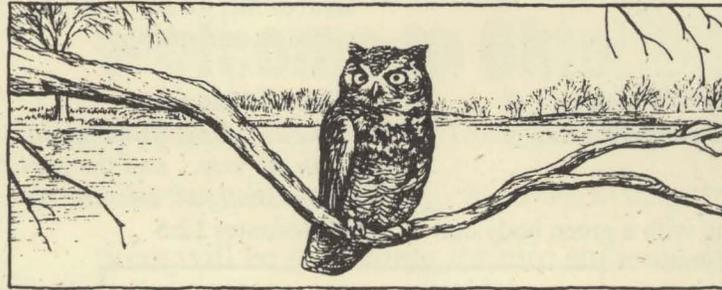


STILLMAN NEWSLETTER



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GRASSHOPPERS: The Long & Short of it

-- Mark Spreyer

This autumn, Stillman will once again host every second grade class from Barrington District 220. The classes will be studying insects and almost every student is likely to get a close look at a grasshopper.

So let's join them and take a close look at two types of grasshoppers commonly found in our area.

Katydids and Locusts

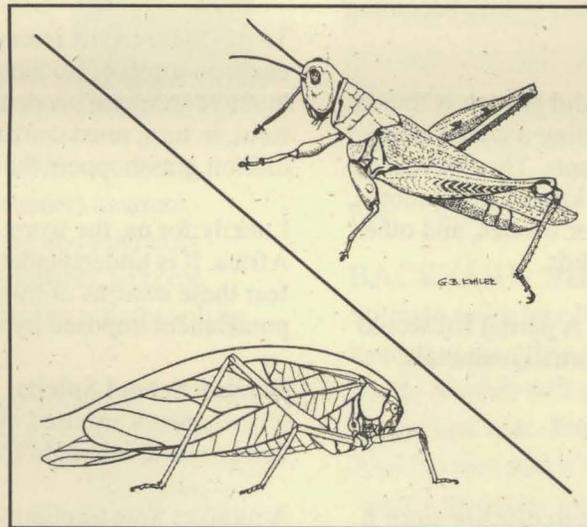
This is not complicated. If a grasshopper has slender antennae that are longer than its body, it is a long-horned grasshopper. Katydids, for example, are long-horned grasshoppers.

If the antennae are much shorter than its body, it is a short-horned grasshopper. Some types of short-horned grasshoppers are known as locusts.

All grasshoppers, and crickets for that matter, belong to an Order of insects called Orthoptera, meaning straight-winged. This certainly describes short-horned grasshoppers. At rest, their outer wings run straight along their bodies. In comparison, long-horned grasshoppers hold their wings in more of a tent-like fashion.

Both types of grasshoppers spend their winters as eggs. Katydids lay their eggs in plant tissue while short-horned grasshoppers lay their eggs in the ground.

Speaking of eggs, female long-horned grasshoppers are equipped with long, swordlike ovipositors which is a fancy word for egg layers. These little harmless swords, mounted at the end of the abdomen, can be quite noticeable. Female locusts, on the other hand, have blunt-tipped tail ends.



For the scientifically inclined, short-horned grasshoppers belong to the Family Acrididae. Long-horned grasshoppers, like the katydid at the bottom, belong in the Family Tettigoniidae.

Long and short-horned grasshoppers have well-developed compound eyes and chewing mouthparts. They also have large, muscular hind legs that are used for more than just jumping

Grasshopper Summerfest

What's a summer festival without music? When it comes to the sounds of summer, grasshoppers really get the joint jumping, so to speak.

Grasshoppers produce incessant, pitchless almost mechanical sounds. Most short-horned hoppers do this by rubbing a series of projections on their large hind legs against a scraper on their wings. It reminds me of that ribbed wooden block I used to rub with a stick in elementary school.

Long-horned grasshoppers strum a scraper on one wing across a filelike ridge on the other wing.

When it comes to the festival's food booths, grasshoppers will be lining up for vegetarian fare.

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If times are tough due to drought or overpopulation, grasshoppers can become scavengers, carnivores, or even cannibals.

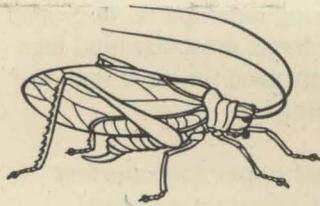
Common Meadow Katydid (*Orchelimum vulgare*)

Now, let's zoom in on one example of each type of grasshopper. We'll start with the common meadow katydid.

They are about 1.25 inches long with a green body and pale brown legs. This color scheme helps camouflage them in their preferred habitats of fields and low meadows.

A female meadow katydid, which is larger than the male, is choosy about where it lays its eggs. She will chew test holes in several stems before turning around and inserting her eggs in the hole. When done, she'll chew the hole shut.

In the winter, little meadow katydid nymphs stay dormant in their eggs waiting to emerge in late spring. They will shed their skins several times before becoming adults in late July.



Katydid growth is fueled by eating a wide variety of plants. They have also been known to eat moths, soldier beetles, and other katydids.

Many insectivores dine on katydids. A partial list would include other insects, frogs, snakes, small mammals, spiders, and birds.

Red-legged Grasshopper (*Melanoplus femurrubrum*)

This inch-long locust can be difficult to identify since it comes in shades of green, yellow, red-brown, and dark brown.

The hind legs are, indeed, red or yellowish. If you have one in hand, the black herringbone pattern on the femurs is quite distinctive.

If you do have one in hand, you are also likely to be stained by "tobacco juice," digestive juices produced by the grasshopper to discourage predators. Not to worry, this juice is harmless to us.

They would rather escape their enemies by flying which, much to the dismay of a net-wielding child, they are quite good at. Red-legged grasshoppers can fly up to forty feet, usually about three feet above the vegetation.

Speaking of vegetation, the list of their food plants is extensive including sweetclover, goldenrods, chicory, ragweed, dandelion, vetches, trefoils, plus a variety of grasses. Farmers are not too fond of this locust as they also eat alfalfa, soybeans, oats, corn, cabbage, and potatoes.

Biblical Plagues?

...they shall be afraid of that which is high, and terrors shall be in the way... and the grasshopper shall be a burden, and desire shall fail; because man goeth to his everlasting home...
Ecclesiastes 12:5

*Peace to the ever-murmuring race!
And when the latest one
Shall fold in death her feeble wings
Beneath the autumn sun,
Then shall she raise her fainting voice,
And lift her drooping lid,
And then the child of future years
Shall hear what Katy did.*

--Oliver Wendell Holmes

My my, that doesn't sound too good for the grasshopper what with that everlasting home and all. You see, some species of short-horned grasshoppers, known as the plague locusts, have solitary and gregarious phases. The latter form huge "clouds" that can number into the tens to hundreds of millions.

These species are generalist feeders and can devour hundreds of square miles of crops. Keep in mind that they aren't specializing in crop plants, they are just taking advantage of a conveniently concentrated food source.

To put these locust numbers in perspective, let's review the food chain courtesy of textbook author G. Tyler Miller, Jr., "One hundred trout are needed to support one man for a year. The trout, in turn, must consume 90,000 frogs, that must consume 27 million grasshoppers that live off of 1,000 tons of grass."

Luckily for us, the worst of these plague locusts live in northern Africa. It is understandable that early civilizations came to fear these swarms of hungry locusts and thought of them as a punishment imposed by a wrathful god.

Sunday School Spirits

Grasshoppers are used elsewhere in religious teachings. With that in mind, I thought this last story might be of interest.

A minister was teaching his fifth grade Sunday school class about the life of John the Baptist. He told how John had lived in the wilderness with little to eat besides honey and locusts.

A little girl asked what locusts are. The minister said, "A locust is a grasshopper." The little girl responded, "Oh, my grandmother *drinks* those."



OKTOBIRDFEST STILLMAN NATURE CENTER OKTOBIRDFEST

 OCTOBER 2013

Welcome to OktoBIRDfest!

During weekends in October, Stillman will host five different bird activities. From our Big Sit to the ever-popular Raptor Sunday, there will be something for bird students of all ages. So, depending on the day, bring your binoculars, camera, or just your curiosity and our expert guides will help you celebrate Stillman's third annual OktoBIRDfest!

THE BIG SIT

With the help of Prairie Woods Audubon, we're happy to once again host the "Lazy Birder's" field trip. No walking is required. We will sit by the lake and let the birds come to us. Bring a folding chair, if you like.

Date: Saturday, Oct. 5
 Time: 3:00PM to sunset
 Age: 10 years and up
 Fee: None



BIRD BANDING OPEN HOUSE

Watch Mark Spreyer (a licensed bird bander) measure, weigh and record data about our resident and migratory birds. Catching birds is not always predictable, so come prepared to hike the trails. If it's raining, the activity will be cancelled.

Did you know the German ornithologist Johannes Thienemann pioneered bird banding and established the world's first bird observatory?

Date: Sunday, Oct. 6
 Time: 9:00AM to Noon
 Fee: None



SUNDAY MORNING BIRD WALK

Mark Spreyer and Mike Levin will lead a morning bird walk. Binoculars and field guides are a must. If you don't have any, don't worry, Stillman does.

Those who join us for this walk wearing lederhosen will receive a year's free membership to Stillman Nature Center.

Date: Sunday, Oct. 13
 Time: 8:00AM
 Fee: None
 Age: 10 years and up

DON'T MISS RAPTOR SUNDAY!

Now's your chance to meet the great horned, barred, barn, and screech owls. Stillman staff will also present a peregrine falcon, broad-winged hawk, and red-shouldered hawk. We will bring the birds out so you can see them up close. Kids will have a chance to dissect owl pellets. Bring a camera and a friend! Drop by anytime between 1:00 and 3:00 in the afternoon.

Date: Sunday, Oct. 20
 Time: 1:00-3:00PM
 Fee: \$10/car



BACKYARD BIRD FEEDERS

Stillman volunteer Jim Kaltsas invites you to try your hand at making log-style suet feeders. Suet specialist Becky Menich will also be on hand to share her recipe for the best suet. Trust me, we've used her suet and it's outstanding! There's no better way to add color to your winter yard than by attracting birds to your own feeder. Call 847-428-OWLS (6957) to make reservations.

Date: Sunday, Oct. 27
 Time: 2:00PM
 Fee: None
 Limit: One feeder per family



Bird photos by Karen Lund.

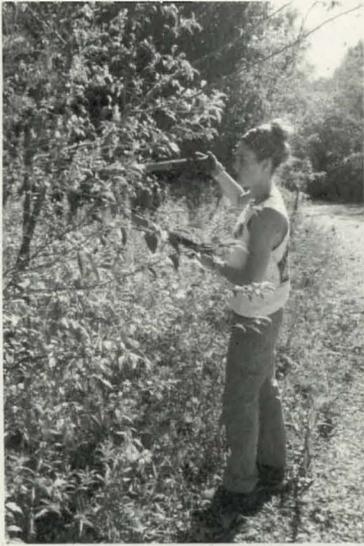
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Stillman Volunteers' Photo Album



Kirsten James, shown here clearing a trail, started as a high school volunteer and became a college intern. She'll be returning to the University of Wisconsin - Stevens Pt. this fall, leaving Stillman in much better shape than she found it.

Photo by Yvette James.



Last spring we planted some oak saplings. Volunteer Yvette James checks that the young tree is planted at the right depth.

Photo by Sue Kowall.



Long-time volunteer and Board Vice President Jim Kaltsas makes sure the sapling is properly mulched.

Photo by Sue Kowall.



Pat Irvin joined our Sat. morning raptor maintenance crew over a year ago. Here she poses with our red screech owl during last July's Raptor Photo Day. Another Raptor Day is scheduled this October.

Photo by Tom Soltis.



This spring both the Stillman Nature Center and its Executive Director, Mark Spreyer, received Environmental Preservation awards from the Garfield Farm Museum. Sue Allman and Mark are shown with the awards. As the Museum wrote, "It began in 1984 with Alexander Stillman's gift of his 80 acre estate.... Since the initial bequest, dedicated volunteers have worked to present the site as an environmental education center raising funds and laboring to improve wildlife habitat." Amen to that and thank you to ALL our volunteers!

Photo by Garfield Farm Museum.



We offer outdoor activities at Stillman all year. Dedicated volunteer and Board President Sue Allman kicks off a tracking program on the dock.

Photo by Sue Kowall.



Becky and Barry Menich help Mark widen a trail. This same trail will be used by District 220's second graders this fall.

Photo by Sue Kowall.

PROGRAMS

Program Basics: PLEASE CALL OR FAX US AT (847) 428-OWLS(6957), OR EMAIL STILLMAN: stillnc@wildblue.net TO MAKE RESERVATIONS for programs. Remember to include your name, phone number, and the number of people that will be attending.

If less than five people plan to attend two days prior to a program, the activity could be cancelled. So, don't forget to call the nature center in advance. If you discover that you are unable to attend, please call to cancel your reservations. This courtesy will be greatly appreciated.

SOLAR OBSERVING ON SUNDAY

Join the Northwest Suburban Astronomers and observe our nearest star with special telescopes and filters. See sunspots and solar prominences in remarkable detail! This will be a fun and safe activity for the entire family.

After observing the sun, take a hike on your own or join a walk led by Stillman's naturalist.

If you like, bring a dish and join us for a potluck picnic. Remember to call Stillman at (847) 428-OWLS and let us know if you're coming. If the weather is iffy, call Stillman for an update before making the trip.



Date: Sunday, Sept. 1
Time: Noon - 3:00PM

SUNDAY MORNING BIRD WALKS

Mark Spreyer and Mike Levin will lead a morning bird walk. Binoculars and field guides are a must. If you don't have any, don't worry, Stillman does.

Date: Sundays, Sept. 15 & Oct. 13
Time: 8:00AM
Fee: None
Age: 10 years and up



FRIDAY NIGHT CAMPFIRE

Join us for stories and roasted marshmallows. Say goodbye to summer and listen for the sounds of nocturnal wildlife. Speaking of which, we'll end the evening with a visit to our resident owls.

Date: Friday, Sept. 20
Time: 7:00-8:00PM
Suggested Donation: \$2.00/person



SPECIAL VOLUNTEERS AND MEMBERS EVENT

We'll provide the main course and beverages. We'd like you to bring along a side dish. ALL of Stillman's members, friends, volunteers and their families are invited. We'd love to see you. Feel free to come any time between 4:00 and 6:00 PM but please do call or email to let us know you're coming and what kind of dish you'll be bringing. Come dressed for the weather because we'll be gathering outside.

Date: Sunday, Sept. 22
Time: 4:00 - 6:00PM

TREE I.D. OR THIS BUD'S FOR YOU!

As the leaves turn color, join Stillman's naturalist as he shows you how to identify some of our Midwestern trees. Easy to remember tips and simple hand-outs will inspire you to open your own "branch office." Come prepared to be out in the weather.

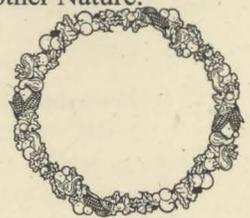
Date: Sunday, Sept. 29
Time: 2:00PM
Fee: None



FESTIVE FALL DECORATIONS

Susan Kowall and Susan Allman will help you design a door decoration featuring bittersweet, grapevine wreaths, and other colorful products from Mother Nature.

Date: Sunday, Oct. 13
Time: 2:00-4:00PM
Member's Fee: \$5/wreath
Non-Member's Fee: \$10/wreath



NEW YEAR'S DAY WALK

Join us for the annual New Year's Day walk along Stillman's trails. Over the years, we've seen everything from bluebirds and shrikes to the remains of multiple coyote kills. If you like winter or can only take so much football, this is the walk for you.

Date: Wednesday, Jan. 1
Time: 10:00AM
Age: 10 years and up

Please note that the Stillman Nature Center is also available, by reservation, during the week to school classes. Also, we can bring our raptors to your meeting place. For more information just call, email, or visit our website: stillmanncc.org

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If you aren't already a member, please consider joining us.

Yes, I'd like to become or continue as a member of the Stillman Nature Center.

You can also join online, just visit stillmannc.org and click on "Become a Member or Volunteer." Volunteer opportunities include teaching classes, clearing trails, and fundraising.

Name _____

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Please mail with your check to:

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Barred Owl	\$1000.00
Peregrine Falcon	500.00
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Great Horned Owl.....	100.00
Broad-winged Hawk.....	50.00
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Thank you for your donation.



Website: www.stillmannc.org

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