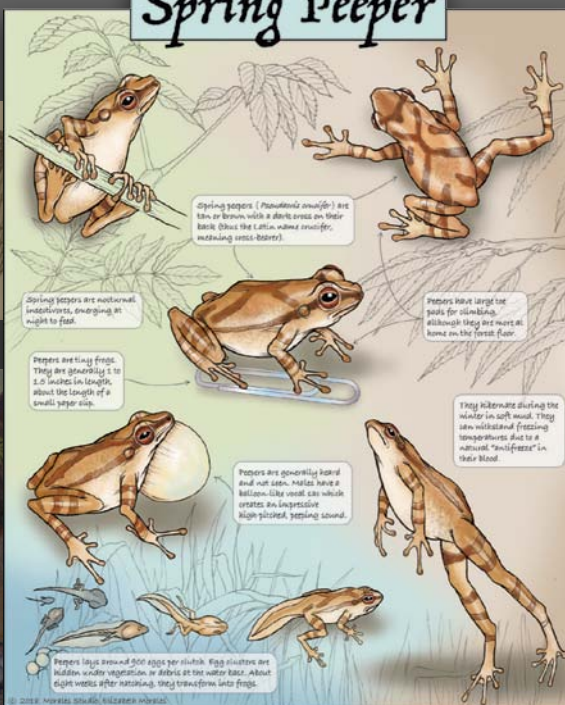


ELUSIVES

THE NATURAL WORLD WE SELDOM SEE

Spring Peeper



An exhibit of Natural Science Art
by the Finger Lakes Chapter of the
Guild of Natural Science Illustrators



ELUSIVES

The Natural World We Seldom See

An exhibit by the members of the
Guild of Natural Science Illustrators
Finger Lakes Chapter

Introduction

The natural world holds many secrets! How much are we missing, as we go about our daily lives? Organisms, big and small, are actively pursuing life unknown to us—growing and feeding, sending down roots, rearing young, establishing territories or moving to new areas—sometimes at night, perhaps in the dark forest or underwater, even under our feet.

Our exhibit showcases the creatures and plants that live in the shadows, under rocks, and in the depths of the water or the woods. Each artist has chosen species and behaviors that fascinated her or him, and we hope that you will be equally fascinated!

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Title: Dog-Day Cicada (*Neotibicen canicularis*)
 Artist: ©2016 Elizabeth Andrews
 Medium: Intaglio (Etching)
 Frame size: 12 x 16 — Mat opening: 5 1/2 x 10 1/2*

This cicada is named after the ‘Dog Star’ Sirius appearing in the northern Hemisphere during late July through September. Though the sounds of the cicada are a symphonic cacophony surrounding us during the long, hot, “dog-days of summer,” the creatures themselves, hiding in the trees above us, are elusive to the eye!



Title: The Last Unicorn (*Procyon lotor terebra*)
 Artist: ©2016 Elizabeth Andrews
 Medium: Intaglio (Etching)
 Frame size: 16 x 20 — Mat opening: 11 1/2 x 15

In ancient and medieval times, the mythology of the elusive unicorn came alive through the natural sciences, art, and storytelling. Unicorn horn specimens were highly desired; objects such as narwhal horns were presented as proof of the unicorn’s existence and placed in cabinets of curiosity.

In this etching I have documented “The Last Unicorn” — or have I? Upon closer observation, that which looks like a rare and valuable specimen may simply be the bricolage of a juvenile raccoon skull and auger shell.

* Art sizes throughout the catalog are in inches high x inches wide



Title: Sawfly larva, (lesser housefly, *Fannia canicularis*)

Artist: ©2018 Paula DiSanto Bensadoun

Medium: Colored pencil on frosted acetate

Frame size: 16 x 20 — Mat opening: 12 x 16

I discovered this tiny 4 mm fly larva under leaf mold and observed it under a dissecting microscope. It is enlarged about 35 times. The leaves are not drawn to scale. The larva, however, is shown life-size and seen highlighted on a lower leaf. The balloon like extension of its head expands and contracts as its head sways.

These larvae go through complete metamorphosis (egg, larva, pupa, adult fly 5 - 6 mm) and are found in all temperate regions of the world. They shun light and live on decomposing animal and vegetal matter.



Title: Wild Ginger (*Asarum canadense*)

Artist: ©2017 Kathleen J. Brahney

Medium: Watercolor

Frame size: 16 x 12 — Mat opening: 11 x 9

While the waxy, dark green, heart-shaped leaves of the wild ginger are easy to spot, the plant's flowers are indeed elusive. Hidden by the plant's dense foliage, the flowers sprout from the shallow-growing rhizomes just at soil level. Wild ginger seeds possess an oily outer coating that serves as food for ants, which disperse the seeds through a process called myrmecochory.



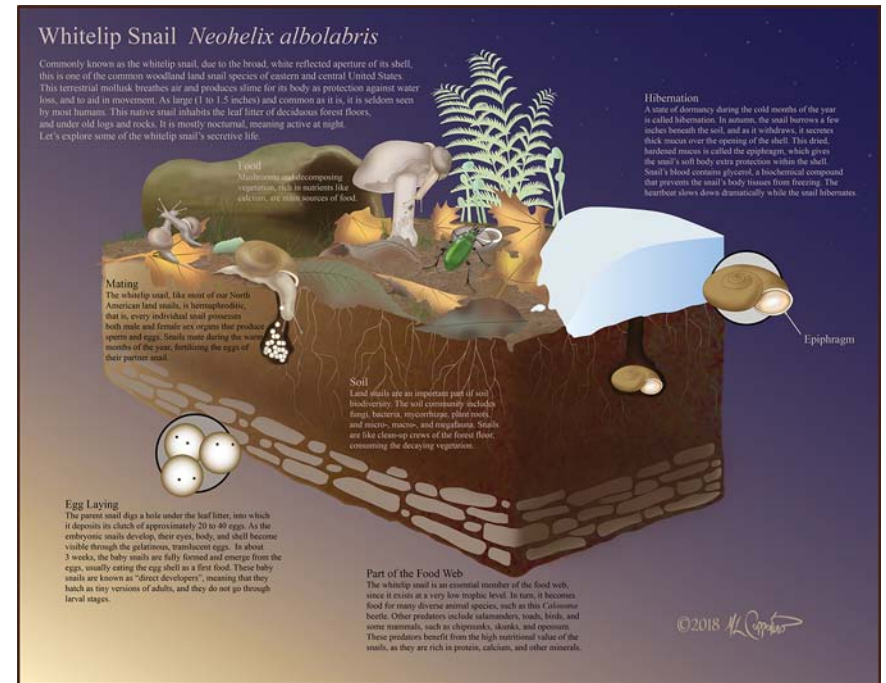
Title: Moonflower (*Datura sp.*)

Artist: ©2018 Henrike Burton

Medium: Watercolor

Frame size: 20 x 16 — Mat opening: 13 1/4 x 9 7/8

The moonflower blossoms open at dusk on summer nights. Although a beautiful flower, it is a member of the nightshade family, and can be quite poisonous to people and mammals. Nocturnal moths, though, may come to feed on the nectar.



Title: Whitlip Snail (*Neohelix albolabris*)

Artist: ©2018 Marla Coppolino

Medium: Digital print

Frame size: 12 x 16 — Mat opening: 9 x 13

Native land snails lead secret lives, being most active nocturnally, consuming decaying vegetation under forest leaf litter and under the soil. During warmer months of the year, they mate and lay their eggs. These land mollusks occupy an important place in the food web—the bottom, where they glean essential nutrients and in turn become food for other animals.



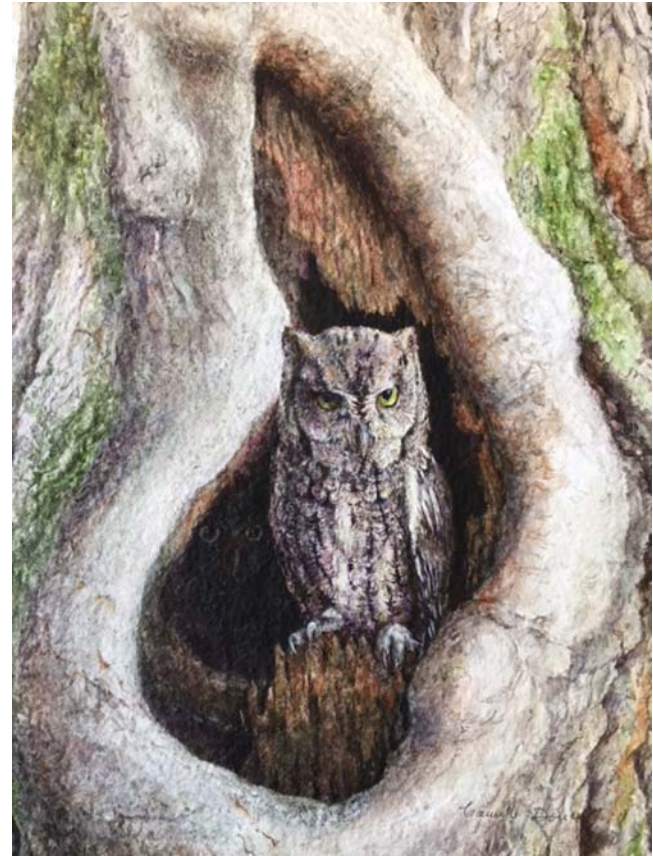
Title: Northern Flying Squirrel (*Glaucomys sabrinus*)

Artist: ©2018 Margaret Corbit

Medium: Ceramic mosaic

Frame size: 20 x 16 — Mat opening: 20 x 16

Rarely seen because of their nocturnal behavior, northern flying squirrels glide among the branches in old growth coniferous and mixed forests. These little creatures use skin flaps (patagia) that stretch between their front and rear paws like parachutes and their flattened tails to control their glides. They are endangered in Pennsylvania but frequently seen on our porch in Tompkins County, NY.



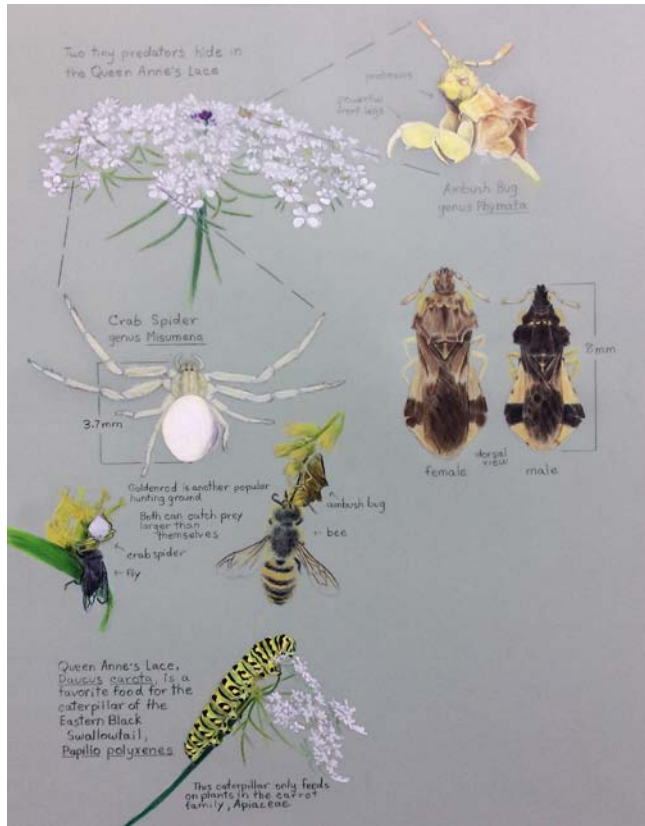
Title: Eastern Screech Owl (*Megascops asio*)

Artist: ©2017 Camille Doucet

Medium: Watercolor

Frame size: 20 x 16 — Mat opening: 16 x 12

At 6 1/2 in (16.5 cm) long, the eastern screech owl is one of our smaller owls. The screech owl name refers to one of the bird's vocalizations, which resembles the cries of a person in distress. It also whinnies and hoots. It is rarely seen because of its camouflage, nocturnal habits, and very silent flight. They nest in tree cavities, old woodpecker holes, and birdhouses.



Title: Hidden Among the Flowers
 Artist: ©2018 Lucy Gagliardo
 Medium: Mixed media
 Frame size: 20 x 16 — Mat opening: 17 x 14

From a distance we enjoy wildflowers, and they are interesting in their own right, but there is more to the story. Take the time to look closely and you will discover many organisms using the flowers to their advantage.



Title: American Woodcock (*Scolopax minor*)
 Artist: ©2018 Lucy Gagliardo
 Medium: Mixed media
 Frame size: 12 x 16 — Mat opening: 8 x 6 1/2

A shorebird that has made its home in the woods! The woodcock is perfectly camouflaged for the forest floor, where it walks along, probing the soil with its long bill in search of earthworms. The males can be heard, and possibly seen, in the spring as they perform their dazzling courtship ritual and females create a depression in the leaf litter to lay their eggs.



Title: Fisher (*Martes pennanti*)

Artist: ©2017 Margaret Guo

Medium: Watercolor

Frame size: 20 x 16 — Mat opening: 13 x 9 1/2

Fishers are long and slim with thick fur and a bushy tail, and grow to 2.5 - 3.5 ft (76 - 106 cm) in length. Contrary to their name, fishers don't eat fish. They hunt snowshoe hares, rodents, birds, and rabbits. They are one of the few animals that can eat porcupines. Fishers are mostly nocturnal and take shelter in hollow trees and logs in dense coniferous or mixed forests.



Title: Ghost Plant (*Monotropa uniflora*)

Artist: ©2018 Gretchen Kai Halpert

Medium: Colored pencil

Frame size: 16 x 20 — Mat opening: 11 x 14 1/2

The ghost plant is also known as Indian pipe or corpse flower. Most of the year, these woodland plants live as a root mass underground, appearing in late summer and early fall. They contain no chlorophyll, deriving nutrients from fungi and, indirectly, from tree roots. The single flower nods when emerging from the earth, turns sideways as it matures, then looks up to release its seeds to the wind.



Title: Stinky the Skunk (*Mephitis mephitis*)

Artist: ©2017 Shirley J. Hogg

Medium: Watercolor

Frame size: 16 x 20 — Mat opening: 10 3/4 x 14 1/4

Striped skunks are most active in the hours just after dusk and at first light. They eat grubs, worms, salamanders, frogs, berries, roots, nuts and leaves. They also eat honeybees; their thick coat protects them from the stings. Although well known for their defensive spraying tactics, skunks are rather solitary and mild-mannered if not threatened.



Title: Gray Fox (*Urocyon cinereoargenteus*)

Artist: ©2017 Philip L. Hutchings

Medium: Watercolor

Frame size: 20 x 16 — Mat opening: 14 1/2 x 10 1/4

Gray foxes are the only canine in North America that climb trees, where they can seek refuge. They have semi-retractable claws. Gray foxes are primarily nocturnal and are omnivorous. They hunt small mammals for food but also eat birds, insects, eggs, fruit, nuts, and grains. Foxes den in rock piles, or hollow logs.



Title: Lake Sturgeon (*Acipenser fulvescens*)

Artist: ©2018 In Shik Lee

Medium: Watercolor

Frame size: 20 x 16 — Mat opening: 15 3/8 x 11 1/2

Almost driven to extinction in North America by over-fishing and pollution, the now protected sturgeon are making a slow comeback in Cayuga Lake in Upstate NY, as well as other areas around the Great Lakes. These ancient fish can grow to over seven feet. Sturgeons are a protected species as their eggs, also known as caviar, are coveted by gourmands.



Title: American Bobcat (*Lynx rufus*)

Artist: ©2018 Iva Lesky

Medium: Watercolor

Frame size: 20 x 16 — Mat opening: 12 x 9

Elusive, declining in some areas, but generally resilient—the 12 subspecies of bobcats are found from southern Canada to central Mexico; and in a wide range of habitats all across the United States. These graceful, skilled predators are about twice the size of a housecat. Their preferred food is rabbit or hare, but they will eat what is available.



Title: Black-throated Blue Warbler (*Setophaga caerulescens*)

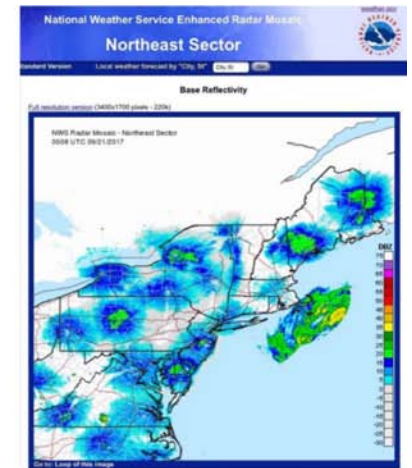
Artist: ©2017 Liisa Mobley

Medium: Acrylic

Frame size: 16 x 20 — Mat opening: 16 x 20

While many species of birds migrate at night, we are rarely aware of this mass of movement. Black-throated blue warblers wing their way north from the Caribbean every spring, and breed in the northeastern United States and southeastern Canada, returning to warmer lands in the fall. I was intrigued by this subject because I love birds and find the idea of night migration fascinating.

Support material shown on page 23.



Radar images from the evening of Sept 21, 2017, at 7:48 pm (EDT) on left, and 8:08pm (EDT) (on right).

Shortly after dusk, many birds, including black-throated blue warblers, take off for their fall (and spring) migrations. Weather radars pick up birds in flight; the large blue and green, somewhat roundish blobs in the radar images are indicative of birds or insects migrating. The number of birds departing for migration increases a few minutes later, as can be seen by the bigger “blooms.”

Public domain radar images from the National Weather Service. <https://radar.weather.gov/Conus/northeast.php>

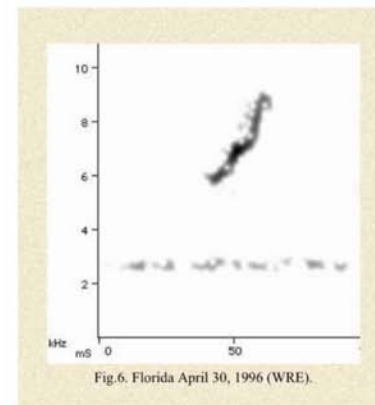


Fig.6. Florida April 30, 1996 (WRE).

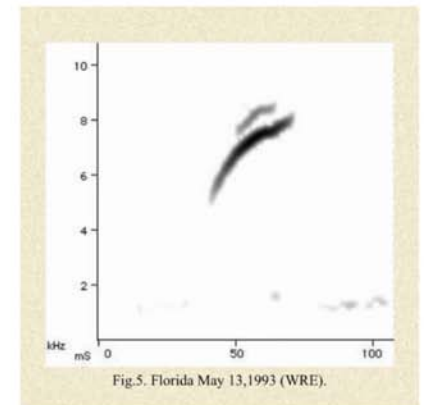
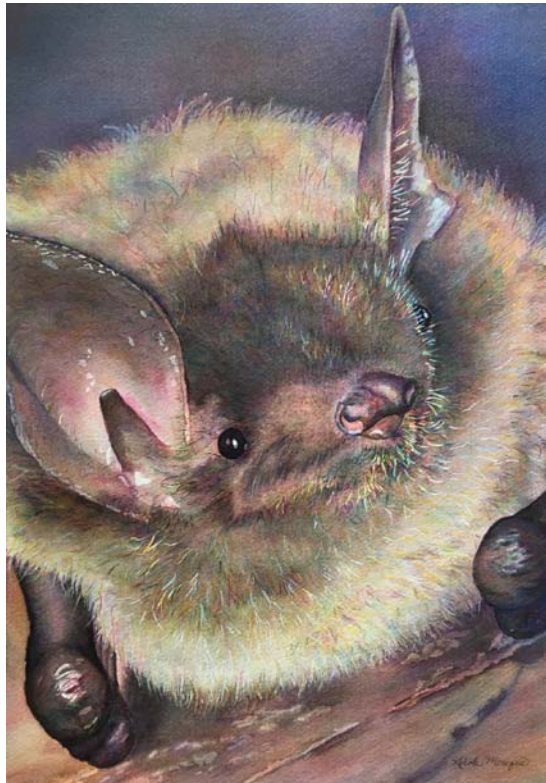


Fig.5. Florida May 13, 1993 (WRE).

While migrating, birds often communicate with short call notes; during night migrations, these are known as night flight calls (NFCs). Birders and scientists record these elusive sounds, and create spectrograms allowing us to visualize the call notes.

The images above are spectrograms of NFCs from black-throated blue warblers. The horizontal axis is in milliseconds of time, and the vertical axis shows frequency in kilohertz.

Used by permission from the site, Flight Calls of Migratory Birds <http://oldbird.org/pubs/fcmb/start.htm>



Title: Little Brown Bat (*Myotis lucifugus*)

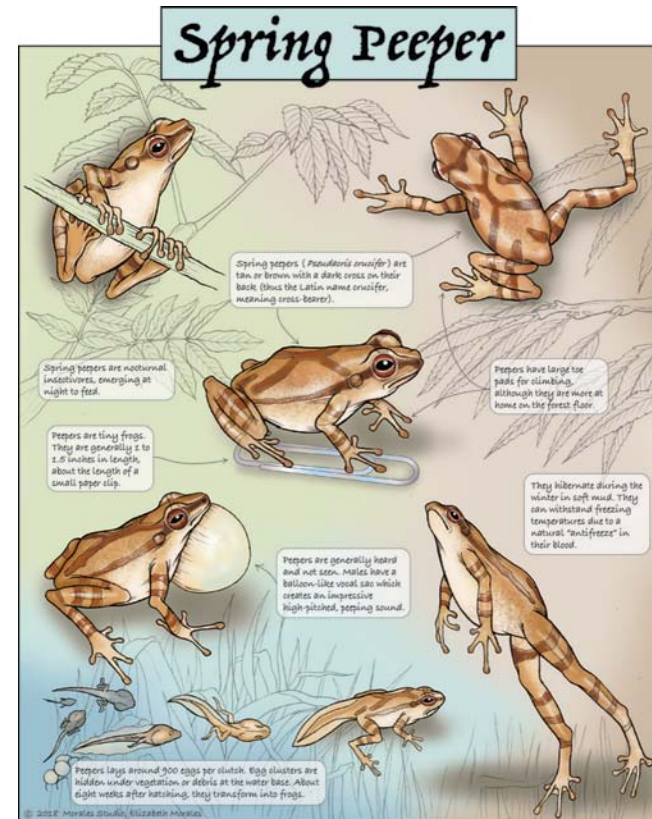
Artist: ©2018 Nicole Monique

Medium: Watercolor and Gouache

Frame size: 20 x 16 — Mat opening: 14 1/2 x 10 1/2

Despite weighing as little as three pennies, with a body smaller than a human thumb, this little brown bat has a huge appetite. A pregnant or nursing female can eat her weight in insects each night, greatly reducing human dependence on toxic insecticides.

Once one of the most abundant predators in North America, it has been almost wiped out in many areas by white-nose syndrome, a fungal disease spreading at a devastating rate.



Title: Spring Peepers (*Pseudacris crucifer*)

Artist: ©2018 Elizabeth Morales

Medium: Graphite and Photoshop™

Frame size: 20 x 16 — Mat opening: 13 1/2 x 11

Spring peepers are tiny frogs—only 1 - 1.5 in (2.5 - 3.8 cm) in length. They are tan/brown with toe pads for climbing and webbed hind feet for support. Peepers feel most at home among the moist leaf litter near ponds. They are rarely seen, but during mating season they are most certainly heard. Males congregate near ponds and peep with high-pitched energy to attract a mate.



Title: Dinner at Twilight; Common Nighthawk (*Chordeiles minor*)

Artist: ©2018 Margaret Nelson

Medium: Digital print

Frame size: 16 x 20 — Mat opening: 10 3/4 x 14 1/2

This nighthawk is common in the Northeast U.S. but is seldom noticed as it is mainly active at dawn and dusk. In the past, nighthawks nested on rocky outcrops, burned areas, or on sandy gravel, laying two eggs laid on bare ground. They have now accommodated to our cities, where they find good nesting on flat gravel roofs, and where city lights attract plenty of the insects on which they feed.



Title: Ants, Sleeping (*Camponotus species*)

Artist: ©2017 Margaret Nelson

Medium: Digital print

Frame size: 12 x 16 — Mat opening: 11 1/2 x 7 7/8

Ant biologist Professor Bert Hölldobler recounted an observation of carpenter ants in their nest, lying on their sides in the pupal position, which he "... 'wakened' by gentle probing with a pair of forceps. For a few seconds the awakened ants moved sluggishly before commencing the typical swift movements of a worker ant."



Title: Brook Trout (*Salvelinus fontinalis*)

Artist: ©2017 Louisa Sandvik

Medium: Watercolor

Frame size: 16 x 20 — Mat opening: 8 1/2 x 12 1/2

The brook trout, the state fish of New York, can be recognized by the pattern of wavy lines, or vermiculations, on its dark, olive-green back. This is the same pattern created when the sun shines through rippled water to cast shadows on the bottom. The wavy lines camouflage the trout, helping it to avoid predators from above such as herons and kingfishers.



Title: Great Horned Owl (*Bubo virginianus*)

Artist: ©2018 Louisa Sandvik

Medium: Watercolor

Frame size: 16 x 20 — Mat opening: 10 x 14

Like many owls, the great horned owl is generally nocturnal, hunting for small mammals, birds and other prey, silently and unseen. They may occasionally hunt during daylight, but they are mostly hidden in dense cover during the day. The great horned owl lives in a wide variety of habitats, which may include a mix of forested lands and open fields and wetlands.



Title: Raccoon (*Procyon lotor*)

Artist: ©2018 Sara Schaffzin

Medium: Colored pencil

Frame size: 12 x 16 — Mat opening: 8 1/2 x 11 1/2

In human environments, raccoons are known for their nighttime food-seeking mischief. They use their long, supple fingers much more than their eyes to acquire sensory data about objects they touch. They wet their food—not to “wash it” as is commonly thought—but because the moisture makes the nerve endings in their hands more receptive, giving them more information about potential food sources.



Title: Common Mudpuppy (*Necturus maculosus*)

Artist: ©2017 Kathy Schlough

Medium: Watercolor

Frame size: 12 x 16 — Mat opening: 8 1/2 x 12

The common mudpuppy is a species of salamander. They are completely aquatic and live in eastern North America. Mudpuppies have external red feathery gills and use them as their primary means of gas exchange. I had the pleasure of meeting my first mudpuppy growing up on a farm in Pennsylvania when my brother found him hiding in our wet unfinished basement.



Title: Hologram Moth (*Diachrysia balluca*)

Artist: ©2018 Bridget Bossart van Otterloo

Medium: Watercolor

Frame size: 12 x 16 — Mat opening: 10 3/4 x 11 1/2

The hologram moth's coloring makes it elusive to predators in the woods. The forewings have large patches of dull, metallic green; the hindwings are grey brown and unmarked. I added copper leaf to the painting to show the iridescence on the moth's wings.

The source photo for this painting was taken by my friend Monika Wood on a hiking trip around the Finger Lakes area.



Title: Luna Moth (*Actias luna*)

Artist: ©2018 Susanne Williams

Medium: Watercolor

Frame size: 16 x 20 — Mat opening: 10 1/2 x 15

Although they are common, and large—with a wingspan of up to 4 1/2 in (11.43 cm)—sightings remain elusive; the luna moth lives for one week with only one or two generations each summer. Also, as their name implies, they generally fly at night.

I was attracted to the brilliant color of a caterpillar on a maple tree. Research led me to the lovely adult moth.

Reception / Draw-In

Cumming Nature Center, March 24, 2018



(l-r): Members Kate Fady, Norm Frisch, Liisa Mobley, Lucy Gagliardo, Camille Ducet, Henrike Burton, Gretchen Halpert, Sue Williams, Marla Coppolino, Elizabeth Andrews. Photo: Susan Wilson



Members and also various guests who came and went throughout the day honed their sketching skills during the reception / draw-in. Photo: Marla Coppolino

Elizabeth Andrews commissioned Rob D'Alessandro of Garden Recording Lockport, NY to create a music composition using sounds of the creatures included in our exhibit. It was played during our reception.

Exhibit Committee:

Lucy Gagliardo

Liisa Mobley

Nicole Monique

Margy Nelson

Norm Frisch (catalog)

Exhibit Venues

Cumming Nature Center (RMSC); 6472 Gulick Road, Naples, NY

EXHIBIT: February 3 - May 13, 2018 — RECEPTION: 10 a.m. - 2 p.m.; March 24, 2018

Thanks to:

Nathan Hayes, Director, Cummings Nature Center

William Holowka, Senior Preparator

Sarah LeCount, Collections Manager

Kathryn Murano, Senior Director of Collections and Exhibitions

Lois R. Shaffer, Deputy Director, Design / Exhibits Services

Beaver Lake Nature Center; 8477 East Mud Lake Road, Baldwinsville, NY 13027

<http://www.onondagacountyparks.com/parks/beaver-lake-nature-center/>

EXHIBIT: May 17 – June 25, 2018 — RECEPTION: 1:00 - 4:00 p.m.; June 17, 2018

Thanks to:

Jennifer Maguder, Naturalist

Armando Villa-Ignacio, Naturalist

History of the Finger Lakes Chapter of the Guild of Natural Science Illustrators, Inc.

The Guild of Natural Science Illustrators (GNSI) was created in 1968 as a way to network among the illustrators of the Smithsonian Museum in Washington, D.C. It has rallied thousands of otherwise isolated natural science artists around the nation and around the world, through the web and through the Guild's famous week long summer conference. In 2003, out of this long and fruitful Guild collaboration, the Finger Lakes chapter was created. We meet several times a year, and enjoy our camaraderie in artistry! We "show and tell" our current work, and also share advice about art techniques and professional tips. We offer mini workshops from time to time, and, also, meet to paint at chosen locations. In recent years, we have worked with the Cornell Plantations to invite teachers of professional interest.

We strive to have group shows on a regular basis. Our shows often have themes, such as: "The Sweet-voiced Bird Has Flown: Portraits of Common Birds in Decline;" "Marsh Madness," which was a show about wetlands of upstate N.Y.; and "Weeds: Untamed Wonders." Our group has shown at various venues in New York State, including the RMSC Cumming Nature Center in Naples; the Cornell Lab of Ornithology, Ithaca; Mann Library at Cornell University, Ithaca; Rockefeller State Park Preserve in Pleasantville; New York Hall of Science in Queens, and Upstate Medical Health and Science Library in Syracuse, the Montezuma National Wildlife Refuge Visitor Center, the Community School of Music and Art in Ithaca, and the Lime Hollow Nature Preserve in Cortland.

In 2008 we hosted the national GNSI conference in Ithaca, N.Y.

For more information about the national Guild, please visit the website:

www.gnsi.org

*If you are interested in the Finger Lakes Chapter, please contact us at
gnsi.fingerlakes@gmail.com, or visit our website at:*

<http://gnsifingerlakes.wix.com/gnsi-fingerlakes>