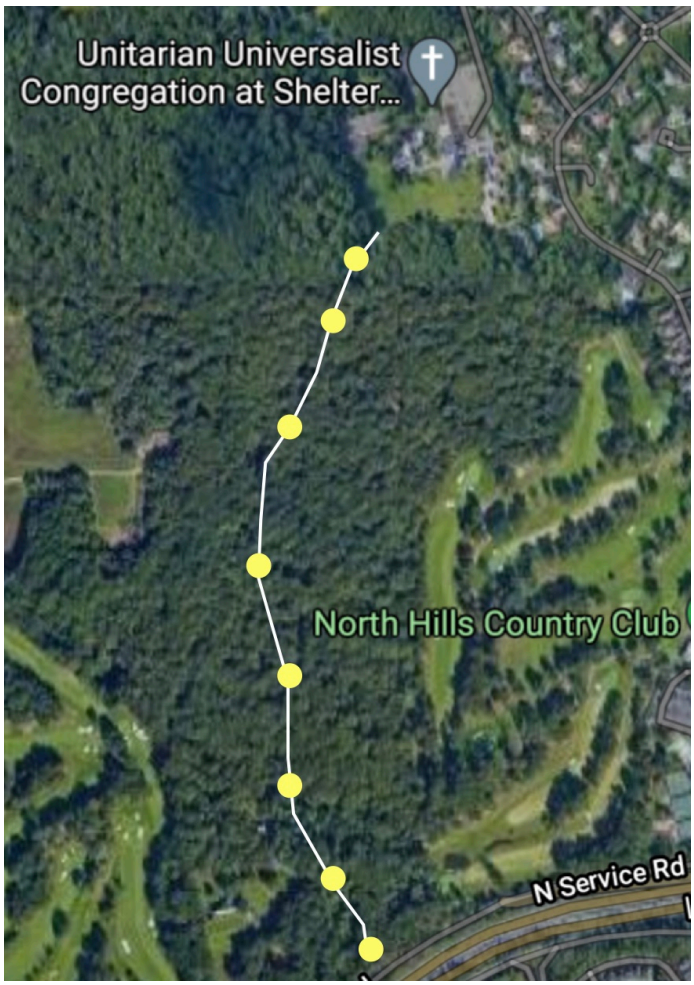
2020-2021 Wildlife Survey Report
Unitarian Universalist Congregation at Shelter Rock

Seatuck Environmental Association
July 2021

Introduction

Over the past year Seatuck Environmental Association ("Seatuck") conducted seasonal surveys of the Unitarian Universalist Congregation at Shelter Rock ("UUCSR") property in Manhasset, NY. The goal was to document the presence of bird and other wildlife species inhabiting the property. Five bird surveys were conducted (September and October 2020 and March, May, and June 2021) and one survey of the vernal pools (March 2021).

For the bird surveys, we established a "point count" system, with eight listening stations throughout the property (*see map at right*). Surveys were conducted at each point for three minutes; counting all birds heard or seen. The points were spaced out to minimize repeat counts of the same birds. This approach allowed us to capture all representative habitats and ensure comprehensive overage, while establishing an easily repeatable survey procedure.



Each survey had a different goal. The September and October visits were designed to capture Fall migration, while the early March visit was designed to ascertain overwintering birds. The May visit was designed to capture Spring migration, while the June survey was to determine breeding status of various bird species.

In addition to the field surveys, Seatuck also inspected around the UUCSR buildings during each visit to determine the effectiveness of window stickers that were applied to many of the facility's windows to prevent bird-window collisions.

SURVEY SUMMARIES

The following summaries are supplemented by the attached spreadsheets, which provide additional detail about the the bird census findings.

1. September 9, 2020 - Fall Migration #1

6:30 a.m. - 9:35 a.m.
Sunny, Temperature 68 degrees

AMERICAN REDSTART

Eighteen bird species, two mammal species, and one amphibian species were detected during the site visit. The bird species were a blend of resident birds, such as Hairy Woodpecker and Carolina Wren, short distance migrants, such as American Robin, and longer distance migrants like the Ruby-throated Hummingbird, American Redstart, Black-and-white Warbler and Wood Thrush. This confirms that the property provides "home" and "hotel" habitat for a number of bird species.

An inspection around the facility revealed no dead birds from window collisions.

2. October 7, 2020 - Fall Migration #2

10:05 a.m. - 12:10 a.m.
Partly sunny, Temperature 57 degrees

NORTHERN FLICKER

Nineteen bird species, two mammal species, and one amphibian species were detected during the site visit. There was a clear movement of Northern Flickers and the two thrush species as numerous individuals of the three species were observed. An inspection around the facility revealed no dead birds from window collisions.

3. March 3, 2021 - Winter Birds
8:24 a.m. - 10:34 a.m.
Partly sunny, Temperature 41 degrees

Twelve bird species were detected during the survey involving resident and overwintering species. One surprise was the presence of a Gray Catbird, which was either a rare winter holdover or a very early migrant. An inspection around the facility revealed no dead birds from window collisions.

GRAY CATBIRD

4. March 24, 2021 - Vernal Pools
7:30 p.m. - 11:30 p.m.
Heavy rain, Temperature 50 degrees

Seatuck staff and several colleagues from partner organizations (Hofstra University, Greentree Foundation) conducted joint surveys of the vernal pools at UUCSR and Greentree on what turned out to be a remarkable evening in late March. The conditions (heavy rain and mild temperatures after several days of dry weather) generated a large migration of frogs and salamanders. Prompted by the perfect conditions, the adult amphibians leave their subterranean locations (salamanders) or trees (frogs) and crawl/hop over the forest floor into the vernal pools to breed.

SPOTTED SALAMANDER

We witnessed many dozens of Spotted Salamanders, Wood Frogs and Spring Peepers moving across the the wet leaf litter and saw many large breeding congregations in the pools. Our final count was 130 Spotted Salamanders, 250 Wood Frogs and many hundreds (perhaps thousands) of Spring Peepers. And those numbers, given the difficulty of accurate counting in the heavy rain, was likely only a small percentage of the actual total. Even the experienced herpetologists and naturalists in our group were amazed at the spectacle, agreeing it was the largest they had ever witnessed on Long Island. The impressive assemblage of vernal-pool-dependent wildlife is testament to the high quality of the constellation of vernal pools and surrounding woodlands in “Whitney Woods,” especially including the northern UUCSR pond, which had the highest numbers of amphibians of the six vernal pools.

5. May 12, 2021 - Spring Migration
9:14 a.m. - 12:05 p.m.
Partly sunny, Temperature 66 degrees

Thirty-four bird species were seen during this census event, scheduled to gain a sense of the value of the property for songbirds during Spring migration. One mammal was observed and one amphibian was heard.

OVENBIRD

Especially notable were the large number of Wood Thrush and Ovenbird, two long-distance neotropical migrants that are sensitive to the quality and size of woodland habitats. The number of individuals seen of these two species, and the other migrant songbirds observed, confirms the property, as part of a large woodland complex, provides productive migratory and breeding habitat.

An inspection around the facility revealed no dead birds from window collisions.

6. June 18, 2021 - Breeding Birds
10:14 a.m. - 12:07 p.m.
Partly cloudy, Temperature 76 degrees

RED-EYED VIREO

Twenty-one bird species were observed or heard during this census event, which was scheduled to gain a better sense of the birds that are very likely breeding throughout the property. June is typically the month during which most bird species are breeding on Long Island. The presence of Ovenbird, Red-eyed Vireo, and Wood Thrush during this census suggests the forested portions of the property provides important habitat for forest-dependent songbirds, a group of birds that are declining due to habitat loss and fragmentation.

Three mammal species were seen as well as two amphibians detected. Additionally, four butterfly species were observed and at least two species of dragonfly were seen flying over the vernal pond. An inspection around the facility revealed one dead bird, a thrush species, that collided with a window.

	UUCSR BIRD SURVYES - 2020/2021 - SPECIES TOTALS					
		# 1 FALL MIGRATION	# 2 FALL MIGRATION	WINTER	SPRING MIGRATION	BREEDING
	SPECIES	9/9/20	10/7/20	3/3/21	5/12/21	6/18/21
1	Canada Goose			25	1	
2	Mallard				2	
3	Osprey				1	
4	Red-tailed Hawk	1			1	
5	Mourning Dove			1		1
6	Chimney Swift		1			1
7	Ruby-throated Hummingbird	1				
8	Red-bellied Woodpecker	1	3	3	3	3
9	Downy Woodpecker		1			
10	Hairy Woodpecker	1	1	1	1	
11	Northern Flicker	1	6		1	1
12	Great Crested Flycatcher				2	
13	Red-eyed Vireo				1	2
14	Blue-headed Vireo		1			
15	Blue Jay	4	10		1	
16	American Crow					
17	Tree Swallow					1
18	Barn Swallow				1	1
19	Black-capped Chickadee	1	1	4		
20	Tufted Titmouse					1
21	White-breasted Nuthatch		1			
22	House Wren	2			3	3
23	Carolina Wren	4	3	2	1	
24	Golden-crowned Kinglet		1			
25	Ruby-crowned Kinglet		1			
26	Veery				1	
27	Grey-checked Thrush		2			

28	Swainson's Thrush			4						
29	Wood Thrush	1						7		2
30	American Robin	5		6		6		1		4
31	Gray Catbird	2				1		1		5
32	Ovenbird							9		1
33	Northern Waterthrush							1		
34	Black-and-white Warbler	1						3		
35	Common Yellowthroat	1						2		
36	American Redstart	1								
37	Northern Parula	1						3		
38	Magnolia Warbler							1		
39	Blackburnian Warbler							1		
40	Yellow Warbler							1		2
41	Chestnut-sided Warbler							1		
42	Blackpoll Warbler			1						
43	Black-throated Blue Warbler			1				4		
44	Yellow-rumped Warbler							4		
45	Black-throated Green Warbler							1		
46	Chipping Sparrow							1		1
47	Dark-eyed Junco					3				
48	White-throated Sparrow			1		1		2		
49	Song Sparrow			1		1				1
50	Lincoln's Sparrow			1						
51	Scarlet Tanager									1
52	Northern Cardinal	2				2		1		4
53	Rose-breasted Grosbeak							1		
54	Red-winged Blackbird					10				
55	Common Grackle	1						1		2
56	Baltimore Oriole							1		
57	House Finch							1		1
58	American Goldfinch							1		1
	TOTAL SPECIES	18		20		13		35		21
	TOTAL INDIVIDUALS	29		47		60		69		39

UUCSR BIRD SURVYES - 2020/2021				
STATION COUNT DETAIL				
	FALL MIGRATION - 1	FALL MIGRATION - 2	WINTER	SPRING MIGRATION	BREEDING
	9/9/20	10/7/20	3/3/21	5/12/21	6/18/21
STATION					
1	Blue Jay, American Robin, Northern Cardinal, Gray Catbird (Other: Eastern Chipmunk, Gray Tree Frog (2))	Hairy Woodpecker, Blue Jay, American Robin, Northern Flicker, Ruby-crowned Kinglet *(Other: Eastern Chipmunk)*	Carolina Wren, Red-bellied Woodpecker, Mourning Dove	Yellow Warbler, Wood Thrush, House Wren, White-throated Sparrow, Black-and-white Warbler, Common Yellowthroat, Northern Parula, Black-throated Blue Warbler, Magnolia Warbler, Ovenbird	Mourning Dove, Yellow Warbler, Gray Catbird, House Wren, American Goldfinch
In-Between	Blue Jay, House Wren, Northern Cardinal, Parula Warbler, Veery (3), Black & White Warbler, Ruby-throated Hummingbird, Gray Catbird (Other: gray Squirrel (3))	Blue Jay, Northern Flicker (4), Gray-cheeked Thrush, Swainson's Thrush (Other: Gray Squirrel, Eastern Chipmunk)	Red-winged blackbird flock f (9 -flyover), Northern Cardinal (2), American Robin (6), Canada Geese on lawn (14), Canada Geese (11 - flyover)	Chipping Sparrow, Gray Catbird, White-throated Sparrow, Canada Goose, Northern Cardinal, Northern Waterthrush, Wood Thrush, House Wren, Red-tailed Hawk, American Robin, Barn Swallow	Chipping Sparrow, Gray Catbird, Northern Cardinal, House Finch, Common Grackle, House Wren (2), American Robin, Barn Swallow, Tree Swallow, Chimney Swift, Song Sparrow
2	Carolina Wren, Blue Jay, Black & White warbler	Carolina Wren, Blue Jay, Chimney Swift (flyover), American Robin	American Crow, Red-winged Blackbird (flyover)	House Wren, Northern Parula, Ovenbird, Black-throated Green Warbler, Common Grackle, Red-bellied Woodpecker	Common Grackle, House Wren, Gray Catbird
In-Between	None	Northern Flicker, Blue Jay, American Robin (Other: Gray Squirrel, Eastern Chipmunk, Feral Cat)	None	Ovenbird	Red-bellied Woodpecker, Northern Flicker, Northern Cardinal *(Other: Eastern Chipmunk)*
3	Blue Jay, Red-tailed Hawk	Blue Jay, Black-throated Blue Warbler, Golden-crowned Kinglet, Red-bellied Woodpecker	Red-bellied Woodpecker	Wood Thrush, Black-throated Blue Warbler, Red-bellied Woodpecker, Ovenbird, Yellow-rumped Warbler (3) *(Other: Eastern Chipmunk)*	Wood Thrush
In-Between	Common Grackle (flyover) Red-bellied Woodpecker, American Redstart	Red-bellied Woodpecker, Red-bellied Woodpecker (kill), Blue Jay	Dark-eyed Junco (3), Black-capped Chickadee (eating poision ivy berries)(3), American Robin, Song Sparrow, Canada Geese (11)(flyover).	Ovenbird, Red-bellied Woodpecker, Great Crested Flycatcher, Blackburnian Warbler, Hairy Woodpecker, Wood Thrush	Northern Cardinal, Black-capped Chickadee, Carolina Wren
4	Carolina Wren, House Wren, Blue Jay, American Robin	Carolina Wren, Blue Jay, White-breasted Nuthatch, American Robin, Blackpoll Warbler	Hairy Woodpecker	Great Crested Flycatcher, Northern Parula, Yellow-rumped Warbler	Red-bellied Woodpecker
In-Between	American Robin (Other: Gray Tree Frog)	American Robin, Northern Flicker	White-Throated Sparrow (4)	Baltimore Oriole, Ovenbird, Black-throated Blue Warbler	None
5	Carolina Wren, Eastern Chipmunk	Carolina Wren, Swainson's Thrush (3), Blue Jay, Black-capped Chickadee, Downy Woodpecker, Gray-cheeked Thrush, American Robin	None	Wood Thrush, Chestnut-sided Warbler, Black-and-white Warbler, Blue Jay *(Other: Eastern Chipmunk)*	American Robin (carrying food), Red-tailed Hawk, Wood Thrush
In-Between	Hairy Woodpecker, Northern Flicker	Northern Flicker, Song Sparrow, Lincoln's Sparrow, White-throated Sparrow	Red-bellied Woodpecker	Yellow-rumped Warbler, Black-throated Blue Warbler, Ovenbird, Black-and-shite Warbler, Accipiter sp.	Red-eyed Vireo, Tufted Titmouse, Eastern Chipmunk
6	Wood Thrush, American Robin	Blue Jay	Black-capped Chickadee	Wood Thrush, Veery, Carolina Wren, Northern Flicker, Yellow-rumped Warbler, Ovenbird	Gray Catbird, Red-eyed Vireo, Ovenbird, Scarlet Tanager (Other: Gray Treefrog, Eastern Chipmunk)
In-Between	Common Yellowthroat, American Robin, Veery *(Note: the latter two birds were observed feeding on Virginia Creeper berries)*	Red-bellied Woodpecker, Blue Jay, Northern Flicker	None	Wood Thrush, Ovenbird	None
7	Carolina Wren, Ruby-throated Hummingbird (2) *(Note: this station, adjacent to the "Jewelweed Meadow," is a reliable location for hummingbirds. A dominant female was defending the territory from another female)*	Blue-headed Vireo, Blue Jay (several, displaying mobbing behavior, source of their agitation not detected)	Gray Catbird (Note:this is either an early migrant or an overwintering bird, both possibilities are an uncommon event)	Black-throated Blue Warbler, Magnolia Warbler, Ovenbird, Norther Parula, Northern Oriole, Wood Thrush (Other: Gray Treefrog)	Yellow Warbler, Red-bellied Woodpecker *(Other: many cabbage white butterflies)*
In-Between	Black-capped Chickadee	None	Carolina Wren	House Wren, Yellow Warbler, Gray Catbird, Northern Cardinal, Red-winged Blackbird, Osprey (flyover), Rose-breasted Grosbeak, Red-eyed Vireo, Common Yellowthroat	American Robin, Gray Catbird (Other: Black Swallowtail, Spicebush Swallowtail, Tiger Swallowtail,gray Squirrel, Feral Cat (black))
8	None *(Note: road noise made it hard to hear and may have been a contributing factor to the lack of birds. The vernal pool was dry, with a vegetative cover of several sedge, grass, and smartweed wildflower species)*	Vernal Pool - Blue Jay, American Robin (Other: Gray Treefrog)	None	Wood Thrush, Mallard (2), Red-winged Blackbird	(Vernal Pool) - Red-eyed Vireo, American Robin, Northern Cardinal, (*Other: several dragonfly species, Green Frog (4))*

DISCUSSION AND MANAGEMENT RECOMMENDATIONS

In all, fifty-eight (58) different bird species were detected, as well as a rich vernal pool community and several mammals, insects and other wildlife of note (*see tables below*). However, it is important to stress that these were only preliminary surveys designed to provide a rough idea of wildlife use of the property. The 58 bird species detected during the surveys very likely under-represents the value of the property for both migratory and resident birds. It is highly probable that additional bird species regularly utilize the open, landscaped setting around the building complex and the adjacent forests. More species likely occur on the property but were simply undetected by the limit of five visits. Additional bird surveys would undoubtedly increase the number of bird species detected inhabiting the property.

For example, no owl or goatsucker species (both nocturnal bird groups) were detected since the surveys took place during the morning. One or more of these species would likely have been detected if a survey took place at dusk or at night. Similarly, while we were somewhat surprised not to find more evidence of mammal and other wildlife species, we recognize that the assessment of such species often requires more significant field work (e.g., live trapping for small mammals). Additional surveys would likely result in the detection of additional wildlife and a more thorough and robust understanding of the habitat value of the UUCSR property.

That said, in our opinion, these surveys provided important additional evidence of what we originally learned when conducting assessments for Greentree: that the forest habitat that collectively makes up “Whitney Woods” is some of the highest quality woodlands in Nassau County. It has been and remains an important ecological oasis in an otherwise highly developed portion of Long Island. The high densities of forest specialist birds (e.g. Wood Thrush, Ovenbird) and the remarkable population of vernal pool species (e.g. Wood Frog, Spotted Salamander) confirm that the woodlands are healthy and providing critically important habitat for resident, breeding and migrant species.

As you already know, however, this important acreage is not free from threats. Invasive species, well established in many parts of the UUCSR property, pose a significant threat to the health of the forest. Species like winged-euonymus (a.k.a. Burning Bush) can dominate the forest floor, which not only crowds out native understory species, but also prevents native tree saplings from taking hold. Over time this can prevent trees from regenerating and completely change the character and quality of the woodlands.

Importantly, the forest is not the only habitat under threat. The “Jewelweed Meadow," along the southern end of the main path, which provides important habitat for a variety of pollinators, including many bee, beetle, wasp, and fly species, as well as Hummingbirds (which are likely nesting nearby), is being encroached upon by porcelainberry and other non-native invasive vines. And, as you well know, a large stand

of invasive bamboo looms over the vernal pool on the property's southern border. The stand is already have a negative impact on the ecology and hydrology of the vernal pool.

RUBY-THROATED HUMMINGBIRD

We urge UUCSR to take the threat from these and other invasive species seriously and encourage you to implement a long-term plan to manage the problem. Seatuck has worked with Greentree to develop and initiate an invasive species management plan - we would be happy to help UUCSR mirror the Greentree approach. In fact, over the long term, both landowners will require the support and cooperation of the other if either is to successfully address the invasive species problem.

Finally, regarding the window collision issue, our inspections suggest that the placement of the several hundred stickers on windows by Seatuck staff has proven effective in reducing bird mortality. The occurrence of a few additional victims, however, suggests that the installation of additional stickers might still be necessary.

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Seatuck is grateful for the opportunity to conduct these field surveys and assist UUCSR in better understanding the wildlife value of its property. More than ever, we are convinced that the congregation's property - and Whitney Woods as a whole - is one of the most ecologically significant natural areas in Nassau County. We applaud UUCSR for embracing its responsibility to steward this important resource and pledge our commitment to help in any way we can.

Submitted by:

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