

STILLMAN NEWSLETTER



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NATURE'S NUTS...AND SEEDS AND FRUITS

-- Mark Spreyer

*The trees in apple orchards
With fruit are bending down...
September days are here,
With summer's best of weather
And autumn's best of cheer.*

--Helen Hunt Jackson.

What fall festival is complete without apple cider? Who hasn't watched a squirrel collecting acorns? O.K., maybe it was sneaking some sunflower seeds from your bird feeder but you know what I mean. It's harvest time on the calendar.

We humans tend to think of tasty meals at this time of year. Nature is planning or, should I say, planting the next generation. Let's take a closer look at the different ways nature does this. It isn't all about food.

A Seedy Business

Seeds are the point in being a plant. If you are an annual or biennial, your genes will be gone in a year or two if your seeds don't succeed. Even perennials aren't going to be green forever.

Just producing viable seeds, however, does not guarantee a plant's future. If seeds only fell under the parent plant, the young seedlings would all have to compete with the larger established plant for water, nutrients, soil, and sunlight.

No, that's not a good plan. The seeds need to be dispersed to new sites that, hopefully, will provide hospitable surroundings where the seedlings can take root. Nature has come up with a variety of strategies to do just that.

Floaters

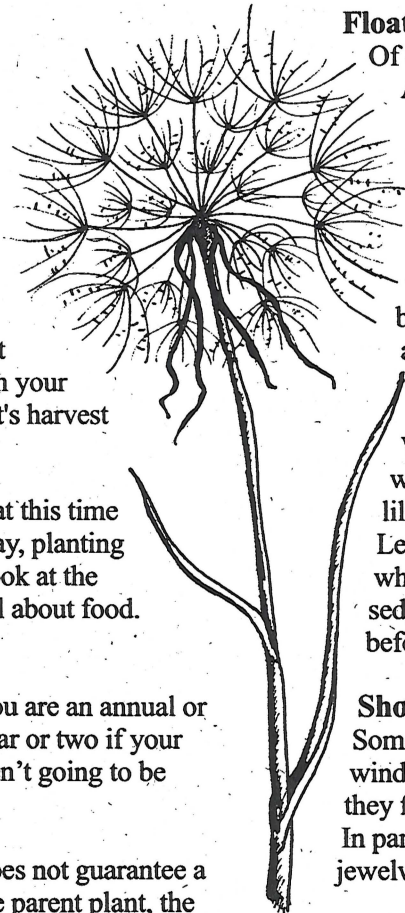
Of course, not all seeds are produced in autumn. Anyone who has cleaned cottonwood seeds from their screens or swept maple "helicopters" off their driveway knows that seeds have been falling for months. I like to refer to these seeds, along with the milkweed "parachutes" that are seen in the fall, as "floaters." That is, they are designed to float or glide in the air and be dispersed by the wind. A partial list of other airborne floaters includes dandelion, goatsbeard (see illustration), thistle, dogbane, elm, and ash.

While many seeds can be transported by moving water, some are designed for that purpose. Water lilies and coconuts immediately come to mind. Less showy examples would include certain sedges which have seeds that contain pockets of air. These sedge seeds can float on water for several months before finding conditions suitable for germination.

Shooters

Some plants aren't counting on a well-timed gust of wind or water current to disperse their fruit. Instead, they fire their seeds into the great green yonder. In particular, I'm thinking of wild geranium and jewelweed.

Wild geranium, often called cranesbill, is a woodland wildflower that sports a pointed seed pod that resembles a crane's bill. When fully ripened, the beaked pod splits into five segments that suddenly coil upward, scattering its seeds for a distance of several feet.



Yellow Goatsbeard
(*Tragopogon pratensis*)

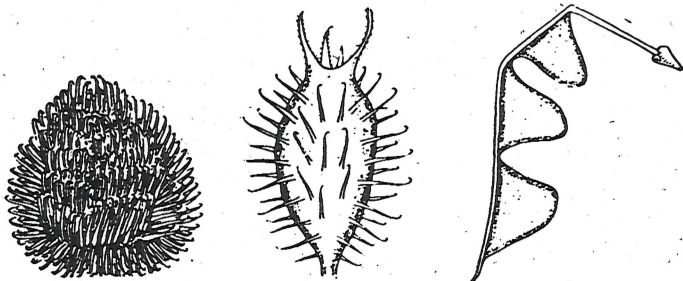
STILLMAN NATURE CENTER

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Jewelweed is also known as touch-me-not for good reason. A member of the *Impatiens* genus, the flower develops into an elastic five-chambered capsule. Touching the ripe fruit causes the capsule to open explosively, expelling its tiny seeds to a distance of as much as four feet. If you've never touched a loaded jewelweed five-shooter, as Richard Headstrom writes, "I guarantee you will jump at the unexpected volley from the miniature machine gun."

Hitchhikers

Anyone who has brushed these out of their pet's fur or picked them off their socks knows about hitchhikers. Seeds which hitch rides by hooking themselves to fur or fabric include burdock (see illustration), cocklebur, sticktight, tick-trefoil, and sweet cicely, just to name a few.



Burdock

Cocklebur

Tick-trefoil

I mention the first two since they are said to have inspired the invention of an everyday material. In 1948, George de Mestral, an amateur Swiss naturalist, took his dog for a walk. Once home, he had to remove many burs from the dog's fur and his own pants.

Being curious, he turned his microscope on the seed heads and noticed how the numerous small hooks on the seeds had attached themselves to loops in the fabric of his pants. Mestral had an idea for a new fastener.

By 1955, the inventor had patented his design for a "hook and loop fastener." Mestral went on to form Velcro Industries.

Here at Stillman, we are going to take a closer look at hitchhikers in our November Outside We Learn Stuff outing (see *Programs*).

Lunchables

If you can't hitch a ride on the outside of an animal, why not ride on the inside? This brings us to wildlife food or, what I like to call, lunchables. The list of edible wild fruits is indeed a long one. A sampling would include plums, raspberries, crabapples, grapes, mulberries, acorns, hazelnuts, elderberries, and cherries.

For an example for how this works, let's take a closer look at cherries. Approximately 100 species of wildlife dine on juicy wild cherries. Actually, the wildlife is enjoying flavorful seed containers. As you probably know, the cherry pit or seed is relatively smooth and hard. Not surprisingly,

it passes through an animal's digestive tract unharmed, only to be deposited in a convenient pile of manure quite some distance from where it was first ingested.

Drinkables

While these various approaches to plant distribution do work, humans can be a little more single-minded when it comes to furthering plant distribution. This brings me back to apple cider.



Johnny Appleseed

In order to make cider, you squeeze the juice from apples in cider presses. The leftover pressings contain, as you might imagine, an abundance of apple seeds. One dedicated apple lover, Jonathan Chapman aka Johnny Appleseed, repeatedly visited the cider presses of western Pennsylvania to gather apple seeds with which to plant new trees. Domestic apple trees, by the way, only existed on the East Coast since it was early colonists who first brought them to this continent.

By the time of his death in 1847, the seeds from those presses grew into apple orchards scattered across thousands of square miles of what is now Indiana and Ohio.

If you prefer a more potent drinkable derived from a flavorful seed container, I'll leave you with another verse from Helen Hunt Jackson.

*Then for "October Month" they put
A rude illuminated cut--
Reaching ripe grapes from off the vine,
Or pressing them or tunning wine;
Or something to denote that there
Was vintage at this time of year.*

SPECIAL VOLUNTEERS AND MEMBERS EVENT

On Saturday, 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 and talk with you. Feel free to come any time between noon and 3:00 PM but *please do call or email to let us know if you plan to attend and what kind of dish you'll be bringing.*

Date: Saturday, Sept. 25
Time: Noon - 3:00PM

Please note that the Stillman Nature Center is also available, by reservation, during the week to school classes. For more information just call or email us at stillnc@wildblue.net.

PROGRAMS

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

If less than 5 - 10 people (varying with the activity) have called two days prior to a program, the program 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.

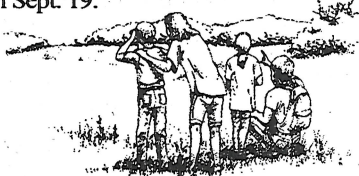
If you like, bring a dish and join us for a potluck picnic. *Remember to call Stillman at (847) 428-OWLS and let us know if you're coming.* If the weather is iffy, call Stillman for an update before making the trip.

Date: Sunday, Sept. 5
Time: Noon - 3:00PM

SUNDAY MORNING BIRD WALK

Mark Spreyer will lead a morning bird walk. Binoculars and field guides are a must. If you don't have any, don't worry, Stillman does. If it's raining, we will try again on Sept. 19.

Date: Sunday, Sept. 12
Time: 8:00AM
Fee: None
Age: 10 years and up



NEW FAMILY SERIES CONTINUES:

Outside We Learn Stuff!

O.W.L.S. is a monthly nature club for families. The simple idea is to get more families outside together. The club is open to anyone with a sense of adventure. Parents are required to stay with their children at all times. This season we will be looking at pond life, fall colors, and seeds. Space is limited so please call or email Stillman to let us know if your family wants to join Stillman's OWLS.

Date: Saturdays: Sept. 18, Oct. 9, Nov. 13
Time: 10:00AM
Age: Kids age 5 - 12 with parent(s)
Member's Fee: Free
Non-member's Fee: \$10.00/program

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.

Date: Sunday, Oct. 3
Time: 9:00 AM to NOON
Fee: None

THE BIG SIT

With the help of Prairie Woods Audubon, we're happy to once again host the "Lazy Birder's" field trip. Little walking is required. We will sit by the lake and let the birds come to us.

Date: Saturday, Oct. 9
Time: 3:00PM until sunset
Age: 10 years and up
Fee: None

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, Oct. 10
Time: 2:00PM
Fee: None



FESTIVE FALL DECORATIONS

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

Date: Sunday, Oct. 17
Time: 2:00 - 4:00PM
Member's Fee: \$5/decoration
Non-Member's Fee: \$10/decoration



DON'T MISS RAPTOR SUNDAY!

Here's your chance to meet owls and hawks plus a peregrine falcon. 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. 24
Time: 1:00 - 3:00 PM
Fee: \$5/car

YULE LOG OPEN HOUSE by the Two Sues

The dynamic duo of Susan Kowall and Susan Allman are back to show you how to make this festive seasonal decoration out of natural materials. It makes a great centerpiece. Kids are welcome but no scout groups, please. Stop by anytime between 2:00 and 4:00PM. Also, please call in advance to let us know if you are coming. We don't want to run out of supplies!

Date: Sunday, Dec. 5
Time: 2:00 - 4:00PM
Member's Fee: None
Non-Member's Fee: \$5/log

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 coyote kills. If you like winter, don't like football, or need to sober up; this is the walk for you.

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