Banding Assoc. The author of more than 40 ornithological publications, Dr. Clarke is the State Ornithologist and a member of our Editorial Advisory Board.

LINSLEY — SCHOLAR, PREACHER, ORNITHOLOGIST

by Carl J. Trichka

We have already mentioned that the "bible" on Connecticut bird life was the work of Sage, Bishop and Bliss. This 1913 report is still the only book to encompass the bird life of the entire state.

However, seventy years earlier, a paper published by the Reverend James H. Linsley, shortly before he died, commented generally on the birds of Connecticut although it was concerned mostly with the area between Stratford and New Haven. This paper was therefore the forerunner in Connecticut ornithology. Our readers may thus be curious about this predecessor.

Linsley was born on May 5, 1787 in Northford, Connecticut. The first of ten children, he was the son of a farmer, and the family held membership in the Baptist church in North Haven. His early years were spent on the farm, assisting with chores as all farm children did in those days, but by the age of

fourteen he began to discover that religion would be his calling. At age twenty, while visiting in Virginia, he became seriously ill, but an unexpectedly rapid recovery confirmed his belief in God.

At age 24 he taught school at Guilford academy for six hours a day and continued his own studies for another eight to twelve hours daily. He then entered Yale's seminary but continued to teach, sometimes as far away as Bedford, N.Y., to help provide necessary income. His associates considered him a gifted scholar. He recited Hebrew and soon turned his attention to philosophy, chemistry, mineralogy, and astronomy. He graduated from Yale with honors in September, 1817.

He was hired by the Bedford Academy immediately after graduation, and later became principal of the academy. Many lasting friendships were formed during these years. He continued his studies even as he taught school, mastered French, and increased his knowledge of theology.

In 1818 he married the daughter of a military officer, one Sophia B. Lyon. Although he must have had the constitution of an ox, Linsley remained prone to severe attacks of near-fatal hemorrhaging from the lungs, and may thus have had tuberculosis. Each time, his recovery was considered little short of miraculous. In 1821 he moved to Stratford and established a boarding school for children preparing for college entrance.

In 1831 he was ordained as minister and began to preach throughout Connecticut. But something in his life and beliefs soon changed and he began to doubt his calling and his faith in himself as a preacher. His torment caused him to abandon teaching so that he could concentrate on rededicating himself to God. As time passed, his faith restored itself and he undertook a preaching circuit that carried him as far south as Virginia. Several times during this period he suffered attacks of illness that left him incapacitated for long periods.

Not until 1835, when he was 48, did mention of birds appear in his journals. While attending a convention in Richmond, Virginia, he made note of seeing a "bald headed eagle" which flew over the Potomac River. Linsley considered it an omen, and it seemed to say to him that the symbol of our country was

keeping watch over the ashes of Washington and that the city would once again rise to power. He also made note of many "turkey buzzards" on this trip, but recorded only one eagle.

His health in continuous decline, he sought solace by traveling south to get away from the harsh winters of New England, but to no avail. He returned home in 1837, having abandoned his preaching and teaching. He had earlier studied botany and later taught the subject, but had apparently given little thought to the other natural sciences. Now he began to study all over again, devoting himself first to ornithology. He had acquired a few bird specimens during his trips south, and he now pursued the subject with a strong desire despite his illnesses. His work was rewarded because he soon became recognized by the leading ornithologists of the period. In May, 1837, he was made a member of the Yale Natural Historical Society, and later elected to the Connecticut Academy of Arts and Sciences, and the Boston Society of Natural History.

It was said that he collected a cabinet of specimens of great beauty and variety—some 300 species of birds—all elegantly prepared by his own hands. He added many more species of birds to the Connecticut list than did Alexander Wilson, then considered the dean of American ornithology. But his passion for knowledge burned brightly and his interests broadened. He made extensive collections of mammals, reptiles, amphibians, and seashells, and his work continued to draw appreciative notice.

Finally, another attack left him bed-ridden and near death. This illness persisted and he died, at the age of 56, the day after Christmas in 1843.

CONNECTICUT'S FIRST CHECKLIST IN 69 YEARS

by Dennis Varza

The Connecticut Warbler Editorial Advisory Board has organized a committee to produce a Checklist of The Birds of Connecticut by October, 1982. The checklist will summarize all available information about

the abundance and distribution of birds in the state. To fulfill this goal we need the cooperation of all birders in the state and request your help to provide us with as much information as possible.

The committee consists of Dr. George Clark, Paul Desjardins, Robert Dewire, James Mockalis, Dr. Noble Proctor, Fred Sibley, Joseph Zeranski, Art Gingert and Maury Covington. The first meeting was held on October 24, 1981 at the Peabody Museum in New Haven and the following plan of action was devised.

The bird list was divided into two sections, species confirmed in the state by specimen or photograph and those recorded by observation only. The confirmed species would then be written up by Dr. Proctor in units of 25 and distributed to the members of the checklist committee and others with special regional knowledge to be broadly discussed around the state for correction and modification for regional accuracy. The committee will then meet to edit each species account with reference to all modifications to the satisfaction of the full committee. The species account will average 100 words and conform to John Bull's *Birds of the New York Area* for criteria of abundance.

For the second group of species, a library file will be set up at Birdcraft Museum in Fairfield, CT by Zeranski and Covington to gather information on those and other confirmed birds that need more documentation. The information, once sorted and organized, will go to Dr. Clark who will set up an objective three man committee to review all sight records (by criteria to be established) and decide which to include in the checklist. Those species will then be written up and included in the checklist.

Included below is a list of hypothetical birds and a list of birds we would like more records for. We need more information on the location of specimens or photographs of any of these species. Any photos sent in will be put in the file for public reference unless otherwise requested. We would like documentation for any sight records of those species or ones we may have missed, or birds out of season.

Each record should contain the observer(s) name(s), date, locality, conditions of the observation, comparisons with other species

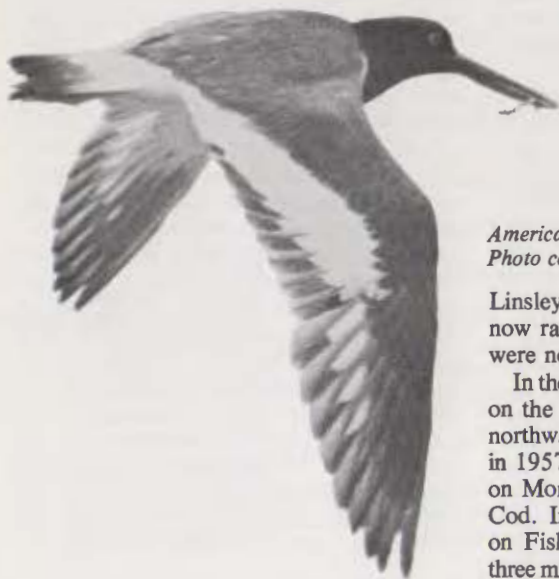
and references used at the time of the observation. The more detail presented, the better the report can be evaluated. Also include your name, address and telephone number so we may contact you for further details if needed.

Hypothetical List-Species observed in Connecticut lacking a specimen or photograph.

Arctic Loon	California Quail	Brown-headed Nuthatch
Manx Shearwater	Chukar	Bewick's Wren
White-tailed Tropicbird	Whooping Crane	Sprague's Pipit
White Pelican	Corn Crane	Bohemian Waxwing
Brown Pelican	Long-billed Curlew	Bell's Vireo
Brown Booby	Greenshank	Swainson's Warbler
Wood Stork	Sharp-tailed Sandpiper	Black-throated Gray Warbler
American Flamingo	Rufous-necked Sandpiper	Hermit Warbler
Reddish Egret	Pomarine Jaeger	Townsend's Warbler
Barnacle Goose	Long-tailed Jaeger	Western Meadowlark
Cinnamon Teal	Mew Gull	Brewer's Blackbird
Labrador Duck	Gull-billed Tern	Painted Bunting
Swainson's Hawk	Arctic Tern	European Goldfinch
Gray Sea Eagle	Burrowing Owl	Green-tailed Towhee
Heath Hen	White-winged Dove	Lark Bunting
Greater Prairie Chicken	Rufus Hummingbird	Golden-crowned Sparrow
Sharp-tailed Grouse	Say's Phoebe	
Gray Partridge	Gray Jay	

Species for which all available information is requested.

Eared Grebe	Curlew Sandpiper	Black-billed Magpie
Western Grebe	Long-billed Dowitcher	Common Raven
All Shearwaters	Ruff	Carolina Chickadee
All Petrels	American Avocet	Boreal Chickadee
Gannet	Black-necked Stilt	Sedge Wren
Magnificent Frigatebird	Red Phalarope	Fieldfare
White Ibis	Northern Phalarope	Wheatear
Whistling Swan	Parasitic Jaeger	Townsend's Solitaire
White-fronted Goose	Lesser Black-backed Gull	Northern Shrike
Fulvous Tree Duck	Black-headed Gull	Loggerhead Shrike
European Wigeon	Franklin's Gull	Prothonotary Warbler
Tufted Duck	Little Gull	Orange-crowned Warbler
Barrow's Goldeneye	Black-legged Kittiwake	Cerulean Warbler
Harlequin Duck	Sooty Tern	Yellow-throated Warbler
Common Eider	Royal Tern	Macgillivray's Warbler
King Eider	Caspian Tern	Yellow-headed Blackbird
Black Vulture	Black Skimmer	Western Tanager
Swallow-tailed Kite	All Alcids	Summer Tanager
Golden Eagle	Barn Owl	Black-headed Grosbeak
Gyr Falcon	Hawk Owl	Blue Grosbeak
Peregrine Falcon	Great Gray Owl	Dickcissel
Sandhill Crane	Boreal Owl	Hoary Redpoll
King Rail	Chuck-will's Widow	Grasshopper Sparrow
Yellow Rail	Red-bellied Woodpecker	Henslow's Sparrow
Black Rail	Red-headed Woodpecker	Lark Sparrow
Purple Gallinule	Black-backed Three-toed Woodpecker	Clay-colored Sparrow
Wilson's Plover	Western Kingbird	Harris' Sparrow
Eskimo Curlew	Scissor-tailed Flycatcher	Lincoln's Sparrow
Spotted Redshank	Cliff Swallow	Smith's Longspur
Baird's Sandpiper		Chestnut-collared Longspur



American Oystercatcher (Haematopus palliatus)
Photo courtesy of Norwich Bulletin

A NEW NESTING SPECIES FOR CONNECTICUT

by Robert C. Dewire

The striking American Oystercatcher (*Haematopus palliatus*) nests on open sandy beaches where it can see predators at a great distance and move away from the nest before approaching disturbers realize that a nest is present. This habit gave rise to the notion that oystercatchers incubate only at night and during rainy weather, since no one ever seemed to see them sitting on a nest.

As late as the mid-1960s the oystercatcher was considered of accidental occurrence in Connecticut. One had to go to New Jersey to add it to one's life list. Sage et al, in the 1913 book, *The Birds of Connecticut*, could do no more than quote an 1843 comment by

Linsley, who wrote, "The oystercatcher is now rare here, but fifteen years since they were not very uncommon in autumn."

In the 1950s, however, oystercatchers were on the move, extending their nesting range northward. They first nested on Long Island in 1957, and in the early 1970s they nested on Monomoy Island, at the elbow of Cape Cod. In 1977 the first nest was discovered on Fisher's Island, in New York but only three miles from the Connecticut shore. Rhode Island's first nesting record was in 1978, when the birds nested on Block Island.

We have therefore expected nesting since about 1970 when oystercatchers became yearly visitors, with one or two birds observed in the Mystic area, at the mouth of the Housatonic River, and on the Norwalk Islands. In 1980 an island off the Mystic-Noank shore had a nesting pair but it failed to produce young because of predation by Great Black-backed Gulls.

Finally, on June 12, 1981, David Sparling, John Williams, and Mary Jean Dewire and I found a pair with two young on Ram Point in Mystic, Connecticut. To our knowledge, this is the first confirmed production of young in the State and the first nesting on the mainland. Ram Point is a small spit of pebble beach jutting from Mason's Island into the Mystic River from the east. The land is private property and accessible only by boat. Unattractive as a swimming or clamming beach, it has, fortunately, little current human use. The oystercatcher young we found appeared to be about ten days old. The adults were aggressive in defense. We twice watched them chase and harass Herring Gulls which flew near the young.

Can the Black Skimmer be far behind as a breeding bird?

A CHOICE BREEDING BIRD AREA

by Christopher S. Wood

The birding "hot spots" most familiar to Connecticut birders are generally associated with migratory pathways, whether river valleys, ridge lines, or coastal "funnels" such as East Rock Park in spring and Lighthouse Point in autumn. A breeding bird "hot spot," however, requires a different set of ecological conditions to promote diversity, and in western Connecticut one location which meets these criteria is Steep Rock Park in the town of Washington. To find this park, go to the intersection of Routes 47 and 109, called Washington Depot, and follow the Shepaug River's west bank southward until you reach the park.

Coverage of this area in our June Counts during the last three years yielded a total of seventy species, nearly all of whom are likely breeding birds. The park straddles a particularly spectacular stretch of the Shepaug River, with steep wooded banks and hemlocks that hide Barred Owls and Great-horned Owls,

Whip-poor-wills, and Hermit Thrushes. Songbirds animate the ecotonal edge between the steep ridge west of the river and its brushy floodplain. Acadian Flycatcher, Golden-winged Warbler, and both Waterthrushes occur in this west bank area.

Pileated Woodpeckers often call from the hemlock forest above the east bank, and not far from a brushy intersection in these woods one June day, a Winter Wren burst into song as we drove by while a pair of agitated Goshawks circled low over the trees. Another year a long walk to a secluded reach of the river rewarded us with an enigmatic female Common Merganser preening itself quietly, and along the way the hemlocks yielded Red-breasted Nuthatch, Blackburnian Warbler, Black-throated Green Warbler, and Canada Warbler.

Adding to the park's habitat diversity is an arrested succession zone, a transmission right-of-way, in or near which some forty species are regularly recorded. From a high vantage point on this line, Turkey Vultures, Sharp-shinned Hawks, Broadwings, Redtails, and Kestrels have been seen.

The park represents no more than 10% of our section of the count circle, but the species seen here in 1981 amounted to 75% of the 86 species found that day, and more than 50% of the 117 species for the entire 15-mile diameter circle.



Oystercatcher Nest

*Photo by
Dennis Varza*

BIRDING IN SOUTH WINDSOR

by Paul Desjardins

Connecticut is a small state but we are fortunate that it still contains good birding habitats, some waiting to be explored. One of the best of these in north central Connecticut is one local birders call Station 43 in South Windsor. It measures only eight tenths of a mile from east to west and one and a half miles from north to south. It is between Main Street and the Connecticut River, and bounded on the south by Vibert Road, and by Strong Road on the north. To reach it from the south, take Route 91 north to the Bissel Bridge exit in Windsor. Cross the river and turn left (north) on Route 5. Passing Larry's Auto Bay, turn left at the traffic light onto Newberry Road and continue about half a mile to the intersection of Main Street. A dirt road leading to Station 43 lies straight ahead of you off Main Street. It may be wise to park at this intersection because the dirt road is often rough.

The diversity of habitats in this small area is remarkable. It has deciduous woodlands, old fields, marsh, and thickets, as well as the river itself. There are sand bars in the river, and every spring a small pool with mudflats develops in one of the fields, producing ideal shorebird habitat. Breeding birds include Green Heron, Least Bittern, Common Gallinule, Sora and Virginia Rails, Willow Flycatcher, Marsh Wren, Warbling Vireo, Bobolink, Meadowlark, Savannah Sparrow, and others.

But the migrations produce the most exciting lists. Spring brings occasional Snow Geese, Northern Shovelers, Gadwall, and Canvasback. Double-crested Cormorants are common. In autumn, Snow Geese occur again, plus Golden Plover, Upland Sandpiper, and Buff-breasted Sandpiper. Ruby-throated Hummingbirds and Bobolinks are numerous, and several species of hawks drift by. The Connecticut Warbler occurs during September and October, and one may observe eight or nine species of sparrows before the hunting season starts. Common Mergansers are always present on the river in winter, and occasional Rough-legged Hawks, Loggerhead

Shrikes, Common Redpolls, and Snow Buntings occur.

One of the sure indicators that an area merits designation as an outstanding birding spot is the number of rarities it produces. Station 43 has produced an impressive list which includes the White Pelican, Wood Stork, Glossy Ibis (rare inland), Whistling Swan, Barrow's Goldeneye, King Eider, Black Vulture, Golden Eagle, Sandhill Crane, Purple Gallinule, Wilson's Plover, Black Guillemot, Hawk Owl, Western Kingbird, Fish Crow, Hoary Redpoll, Sharp-tailed Sparrow, and Clay-colored Sparrow. Come and see us.

Paul Desjardins lives in Windsor Locks, is a member of our Editorial Advisory Board, and has helped make Station 43 the hot spot it is.

CONNECTICUT BIRDS IN COLLECTIONS

by Dr. George A. Clark, Jr.

During the past 80 years ornithology has changed from an emphasis on preserved specimens to the substantial predominance of studies of living birds. Increased public awareness of the numerous problems in bird conservation has led to greater federal and state regulation of the possession of wild birds, whether dead or alive, and along with these changes, the maintenance of collections of preserved birds has increasingly become the responsibility of scientific and educational institutions rather than individuals. There is much yet to be learned from collections which provide exceptional opportunities for evaluating additional characters for use in systematics, identification, aging, and sexing, for determining plumage succession, time of breeding, and the migration routes of populations. In addition, specimens including skeletons and birds preserved in fluid, are of special value for improving our very incomplete knowledge of the many anatomical differences among birds and how these are related to differences in habits. Collections have also proved to be of great value for the

purpose of conserving living birds; for example, preserved specimens have often been used for chemical analyses in cases of suspected chemical pollution. Another continual use of collections is as a reference source for identifying feathers and other parts found in the field.

Two major historic collections of Connecticut birds were those of John Hall Sage, now housed at the University of Connecticut in Storrs, and of Louis Bennett Bishop, whose specimens now reside in the Field Museum in Chicago. Another major assemblage of Connecticut specimens is in the Yale University Peabody Museum of Natural History in New Haven. Other museums with notable holdings of Connecticut specimens include the American Museum of Natural History (New York City), Harvard University Museum of Comparative Zoology (Cambridge, Mass.), National Museum of Natural History (Washington, D.C.), British Museum (Natural History) at Tring, England, and the University of Iowa Museum of Natural History (C.M. Jones Collection) in Iowa City. Numerous other institutions have small numbers of specimens from Connecticut, but no complete tabulation is available. In most cases curators welcome the use of the collections by responsible individuals conducting serious ornithological studies.

Major advances in recent decades in binoculars, telescopes, field guides, cameras, films, lenses, tape recorders, banding techniques, etc., now facilitate reasonable documentation for most records without collection of specimens. However, when birds of special interest are found dead, preservation is desirable. Even isolated feathers or eggshell fragments can often be of value for documentation of records. Wing, tail, and body feathers are remarkably specific for most species, and in many cases even a single feather can be correctly identified by comparison with a reference collection. Recently deceased specimens are usually best kept frozen in plastic bags. At a minimum, the date and place of discovery should be recorded with each specimen; other details including habitat and possible time and causes of death can also be valuable. Well wrapped specimens will keep satisfactorily in a freezer for many weeks if necessary until they can be presented to an appropriate institution. Such

salvage of dead birds, their parts, abandoned eggs or nests, should be done only with proper legal permits issued to banders for salvaging dead birds.

Listed below are examples of exceptional records documented by salvaged specimens now in the University of Connecticut Museum (UCM) at Storrs; the numbers following the museum abbreviation are unique catalog numbers for each specimen. I thank Robert Dubos for comments on an earlier version of this report.

Horned Grebe, ♀ near the Willimantic River, Willimantic, CT; 12 Jan. 1977 (UCM 7492).

Cattle Egret, ♀, off Bassett Bridge Road, Mansfield, CT; 5 April 1981 (UCM 7779).

Swallow-tailed Kite, ♀, from a field at Stamford, CT; 3 June 1976 (UCM 7479).

Sooty Tern, ♀, Gales Ferry, Ledyard, CT; 7 Sept. 1979 (UCM 7725).

Sooty Tern, ♀, Westerly, RI; 6 Sept. 1979 (UCM 7774).

Common Murre, unsexed, Connecticut Turnpike Exit 8, Stamford, CT; 8 Jan. 1977 (UCM 7490).

Dovekie, ♂, on a road, Abington-Eastford, CT; 11 Nov. 1968 (UCM 2001).

Dovekie, ♂, in a corn field, Brooklyn, CT; 5 Nov. 1969 (UCM 4195).

Dovekie, unsexed, Rippowam River, Stamford, CT; 15 Nov. 1974 (UCM 7281).

Barn Owl, unsexed, one of 3 mummified in a power plant dust bin, South Meadows, Hartford, CT; 1980 (UCM 7688).

Barn Owl, unsexed, Killingworth, CT; 20 Jan. 1977 (UCM 7547).

Barn Owl, unsexed, died in chimney, Middletown, CT; 23 July 1978 (UCM 7648).

Barn Owl, ♀, Galstonbury, CT; 26 Jan. 1978 (UCM 7509).

Common Flicker, ♂, Mansfield, CT; 2 June 1974 (UCM 7220); this bird found dead on a road shows both pink and yellow feathers in both the wings and tail; L.L. Short, who has studied hybrid flickers extensively, kindly examined color slides of this bird and termed it an introgressant individual.

Varied Thrush, ♂, hit a window, Riverside, Greenwich, CT; 17 Dec. 1977 (UCM 7517).

Black-headed Grosbeak, ♂, Gales Ferry, Ledyard, CT; 18 Mar. 1978 (UCM 7726).

Sharp-tailed Sparrow, subspecies *caudacuta*;

mummified on a road by the Willimantic River, South Willington, CT; 12 June 1973 (UCM 7123); an exceptional inland record for this subspecies.

NOTES & NEWS

THE BREEDING BIRD ATLAS PROJECT

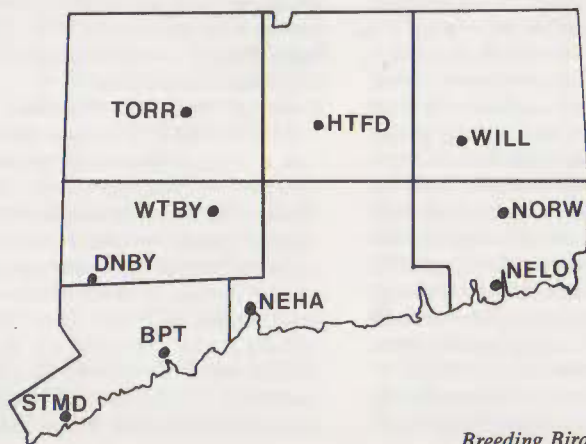
by Christopher Wood

Almost certainly, there are many favored breeding bird areas in Connecticut, like Steep Rock Park, and those who read this journal are most likely to be aware of them or best-equipped to discover them. This is your opportunity to contribute to the most ambitious compilation of Connecticut ornithological information since Sage, Bishop and Bliss (1913). The Audubon Council of Connecticut, assisted by the Northeast Regional Office of the National Audubon Society, are well along with plans to initiate a Breeding Bird Atlas (BBA) in 1982. This will be a five-year project to map the distribution of our breeding birds and clarify their numerical status, and will culminate in a publication that should establish invaluable baselines of bird life to help assess and guide Connecticut environmental programs.

For organizational purposes, the State will be partitioned into seven regions, each to consist of several United States Geological Survey 7½ minute quadrangles. These are the nation's standard maps. Each quadrangle is in turn quartered with the intent of getting individual coverage of at least one quarter each year. Some areas may receive heavier coverage because they have, or attract more birders. We especially need lots of workers during the first four years. The fifth year will be devoted to up-dating, special coverage, and general tying up of loose ends.

Regional coordinators will soon be appointed and the next step will be the assignment and training of territory captains, each to be responsible for one quadrangle for the year. These territory captains, with the help of regional coordinators, will organize full coverage in their territories, collate data, and transmit it to regional coordinators. They will assign blocks to anyone who knows birds and is willing to help. The final rules will be printed and distributed prior to January, 1982, when some hawks and owls begin their breeding cycle.

VOLUNTEER TERRITORY CAPTAINS ARE NEEDED NOW! You, the readers of Connecticut Warbler, are among the State's most able and active birders. The BBA Project needs your talent and time if the Project is to succeed. Please contact Elsa Jennings at the NAS Northeast Regional Office, Sharon Audubon Center, Rt. 4, Sharon, CT 06069 (tel. 364-5989); or Chris Wood, Quanopaug Tr., Woodbury, CT 06798 (tel. 263-5331).



Breeding Bird Atlas Regions



©Kevin Byron

HEINZ MENG FALCON LECTURE

Dr. Heinz Meng of the Peregrine Foundation was the first person to successfully breed Peregrine Falcons in captivity and is chiefly responsible for their return to wild breeding status in the White Mountains of New Hampshire.

Dr. Meng will present a lecture entitled *The Falcons Return* on Saturday, November 21, 1981 at 8:00 P.M. It will be held at the Tomlinson Jr. High School in Fairfield, CT. Admission is \$4.00 for adults and \$2.00 for persons under 16. For more information call 259-0416.

A feature of the evening lecture will be the flying of his live falcons in the auditorium.

FIRST ALL-COMERS CHRISTMAS COUNT

On Sunday, January 3, 1982, the first ever team competition will be held in an area of northeastern Connecticut. The count will begin at midnight and end at 5:00 P.M. Each team (1 to 6 members per car) can visit all areas of the standard 15 mile diameter count circle to find birds. This count is planned as a friendly competition to familiarize people with a poorly birded area of the state. Get a team together and join in the fun. Call Fred Sibley (453-9345) or Jim Mockalis (295-9937) for details including the site and the location where the compilation will be held.

THE CHIMON ISLAND PROJECT

by Sandra Erskine

Chimon Island is one of that chain of islands known collectively as the Norwalk Islands which also include Grassy, Betts, Copps, Ram, and Sheffield Islands. These remnants of a former glacial moraine are approximately one mile south of the entrance to Norwalk Harbor and are used extensively by fishermen, boaters, and other recreation seekers.

Chimon Island is presently owned by the William Garafalo family who intend to sell it. It might therefore be developed for private homes, though an Island Conservation Zone limits dwellings to one per two acres.

This summer the Natural History Services Department of the Connecticut Audubon Society initiated a study of Connecticut's most important heronry on Chimon. A seasonal lease was secured from the owner and a warden assigned to protect and study the area from late May to mid-August. In this initial year of the study our objectives were 1) to identify all the nesting species; 2) to make an accurate count of the nests of the dominant species; 3) to band as many of the nesting birds as possible; and 4) to color-dye the white herons to track their dispersal from the island.

Our study yielded 510 Black-crowned Night Heron nests; two nests of the Yellow-crowned Night Heron; 217 of the Snowy

Egret; 28 of the Great Egret; 17 of the Cattle Egret; 23 of the Glossy Ibis; 12 of the Green Heron; and 13 of the Little Blue Heron.

We banded 341 young birds as follows: 98 Black-crowned Night Herons, 7 Yellow-crowned Night Herons, 171 Snowy Egrets, 13 Cattle Egrets, 21 Great Egrets, 6 Glossy Ibis, 6 Green Herons, and 19 Little Blue Herons. Of these 341 birds, 100 were color-dyed with a picric acid solution which produces a yellow stain. We dyed 77 Snowy Egrets, 10 Great Egrets, 11 Cattle Egrets, and 2 Little Blue Herons.

In addition, we surveyed the outlying islands—Grassy, Betts, and Cops—and banded 103 Herring Gull chicks and 33 Great Black-backed Gull chicks.

This initial year of study on Chimon Island was a productive one. We hope to continue our work next spring with the cooperation of the owner, assessing our 1981 work, and continuing the study of the heronry in particular. Since this is the only major heronry in Long Island Sound there is need to study the implications of development, lest the birds be forced to desert.

Sandra (Sandy) Erskine is a student at the University of Colorado and the first CAS warden at Chimon Island.

COMMON TERN COLOR MARKING BY THE CANADIAN WILDLIFE SERVICE

During 1981, Dr. Hans Blokpoel of the Canadian Wildlife Service color marked Common Terns at two large colonies in the Great Lakes region with the objective of determining their migration routes and where they winter. Adult terns were trapped on their nests at the eastern headland of the Toronto Outer Harbor (Lake Ontario) and at Tower Island on the Niagra River. Orange plastic tags were attached to both wings of the birds. In addition, young terns were marked with pink plastic wing tags at the same colonies. One metal leg band and one colored plastic leg band (yellow with a black

horizontal stripe) were put on each of the tagged birds.

If you see a Common Tern with a pink or orange wing tag, please report the place, date and color of the tag. If possible, also record the combination of numbers or letters on the tag (the two tags on any bird have the same color and the same combination of letters and numbers) and note which legs the plastic and metal leg bands are on. All reports will be acknowledged and should be sent to:

Bird Banding Office
Canadian Wildlife Service
Ottawa, Ontario, CANADA
K1A 0E7

THE EFFECTS OF URBANIZATION ON BREEDING BIRDS

Gregory S. Butcher, writing in a recent issue of *Oecologia*, an international journal, reports on the loss of species resulting from the shrinking of habitats as mankind continues to partition the planet for human uses without consideration of the needs of other species. Butcher's paper is entitled "Equilibrium Biogeography and the Size of Nature Preserves: An Avian Case Study," and reports on field work done at the Bolleswood Natural Area of Connecticut Arboretum in New London, where Professors William Niering, Richard H. Goodwin, and William J. Barry have encouraged study of this problem for two decades.

This study documents a growing awareness that several bird species of the eastern deciduous forest are "interior" or "deep forest" nesters and abandon sites or fail to produce young when large woodland blocks are cut by roads or otherwise reduced in size, making them "islands" of woodland in a spreading suburbia instead of true forests as formerly. The Connecticut bird species which are declining because of this "island effect" include the Eastern Wood Pewee, Red-eyed Vireo, Hooded Warbler, and American Redstart. It is suspected that several other species are also affected.

Such studies are throwing new light on the need for large blocks of habitat if the full complement of indigenous species is to be protected for the future.

What our subscribers say:

"Glad to see Joan Lee Faust's article in the Sunday, October 4th issue of the New York Times about your new birding venture, The Connecticut Warbler . . . The article reflects a true understanding of the purpose of your journal. Congratulations to the volunteer staff for tackling this tough task. I, for one, think you are doing a great job and I'm pleased to see the Times thinks so too."

J.D.M
Fairfield, CT

"Today is my bosses birthday and I want you to know that he will be one surprised and happy man to receive a gift subscription to the Connecticut Warbler."

A.K.S.
Newington, CT.

"Just heard that your new magazine, The Connecticut Warbler, is done entirely by a volunteer staff who are doing this work because of their love of birding and a real concern for Connecticut wildlife. In these times of "what's in it for me?" this is an unusually commendable movement and I'm glad to be able to support it. Keep those issues coming."

R.B.B.
Milford, CT.

TABLE OF CONTENTS

EDITORIAL Carl J. Trichka	43
BREEDING BIOLOGY OF WATERTHRUSHES Dr. Robert J. Craig	44
ORNITHOLOGICAL THESES AT THE UNIVERSITY OF CONNECTICUT Dr. George A. Clark, Jr.	47
LINSLEY, SCHOLAR, PREACHER, ORNITHOLOGIST Carl J. Trichka	49
CONNECTICUT'S FIRST CHECKLIST IN 69 YEARS Dennis Varza	50
A NEW NESTING SPECIES FOR CONNECTICUT Robert C. Dewire	52
A CHOICE BREEDING BIRD AREA Christopher S. Wood	53
BIRDING IN SOUTH WINDSOR Paul Desjardins	54
CONNECTICUT BIRDS IN COLLECTIONS Dr. George A. Clark, Jr.	54
NOTES AND NEWS	56

The Connecticut Warbler is a quarterly publication devoted to the advancement of the study of birds and their conservation in the state of Connecticut. It is published by the Natural History Services Department of the Connecticut Audubon Society. Address all correspondence to 314 Unquowa Road, Fairfield, CT. 06430.