

New Hampshire

BIRD RECORDS



WINTER 2020-21

Vol. 39, No. 4

A "Superflight" of Winter Finches

The winter of 2020-21 saw a big irruption of winter visitors, which began in the fall (see the Fall 2020 issue). Here are a few of the species. See Pam Hunt's article, the season summary, and the Christmas Bird Count report for more information.



White-winged Crossbill
by Steve Mirick, 2-13-21, Greenland, NH.



A very colorful Common Redpoll by Debra Powers, 1-31-21, Newmarket, NH.



Pine Grosbeaks were one of the stars of the superflight. This male was photographed by Len Medlock, 1-18-21, Epping, NH.



Evening Grosbeaks were also part of the superflight. One individual shows xanthochromic coloration. See the Field Notes for more. Photo by David Govatski, 12-30-20, Jefferson, NH.



A leucistic Evening Grosbeak in Lyndonville, VT photographed on the same day as the xanthochromic bird, 12-30-20, by Tom Berriman.

Where's the Photo Quiz?

It's on hold at present. If you're interested in taking on this feature, please contact Becky Suomala (email on page 1).



Protecting our environment since 1914

NEW HAMPSHIRE BIRD RECORDS
VOLUME 39 NUMBER 4
WINTER 2020-21

EDITOR

Rebecca Suomala
603-224-9909 X309
rsuomala@nhaudubon.org

TEXT EDITOR

Dan Hubbard

SEASON EDITORS

Eric Masterson, Spring
Greg Tillman/Susan Wrisley, Summer
Ben Griffith, Fall
Jim Sparrell/Katherine Towler, Winter

LAYOUT

Dyanna Smith

PUBLICATION ASSISTANT

Kathryn Frieden

ASSISTANTS

Susan Burkhardt, Zeke Cornell,
David Deifik, Susan MacLeod,
Gray Medynski, Marie Nickerson

FIELD NOTES

Diana Stephens

PHOTO QUIZ

Susan Wrisley

PHOTO EDITOR

Wendy Chatel

WEB MASTER

Kathy Barnes

WHERE TO BIRD

Phil Brown, Steve Lamonde

EDITORIAL TEAM

Phil Brown, Wendy Chatel, Hank Chary,
David Deifik, Ben Griffith,
Dan Hubbard, Pam Hunt,
Steven Lamonde, Iain MacLeod,
Eric Masterson, Robert A. Quinn,
Rebecca Suomala, Jon Woolf

www.nhbirdrecords.org

IN MEMORY OF

Frank Nims

This issue of *New Hampshire Bird Records* with its color cover is sponsored by Charlie Nims – “It is dedicated to my father who imbued in me a deep passion for the natural world. During my youth, he put out winter feeders which attracted mobs of Evening Grosbeaks, one of my spark birds, and took me fishing for native Brook Trout in the tiniest of streams, memories that I treasure. His military burial plaque reads, ‘Capt. Frank R. Nims, a Lover of Nature.’ That love has carried over to me, expressed in my passions for birding, hiking and the natural world.”



Bea and Frank Nims at their Lake Winnepesaukee cabin on Treasure Island.

In This Issue

A “Superflight” of Winter Finches Inside Front Cover

From the Editor 2

Which Goldeneye is Which? 2

Thank You to Donors 3

Winter Season: December 1, 2020 through February 28, 2021 *by Katherine Towler and Jim Sparrell* 4

Winter Warbler Research: Community Science Opportunity *by Chad Witko* 17

Christmas Bird Count Summary 2020-21 *by David Deifik* 18

121st Christmas Bird Count Table & Map 22

The Winter Irruption of 2020-21 *by Pam Hunt* 27

Mid-winter Bald Eagle Survey Discontinued *by Chris Martin* 28

Finding New Hampshire’s First Ever Sage Thrasher *by Cory Ross* 29

Inland Pacific Loon at Leavitt Park Beach, Meredith *by Iain MacLeod* 30

Winter 2020-21 Field Notes, Diana Stephens, Editor 31

 Barred Owl Visits a Backyard Feeder *by Nancy Allenby* 31

 Wreath of Robins *by Michelle Roberge* 32

 Why Blue Jays Eat Paint *by Diana Stephens* 32

 A Different Kind of Blue Jay, *photos by Ben Haubrich* 33

 Xanthochromic and Leucistic Coloring in Evening Grosbeaks 33

 A Wilson’s Snipe Spends the Winter *by Stuart Varney* 34

 Three Glaucous Gulls (in Three Different Plumages) *by Robert A. Quinn* 34

 Wintering Ovenbird, Portsmouth, NH *by Lynn and Robin Schweikart* 35

A Canada Jay in Sandwich, NH *by Robert Ridgely* 36

The Semi-Superbowl of Birding 2021 37

Birding New Castle, NH *by Patience Chamberlin* 41

Old Man Knowles – The Dangers of Discarded Fishing Tackle *by Janice Landry* 43

Crow Chronicles *by Dana Fox* 46

Birding at the Exeter Wastewater Treatment Plant *compiled by Rebecca Suomala* 49

How Birding Saved Me During the 2020 Pandemic *by Diana Stephens* 51

Photo Gallery – Warblers of Winter 2020-21 Inside Back Cover

Birding at the Exeter Wastewater Treatment Plant

compiled by Rebecca Suomala

Special thanks to Matthew Berube and Joshua Scotton from the Exeter Wastewater Treatment Plant for providing information for this article, Chris Duffy for collecting the material, and Steve Mirick for creating the photos and providing comments.

There have been big changes at the Exeter Wastewater Treatment Plant (WTP) and birds and birders have noticed. There are still great birds showing up but the composition is changing, especially for ducks and gulls. This article highlights the changes so birders know more about why things are changing and future researchers will understand why there were changes in the bird data from the site.

In Spring of 2017, the Exeter WTP started construction of a new wastewater treatment facility. It was the largest construction project the town had ever undertaken with a cost of \$53.5 million. The project upgraded the existing lagoon treatment facility to a process that removes nitrogen. The former system was unable to remove nitrogen down to required levels for discharge into the Squamscott River. The new system is a huge step in protecting the environment, and Great Bay specifically.

Figure 1. The Exeter WTP before construction of the new treatment facility. Created by Stephen Mirick from a photo on the Exeter WTP web site: <https://www.exeternh.gov/publicworks/wastewater>

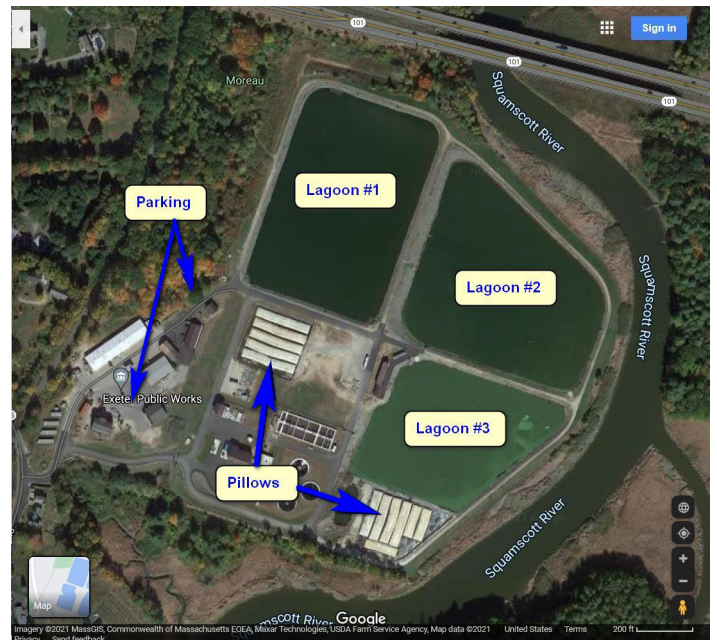


When the former system was in operation (Figure 1), birds congregated in the lagoons (often referred to as ponds by birders), sometimes in huge numbers, especially in winter. According to Matthew Berube, Exeter's Water & Sewer Manager these lagoons "were the main wastewater lagoons. They were used for settling solids and a small amount of nutrient removal through natural processes within each

lagoon. There was no control over nitrification or denitrification." Not only was the water kept open by aerators, but the bio-solids likely provided food for waterfowl.

The new system was fully operational in July of 2019 and the old lagoon style system has been taken out of service. Lagoons 1 and 3 were dredged during the summer of 2020 to remove the bio-solids that had accumulated, and the dredged sludge material was then placed into large giant "pillows" that appeared in September 2020. The pillow areas were very attractive to shorebirds. These pillows (Geotextile bag) remain in place as the water leaches out of the sludge in the pillows and drains back into the treatment system. The material inside the geotextile bags were being hauled away for disposal as this was written.

Figure 2. The Exeter WTP after construction of the new treatment facility. Created by Stephen Mirick from a Google photo.



Lagoon 3 was somewhat reduced in size at the south end. It is now used as an equalization pond for extra wastewater when the plant can't treat all incoming flows. The wastewater is pumped from Lagoon 3 back into treatment when capacity is available. The former lagoon 4 in the southwest corner was eliminated during the construction. Before the construction, it had been mostly filled in by vegetation, but the southeast corner had open water bordered by cattails where Virginia Rail was often reported (see Figure 1). Lagoon 2 will eventually be dredged, and more sludge may need to be removed from Lagoon 1. The future of the Lagoons 1 and 2 is uncertain at this time.

Anticipated Changes in Birds

Winter duck use will likely be influenced by whether aerators are running and creating areas of open water for them. Mallard numbers appear to be decreasing already (a high of 2,500 in the winter of 2016-17 pre-construction versus 600 during the winter of 2020-21 after the lagoon system was taken off line). Waterfowl still use the three lagoons, but with no incoming source of nutrients, there will also be less food for them over time. (Winter numbers are also tremendously influenced by a feeding station on nearby Wheelright Creek.) Gull numbers and variety are already showing signs of decreasing based on a quick comparison of winter gull numbers pre- and post-construction. There is no longer access to the southern fence line which is bordered by dense bushes and was a good spot for songbirds, especially in migration. Rarities and sought-after ducks are still attracted by the open water of the three lagoons and birders are hoping that will still continue.

Access to the WTP

The plant was often closed during construction but the facility is once again open to birders. We are very grateful to the Exeter WTP for allowing birders to access the plant. A reminder that no vehicles are allowed inside the plant and on the dikes – *even if the gate is open*. Please park and walk in. The best place to park is in the lined parking toward the north gate into the lagoons (by the Sugar Maples with the sap collection tubing). Drive straight into the plant past the solar panels and the multiple bay garage. The parking area is on the left just before the gate (see Figure 2). There is additional parking in the central parking lot. Be sure to stay out of the way of any vehicles or workers at the plant.



The construction at the Exeter WTP where Lagoon #4 used to be on 9-2-18 (top) and the “pillows” on 10-12-20 (bottom). Photos by Rebecca Suomala.

Birding the Exeter WTP

Birders have been extremely fortunate to have the privilege of birding at the Exeter WTP over the decades. To ensure safety and continued access, please follow these rules, as requested by the plant management.

1. Do not, under any circumstances, drive in to the lagoons, even if the gate is open.
2. Park in the lined parking spots only and do not block any buildings, even on the weekends.
3. Stay along the main dikes/trails. Do not walk down into the rocks to get photos, etc. Do not walk across fields.
4. Be alert for vehicles and stay out of their way. Never leave your scope unattended on the road where it could block vehicles.
5. Don't interrupt the work flow at the plant.

A reminder that duck hunting occurs around the WTP in fall. Hunters are not allowed to hunt on the WTP property, but plant workers still suggest that birders stay clear of the southeast corner of the WTP during hunting season. Birders should be aware of the possibility of hunting from the other side of the river, especially during early morning hours.

New Hampshire Bird Records Endowment Fund

Donations to this fund provide long-term support for all facets of *New Hampshire Bird Records*, from the publication to the collection, organization, quality control, dissemination, preservation, and storage of New Hampshire bird sighting information.

Leave a Legacy for the Birds with a bequest in your will to the Fund:

I give and bequeath ____ % of my residuary estate (or a specific sum of \$ ____) to the New Hampshire Bird Records Endowment Fund, a permanently restricted fund of the Audubon Society of New Hampshire, 84 Silk Farm Rd., Concord, NH.

For more information, contact the Managing Editor (see inside front cover).

Rare Bird ALERT

 224-9909

Available twenty-four hours a day!
Also online at www.nhaudubon.org

Abbreviations Used

AMC	Appalachian Mountain Club
BBC	Brookline Bird Club
BBS	Breeding Bird Survey
CA	Conservation Area
CC	Country Club
CFT	NH Audubon Chapter Field Trip
FT	Field Trip
IBA	Important Bird Area
L.	Lake
LPC	Loon Preservation Committee
NA	Natural Area
NHA	New Hampshire Audubon
NHBR	New Hampshire Bird Records
NHRBC	NH Rare Birds Committee
NWR	National Wildlife Refuge
PO	Post Office
R.	River
Rd.	Road
RO	Raptor Observatory
Rt.	Route
SF	State Forest
SP	State Park
SPNHF	Society for the Protection of NH Forests, Concord
T&M	Thompson & Meserves (Purchase)
TNC	The Nature Conservancy
WMA	Wildlife Management Area
WMNF	White Mountain National Forest
WS	NHA Wildlife Sanctuary
~	approximately
WTP	Wastewater Treatment Plant

NHBR Subscription Form

I would like to subscribe to *NH Bird Records*.

NHA Member \$25.00 Non-member \$35.00

All renewals take place annually.

Mid-year subscribers will receive all issues published in the subscription year.

I would like to join NH Audubon and receive *NH Bird Records* at the member price.

Family/\$59 Individual/\$45 Senior/\$29

Name: _____

Phone: _____

Address: _____

City, State: _____

Zip: _____

Payment is by:

check enclosed— payable to NH Audubon

MC VISA

Card #: _____

Exp. Date: _____

Return to: Membership Department, NH Audubon,
84 Silk Farm Rd., Concord, NH 03301

Subscribe online at www.nhbirdrecords.org

New Hampshire Bird Records is published quarterly by NH Audubon's Conservation Department. Thank you to the many observers who submit their sightings to NH eBird (www.ebird.org/nh), the source of data for this publication. The published sightings typically represent the highlights of the season. Not all species reported will appear in the issue. All records are subject to review by the NH Rare Birds Committee and publication here does not imply future acceptance by the RBC.

New Hampshire Bird Records © NH Audubon December 2021

Published by NH Audubon's Conservation Department

 Printed on Recycled Paper