

HabiChat

Fall/Winter 2016
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Michael Bentley, Flickr CC by 2.0

For stewards of Maryland's backyard wildlife

HABITAT - the arrangement of food, water, cover, and space - IS THE KEY.

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Forward

Welcome to the combined Fall/Winter Issue of Habi-Chat! This issue is dedicated to northern red oaks and their importance for local wildlife as well as eastern screech owls, how to select the right bird seed, and how to track backyard wildlife with trail cameras. As a fun children's activity, we also have included a fall sensory hike printout to encourage outdoor exploration.

If there is a particular topic that you would like to see on our site, then please don't hesitate to contact me to let me know! My information can be found at the bottom of this newsletter. Happy Habitats!

*Sincerely,
Kerry Wixted*



Maryland Native Plant Profile:

Northern Red Oak (*Quercus rubra*)

Northern red oak (*Quercus rubra*) is a high wildlife value tree in the oak family (Fagaceae). This large oak averages 65 to 98 feet in height and prefers partial to full sun environments. It grows best in well drained soils on mid-lower slopes and can tolerate a variety of soil types including silt, loam, and clay. Northern red oaks are purported to live up to 500 years!

Northern red oak has simple, alternate leaves with 7-9 lobes ("arms"). The leaves tend to grow 5-10 inches in length, but leaves in full shade can sometimes grow larger. In the fall, leaves turn rusty red to scarlet in color. The bark is dark reddish brown with thick ridges. The bark, leaves, twigs, and acorns are all rich in tannins.



By: Rudolf Schäfer Flickr CC BY-SA- 2.0

Northern red oak flowers are borne on drooping clusters known as catkins. They emerge in early April, around the time the leaves also come out on the tree. The trees begin producing acorns around 25 years of age and some take up to 50 years to produce abundant acorn crops. Acorns take approximately 18 months to develop on the tree. Good acorn crops (aka mast) occur every 2-5 years depending on the tree and environmental factors. While acorns are high in tannins, they are still consumed by over 100 vertebrate animals including black bears, white-tailed deer, wild turkeys, northern bobwhite quail, woodpeckers, flying squirrels, foxes, and more. Interestingly enough, it takes about 3 months of cold temperatures for acorns to break dormancy and sprout. On average, only 1 in every 500 red oak acorns is able to sprout. In poor mast years, as much as 100% of the acorn crop will feed local wildlife species. Squirrels and gravity are the two main dispersal mechanisms for northern red oak acorns.



Northern red oak in fall (left) and bark (right) By: Katja Schulz Flickr CC BY 2.0

Northern red oak also supports numerous butterfly and moth species. Several hairstreak butterflies (*Satyrrium* spp.), skippers (*Erynnis* spp.), and over 20 species of moths consume the leaves and/or acorns.

Northern red oak is a popular tree for many landscapes, but it is important to give it room to grow. One issue to note: red oaks are susceptible to oak wilt. Oak wilt kills young and mature oak trees. The early symptoms often include leaves that turn dull green or bronze or appear water-soaked. Eventually, the leaves wilt, turn yellow or brown and drop off the tree in May and June. At this time, oak wilt has been found in a localized area of western Maryland.



Juvenal's Duskwing utilizes red oak by
Kerry Wixted

In Brief: 2016 Western Maryland Mast Survey



By Botaurus - 11 Oct. 2007,
Public Domain

The 2016 Western Maryland mast survey showed improved productivity over 2015. Garrett County ranked 'Abundant' overall while Allegany, Washington and Frederick counties all received an overall ranking of Poor and Spotty.

Years of poor or no mast production can present a challenge to the various wildlife species that depend on acorns as their primary food source. Conversely, abundant mast production allows those same species the opportunity to "fatten up" and store valuable energy reserves to help them survive through the lean winter months between growing seasons when natural foods become scarce. To see more results from the survey, check out our page here:

http://dnr.maryland.gov/wildlife/Documents/WMD_Mast_Survey.pdf

Want more Habi-chats? Check out our archives here:
http://dnr2.maryland.gov/wildlife/Pages/habitat/habichat_archives.aspx

Maryland Native Wildlife

Eastern Screech Owl (*Megascops asio*)

Eastern screech owls are relatively small owls, clocking in at less than 9 inches in height. They have large heads with distinctive ear tufts that set them apart from the smallest eastern owl, the northern saw-whet owl. Eastern screech owls have 2 color morphs- a red form and a gray form. No other owl in the East is red. The color and banding patterns on the owls provide camouflage against tree bark.

Eastern screech owls can be found throughout the eastern United States and parts of northern Mexico year round. They also are common throughout Maryland and can often be found in and around backyard habitats.



Red and gray morphs by DickDaniels (<http://carolinabirds.org/>) - Own work, CC BY-SA 3.0

Eastern screech owls consume small birds, small mammals, reptiles, amphibians, worms, insects, and crayfish. The eastern screech owl will eat mice, rats, moles, and rabbits as well as finches, doves, and more. Occasionally, the eastern screech owl will cannibalize other screech owls or the smaller northern saw-whet owls.

Eastern screech owls breed from mid-March to mid-May. They often form monogamous pairs that mate for life, though sometimes a male will take more than 1 female partner. Screech owls don't make nests, rather they occupy cavities in trees and will make use of whatever materials are in the cavity such as wood chips or an old nest.

Eastern screech owls lay 2-6 white eggs which take just over a month of incubation. Upon hatching, the owls emerge fluffy and white. It takes the nestlings around another month to mature enough to leave the nest. Competition among siblings can sometimes be fierce and can result in loss of one or more of the chicks. The male will hunt for the female and nestlings. The female will tear up the food for their young.

Eastern screech owls make 2 distinct calls- a loud, descending whinny or an even-pitched trill. Both sexes will make calls. The whinny is usually used to defend territories while the trill is used by pairs or families. Mated pairs may sing to each other both during the day and at night.



Screech owl in a cavity by Zach from Gamboa, Panama - Screech Owl 02, CC BY-SA 2.0

Eastern screech owls are relatively easy to attract to wooded backyards by providing adequate nesting habitat. By leaving [snags](#) or placing out nest boxes, you can provide nesting locations for eastern screech owls. If placing boxes out, then the best time of year is now! In late Fall/early winter, eastern screech owl males will seek out nest territory to defend and to use with their mates. For information on screech owl boxes, check out our page [here](#).

Fall HabiChat Tips

Want more tips on summer wildlife gardening? Check out our previous fall Habi-Chat newsletters for ideas!

1. [Attracting Fall Migrants](#)
2. [Fall Hawk Watching Tips](#)
3. [Fall Tips for Wild Acres](#)
4. [Fuel Fall Migrants](#)

Feeding Wildlife: Selecting the Right Seed

Fall is the prime time to start feeding birds. There are many different types of seeds available, so here's our quick guide to seed types, including:

- Nyjer
- Peanuts
- Safflower
- Shelled and cracked corn
- Sunflower
- White proso millet
- Seeds to avoid



Nyjer:

Nyjer seed is often called thistle seed, but it comes from a daisy relative known as *Guizotia abyssinica*. The small, thin nyjer seeds are popular among finch species like American goldfinches.

What it attracts: Buntings, finches, American goldfinches, common redpolls, and sparrows

Best way to offer: Nyjer feeder

Peanuts:

Peanuts whether in pieces, shelled, or whole are a great food source for many bird species. Obviously, the smaller pieces are favored by smaller birds like titmice, but blue jays easily can consume whole peanuts. Be sure to avoid peanuts with added sugar or salt as well as raw peanuts. Peanuts that stay wet for more than a day can harbor harmful fungi that can cause respiratory infections. Therefore, it is important to make sure peanuts are kept fresh and dry.

What it attracts: Chickadees, crows, blue jays, woodpeckers, titmice, nuthatches, and more

Best way to offer: Platform feeder, peanut feeder, hopper feeder (if in pieces)



By Leezie 5, Flickr(CC BY-NC-ND 2.0)

Safflower:

Safflower, like striped sunflower, has a hard shell. Therefore, it is an ideal feed for species that have seed crushing bills. Safflower hearts are also available for purchase, and like sunflower hearts, it is important to keep them fresh and away from moisture. Often, “bully birds” like grackles and European starlings will leave safflower alone.

What it attracts: Chickadees, blue jays, northern cardinals, titmice, and nuthatches

Best way to offer: Hopper feeder, tube feeder, or platform feeder

Shelled and cracked corn:

Lots of birds enjoy corn, but it is not a failsafe feeder food. First, species like house sparrows enjoy corn; and second, it can easily be contaminated. Never use red dyed corn or let corn stay wet for more than a day. Dyed corn often is treated with harmful pesticides while wet corn can harbor toxic fungi similar to those found on wet peanuts.

What it attracts: Northern cardinals, ruffed grouse, ring-necked pheasant, wild turkey, bob-white quail, house sparrows, juncos, and more

Best way to offer: Platform feeder or on ground

Sunflower:

Sunflower seed comes in two types: striped or black oil. The black oil seed is popular among many bird species as the outer shells are thin and easy to crack. The striped sunflower seed take more work and species like northern cardinals are better suited to get through the seed coats. Both types of seeds will result in discarded shells which often must be raked up and removed. Sunflower seeds without the shell (aka hearts) are available for purchase, but it is important to note that the lack of shell makes them susceptible to spoiling quickly. If using sunflower hearts, then it is a good practice to change the seed every 2-3 days and to avoid placing hearts in tube feeders where moisture can collect.

What it attracts: Goldfinches, chickadees, grosbeaks, wrens, woodpeckers, doves, nuthatches, and titmice

Best way to offer: Hopper feeder, tube feeder, or platform feeder



Chickadee enjoying sunflower seeds by Anne Davis 773, Flickr (CC BY-NC 2.0)

White Proso Millet:

Millet is a favorite seed for many birds. Unfortunately, offering millet can also bring unwanted guests like European starlings and pigeons to the feeding party.

What it attracts: Buntings, finches, juncos, sparrows, and towhees

Best way to offer: Hopper feeder, tube feeder, or platform feeder

Seeds to Avoid:

Milo (sorghum), golden millet, red millet, flax, rapeseed, and canary seed often are used as fillers for cheap seed mixes. Many of these seed types will be discarded and will often attract house sparrows and cowbirds. Doves, bobwhite quail, and finches will consume these types of seeds but usually, they prefer other types of seed.

Types of Feeders

Bird feeders come in lots of shapes and sizes and are fashioned to supply foods that attract particular groups of birds. Below is a list of common feeder types.

- **Hopper Feeders** are designed to look like houses. They typically have 4 walls and a roof to keep seeds clean and dry. Hopper feeders can come in elaborate designs and can have squirrel-proofing features. Hopper feeders are generally designed to hold larger seeds and feed larger birds.
- **Platform Feeders** can be easily made from treated plywood with raised edges and will draw in those birds that feed on the ground some or all of the time. Cardinals, blue jays, juncos, sparrows and mourning doves will flock to a mixture of millet, sunflower, cracked corn, and peanut kernels in this type of feeder. Platform feeders can also be used to offer mealworms and fruit to birds. Platform feeders are best used when mounted on poles that have predator baffles on them.
- **Tube Feeders** are especially attractive to smaller birds and are comprised of a plastic or glass tube filled with seeds. Tube bird feeders are designed to keep seed clean and dry. Tube feeders with metal feeding ports are better for areas with more squirrel traffic. Some types of tube feeders are specially designed to hold small seeds like Nyjer seeds.



White-breasted nuthatch at a tube feeder
by Kerry Wixted

Other Tips:

Don't love your feeder birds to death! It is very important to keep feeders clean and dry and to remove old, discarded seed and hulls. Every other week, remove your feeder and wash with a 10% bleach solution, rinse thoroughly with water, then dry before replacing seed. If you notice sick birds at your feeder, then consider taking it down and cleaning it. Once a week, be sure to rake up and remove old seeds and hulls. If you live in an urban area, then you may need to perform this action more frequently.

Finally, don't forget to add a winter water source! Learn more about winter water sources [here](#).



Mourning doves enjoying a heated bird bath by Linda (akahodag), Flickr CC

Winter HabiChat Tips

Check out previous Winter HabiChat articles for more ideas on Winter wildlife gardening.

1. [Dead Trees are the Bees Knees](#)
2. [Habitat Tips for Winter Wildlife](#)
3. [Make Your Own Suet](#)
4. [Pruning in Winter](#)
5. [Winter Berries for Wildlife](#)



Tracking with Trail Cameras

Trail cameras have been around for quite some time. Many people use them for tracking game animals, but the use of digital trail cameras has expanded into wildlife research as well. As a backyard wildlife enthusiast, you can use trail cameras to document local visitors to your yard.

Trail cameras come in all shapes, sizes, and price points. So, how do you find the best camera for your needs? The first step is to determine what you want to document- are you interested in pictures or videos? What quality do you want from your pictures? If using night photography, then would you rather have black and white photos or color photos? These types of questions can help you narrow down your selection.



Selecting the Right Camera

Picture quality is usually an important feature for any camera. The quality can be influenced by many factors. Generally, cameras with higher megapixel (MP) counts produce higher quality photos, but a high megapixel count with a poor lens will produce poor pictures. It is always best to look up customer photos taken with the camera to examine photo quality. Many trail cameras have 5-8 megapixel counts.

Night time is usually the best time to catch backyard mammals in action. Therefore, it is important to look into trail camera flashes before purchasing. While traditional white flash allows for color photos at night, it also has a tendency to scare or disturb the animals you are hoping to capture on camera. Cameras can also have low-glow flash options which emit a visible flash that is significantly reduced. The images will be taken as black and white photos, but it lessens the disturbance created by the flash. The final option includes no-glow flash cameras that have black LEDs which emit no light during picture capture. These photos will also be black and white. It is important to note that the number of LEDs correlates to flash range, so a higher LED count often equates to a higher distance flash range.



This camera was placed under a bird feeder and caught a local raccoon cleaning up the leftovers. This photo was taken with a low-glow flash camera. By: Kerry Wixted

Detection zones also are vital for trail camera selection. It is important to be aware of how wide and long the detection zone is on the camera you choose. Most trail cameras have a 40-60 foot detection range while higher quality cameras can achieve up to 110 foot ranges.

The trigger is usually based on heat and motion. The PIR angle, aka the passive infrared angle, refers to the degree the camera can detect movement. A large PIR angle means that the camera can detect movement faster and can have a better chance of catching the target in the center of the frame. Good quality cameras have a PIR angle of 48 degrees. The camera sensitivity is also important for detection. A high sensitivity will pick up small and large animals. Some cameras allow you to adjust sensitivity. Finally, trigger speed and recovery are also important. A faster trigger speed will allow you to capture animals that are moving quickly while a fast recovery time will allow your camera to take multiple pictures. Keep in mind, the SD card used in your camera can also impact the recovery time.

Placing the Camera

Once you have selected the perfect camera for you, the next step is to place it out in your backyard. Pay attention to areas where you have noticed scat (poop), tracks, or other wildlife sign. Cameras ideally should be placed off the ground, mounted to a pole or tree. Cameras also can be mounted to bird feeders, but be aware of focal lengths before mounting as some cameras cannot take good, up close photos. Always make sure you have permission from landowners or land managers before placing trail cameras out and consider using security locks for your camera and SD card. Try taking a couple of test shots to make sure your camera is angled in the right direction.



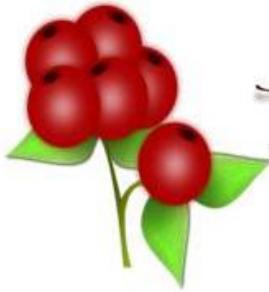
This camera was placed too close to a bait plate used for a mammal study. The results included lots of raccoon back ends! By: Kerry Wixted

Backyard Wildlife Fun

Fall Sensory Scavenger Hunt

Fall is a great time to get outside and explore! How many different objects can you find?

Look For....



Red berries



Ants



Yellow leaf



Acorn

Touch & Feel...



Pinecone



Moss

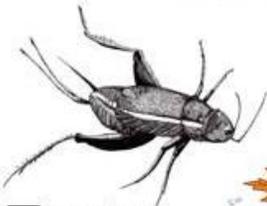


Bark



Feather

Listen For...



Crickets



Crunchy leaves



Birds singing

Smell...



An old flower



Pine needles

Download and print this document [here](#).

Acknowledgements:

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- Northern red oak fall leaves and bark by Katja Schulz Flickr CC BY 2.0
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- Bird seed mix by Algont - Own work, CC BY-SA 3.0
- Squirrel at peanut feeder by Leezie 5, Flickr CC BY-NC-ND 2.0
- Chickadee with sunflower seeds by Anne Davis 773, Flickr CC by NC 2.0
- Mourning doves at heated bird bath by Linda (akahodag), Flickr CC
- All other photos by Kerry Wixted

We want to hear from you!

Letters, e-mail, photos, drawings, etc!

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