

Goatsuckers Unite!



VCE's Green Mountain Goatsuckers Biothon team explores the edge of Noyes Pond in Groton State Forest.

After the jolting extremes of a northern April, the month of May adds a bit of predictability to life in our region: trout lilies bloom under the hardwood canopy, American Toads join the chorus of Spring Peepers, and the VCE staff transforms into the Green Mountain Goatsuckers. Our Birdathon-turned-Biothon team has always embraced a check listing challenge, but we significantly raised the stakes with this year's species count: while aiming to maximize observations of all winged creatures in a 24-hour period, we purposely avoided known hotspots where high numbers would be virtually guaranteed. Instead, we sought out an under-surveyed area where new data could help close gaps in Vermont's biodiversity knowledge base.

Gathering at Groton State Forest on a late-May afternoon, we intended to begin our bird and butterfly lists, pause for supper, and then plug in the moth light. The use of this lure would boost us toward our goal of 200 winged species. With dozens

of moth varieties added to the count overnight, the next day would be a cakewalk!



VCE Conservation Biologist Kent McFarland adjusts the moth light.

Moths Lay Low

And then Mother Nature doubled down on the challenge. At our 5 p.m. start time, it was 45 degrees and pouring rain. Dusk descended, and no self-respecting moth would be caught out in

the maelstrom. The next day dawned blustery and cold. (Did someone say May was predictable?) Birds were quiet, butterflies were hunkered down. The Goatsuckers spent the day working for every species we could find. We left no stone—or leaf—turned.

Every Leaf Has Two Sides

Although slowing down for a time-limited and pledge-based fundraiser is unorthodox, it turns out that our deceleration strategy worked. Shifting the mindset from “Get a move on!” to “What’s the hurry?” was hard at first; but if there was going to be any tallying at all, we were going to have to look intently, carefully, thoroughly. As luck would have it, the blooming apple trees provided an irresistible feast for warblers, Purple Finches, bumblebees, flower flies, and other pollinators who foraged among its flowers, oblivious to the weather, and drew us in to observe their activity.

Excitement Ramps Up

Nathaniel Sharp recalls seeing Spencer Hardy, our resident bee expert who has observed and identified thousands of bees in Vermont, suddenly crouch down to the ground and whip out his macro lens in one swift motion while saying something to the tune of, “I’ve never seen this before!” He had found a sleeping Nomad Bee.



Spencer Hardy photographs a sleeping Nomad Bee (pictured top right).

Nearby Peacham Bog enticed several team members on a quest for the state’s second record of Bog Elfin (the first having been found mere days before by our colleague Bryan Pfeiffer and featured on the front page of the Boston Globe). When Steve Faccio

captured an unidentified elfin that then disappeared before it could be closely examined, Kent McFarland’s voice rose an octave as he exclaimed, “I’m REALLY excited now!” Maybe he was jumping up and down, maybe not. Our memories are foggy but, knowing Kent’s sense of wonder at all things winged, the likelihood is high.



The Green Mountain Goatsuckers’ bog team pauses to scan the vegetation for signs of movement.

Biothon 2023 was the first VCE field experience for several of our newest staffers. Among the day’s pleasant discoveries was that Toni Luff and Laura Prothero are exceptionally observant. They may not have known the scientific classification of the critters they found, but their eagle eyes added substantially to our species list. Conservation Biologist Desiree Narango was thrilled that Toni, our brand-new administrative coordinator, “found me a lifer lady beetle!”

All told, we managed to count 190 species, a nightjar’s “whisker” from our goal of 200. Of these, 40 species of insects had not previously been recorded in Groton State Forest: six beetles, six moths, four butterflies, and a host of flies, aphids, sawflies, and others. And in spite of the unseasonable conditions, we also recorded 70 bird species, including only two raptor species but 16 warblers.

We are grateful to every VCE friend who participated in this year’s Biothon. Whether you birded or butterflyed, supported someone else’s efforts, or pledged support for the Green Mountain Goatsuckers, you helped to make our spring fundraiser a success. Thank you!

— Susan Hindinger, July 2023

Insects

<i>Aedes sp.</i>	Common Flower Flies
Aerial Yellowjackets	Common Willow Calligrapher Beetle
Alder Lacebug	<i>Cucujoidea sp.</i>
Alder Sawfly	Curved-toothed Geometer Moth
<i>Alebra sp.</i>	Cutworm Moths and Allies
<i>Amphigonalia gothica</i>	Darners
Arched Hooktip Moth	Delphacid Planthoppers
Argid Sawflies	<i>Dicaelus politus</i>
Asian Lady Beetle	<i>Dichelonyx linearis</i>
Aster Treehopper	<i>Dichelotarsus sp.</i>
Beech Scale	Eastern Boxelder Bug
<i>Bellardia sp.</i>	Eastern Tent Caterpillar Moth
<i>Bibio xanthopus</i>	Edge-striped Shield Bug
Bizarre Caddisflies	<i>Empidinae sp.</i>
Black Mud-dauber Wasps	<i>Euferonia sp.</i>
Black-banded Orange Moth	<i>Euura sp.</i>
Blueberry Stem Gall Wasp	Forest Tent Caterpillar Moth
Bluets	<i>Gelechiini sp.</i>
Bristle Flies	<i>Gerris sp.</i>
Bronze Ground Beetle	Giant Birch Sawfly
Brown Elfin	Giant Mayflies
Brown Leaf Weevil	Globetails
Brown-shaded Carpet Moth	Goldenrod Gall Fly
<i>Calligrapha confluens</i>	Gray Leafroller Moth
<i>Chymomyza amoena</i>	Green Immigrant Leaf Weevil
Common Bagworm Moth	Half-black Bumble Bee
Common Carpet Moth	Harris's Checkerspot

<i>Hemitheini sp.</i>	<i>Platypalpus sp.</i>
Hendricksons, Sulphurs, and Pale Duns	<i>Polydrusus cervinus</i>
Holarctic Alderflies	Polyphemus Moth
<i>Itopectis conquisitor</i>	Powdered Geometer Moths
<i>Leptophlebia sp.</i>	Promethea Silkmoth
<i>Lepyronia sp.</i>	<i>Pterelachisus</i>
<i>Limenitis sp.</i>	<i>Pyractomena</i>
Limoniid Crane Flies	<i>Pyrochroinae sp.</i>
<i>Lonchaea sp.</i>	Red-footed Longhorn Beetle
Maple Leafcutter Moth	<i>Rhagio sp.</i>
May Beetles	Rolled-winged, Forest, and Winter Stoneflies
<i>Melanotus castanipes</i>	Rosy Maple Moth
Mining Bees	<i>Scathophaga sp.</i>
<i>Myopa clausa</i>	Sigmoid Prominent
<i>Nabis roseipennis</i>	<i>Siphonuridae sp.</i>
Narcissus Bulb Fly	Snowy Geometer Moth
New York Carpenter Ant	<i>Tetrix sp.</i>
Nomad Bees	Three-banded Lady Beetle
Non-biting Midges	Three-lined Hoplia
North American Spur-throated Grasshoppers	Tricolored Bumble Bee
North American Tarnished Plant Bug	Twenty-spotted Lady Beetle
Olethreutine Leafroller Moths	Twice-stabbed Lady Beetle
<i>Ophraella sp.</i>	Two-lined Leatherwing
<i>Orsodacne atra</i>	Two-spotted Bumble Bee
<i>Oxyporus rufipennis</i>	Virgin Moth
Pale Green Assassin Bug	Virginia Ctenucha Moth
Perplexing Bumble Bee	Whitefaces
<i>Phratona sp.</i>	White-spotted Sable
<i>Phytomyza agromyzina</i>	White-winged March Fly

Willow Beaked-gall Midge

Willow Leaf Beetle

Willow Pinecone Gall Midge

Winter Firefly

Woolly Beech Aphid

Yellow-banded Bumble Bee

Zadontomerus

Zigzag Herpetogramma Moth

Birds

American Crow

American Goldfinch

American Redstart

American Robin

American Woodcock

Barred Owl

Bay-breasted Warbler

Belted Kingfisher

Black-and-white Warbler

Blackburnian Warbler

Black-capped Chickadee

Blackpoll Warbler

Black-throated Blue Warbler

Black-throated Green Warbler

Blue Jay

Blue-headed Vireo

Broad-winged Hawk

Brown Creeper

Canada Goose

Canada Warbler

Chestnut-sided Warbler

Chimney Swift

Chipping Sparrow

Common Grackle

Common Loon

Common Raven

Common Yellowthroat

Dark-eyed Junco

Downy Woodpecker

Eastern Bluebird

Eastern Phoebe

Eastern Wood-Pewee

European Starling

Golden-crowned Kinglet

Gray Catbird

Great Blue Heron

Hairy Woodpecker

Hermit Thrush

House Wren

Least Flycatcher

Magnolia Warbler

Mallard

Mourning Dove

Nashville Warbler

Northern Flicker

Northern Parula

Ovenbird
Palm Warbler
Pileated Woodpecker
Purple Finch
Red-breasted Nuthatch
Red-eyed Vireo
Red-winged Blackbird
Ring-necked Duck
Rose-breasted Grosbeak
Ruby-throated Hummingbird
Ruffed Grouse
Scarlet Tanager
Song Sparrow
Spotted Sandpiper
Swamp Sparrow
Tree Swallow
Turkey Vulture
White-throated Sparrow
Wild Turkey
Wilson's Snipe
Winter Wren
Wood Thrush
Yellow-bellied Sapsucker
Yellow-rumped Warbler