



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

In This Issue:

- [Native Plant Profile: Eastern Hemlock](#)
- [Maryland Native Wildlife: Dark-eyed Junco](#)
- [Habitat Tips: Winter Berries for Wildlife](#)
- [Backyard Wildlife Fun for Kids: Conifer Quest](#)
- [Wild Acres in Action: Junior Girl Scout Troup 1557's Wild Acres](#)

Forward

Welcome to the Winter issue of Habi-Chat! During this time of year, many animals are snugly tucked into their winter dens. However, the animals which remain active through the winter often face shortages in food and water. So, if you are feeding birds then check out [songbird seed preferences](#) to make sure you are providing the best seeds for the birds you want to attract. In addition, consider making [homemade suet feeders](#). Also, don't forget to [provide water in winter](#). If you are interested in documenting the species that visit your feeder, then consider signing up for [Project Feederwatch](#) to record your sightings!

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!



Project FeederWatch

Embrace the winter. Count feeder birds for science!



CORNELL LAB of ORNITHOLOGY



BIRD STUDIES
ÉTUDES D'OISEAUX CANADA

Maryland Native Plant Profile:

Eastern Hemlock (*Tsuga canadensis*)

Eastern hemlock is an evergreen tree in the Pine family (Pinaceae). It is found throughout much of the northeastern and Appalachian regions of North America from Canada down to Alabama. In addition, disjunct populations of eastern hemlock can be found in areas east of the Appalachians. These stands are believed to be glacial relicts. One disjunct stand, [Masemore Hemlock Ravines](#), can be found in northern Baltimore County while an old-growth stand, [Swallow Falls](#), can be found in Garrett County.

Eastern hemlock can grow an average of 90 feet tall and has an open-growth habit. It has shiny green needles that grow up to one inch in length and can be found in two-ranks along the branch. The underside of the needles has two parallel white stripes. Around 15 years of age, eastern hemlocks will bear small, ovoid cones near the tips of their branches. The oldest recorded eastern hemlock was 988 years old.

In 1924, the invasive hemlock wooly adelgid was accidentally introduced to the United States. While feeding on the sap of hemlocks, adelgids inject a toxin that prevents the trees from producing new growth. Without treatment, the trees will die within 4-10 years. Ecologists have had success with introducing the adelgid's natural predator: the tooth-necked fungus beetle. These tiny, dark beetles specialize in feeding on woolly adelgid eggs, larvae and adults. Imidacloprid injections are also used to treat infected trees.

At one time, eastern hemlock was harvested to extract tannins from its bark while the lumber was used for pulp to create paper. Eastern hemlock stands are considered important as shelter and cover for white-tailed deer and other wildlife species, such as wild turkey, ruffed grouse, and others.



Hemlock wooly adelgid infestation by
Kerry Wixted

Maryland Native Wildlife:

Dark-eyed Junco (*Junco hyemalis*)

Dark-eyed juncos are medium-sized sparrows that breed in Canada and higher-elevation mountain forests in the U.S. However, as the temperatures begin to drop, these plump sparrows leave most of their Canadian haunts and are abundant in much of the United States. Some juncos that inhabit the Appalachian Mountains, including sections of Maryland's Garrett County, are year-round residents. Dark-eyed juncos are considered one of the most common birds in the United States, and one estimate sets this junco's total population at approximately 630 million individuals!



Dark-eyed Junco by Ken Thomas

Dark-eyed juncos have multiple color patterns specific to the region they are found within. However, most have a dark-gray or brown body with a pink bill and white belly. They have a rounded head, a short, stout bill and a fairly long, conspicuous tail with white outer tail feathers.

Typically, dark-eyed juncos breed in northern areas in the spring. They generally can be found in conifer forests consisting of pines, spruces and a mix of hardwoods. During the breeding season, males are extremely territorial towards other males which they will chase away. When courting, male juncos will perform a small display to show off their wings and tail while also offering nest materials to potential mates. After mating, females will build their nests out of grass and pine needles on the ground or in a depression made of twigs, grasses and ferns. After building a nest, females will lay 3-6 eggs which take up to two weeks to incubate. After hatching, the young take another 2 weeks to develop before they fledge from the nest. Juncos can have 1-3 broods per year.



Juncos often nest on the ground by USFWS

Dark-eyed juncos rely on seeds for as much as 75% of their diet. Juncos readily come to feeders and often prefer millet over sunflower seeds. During the breeding season, dark-eyed juncos also eat insects including beetles, moths, butterflies, caterpillars, ants, wasps, and flies. When foraging, dark-eyed juncos typically hop along the ground while pecking or scratching at the leaf litter.

In the winter, dark-eyed juncos will become less territorial and will form fairly large flocks. Juncos also will forage with other sparrows and bluebirds. Junco flocks typically have a hierarchy or pecking order, and earlier arrivals tend to rank higher in the group than later arrivals.

Backyard Wildlife Fun for Kids: Conifer Quest

(Adapted from National Wildlife Federation)

Questing for conifers can be a fun activity for anytime of the year! Conifers are plants that use cones to hold their seeds. Pines, spruces, hemlocks, cedars and firs are all conifers native to Maryland. Conifers can have small or large cones, some of which have prickles, so be careful! In addition, conifer leaves are usually flat and waxy to help prevent water loss. Some leaves, like those from cedars are scaly or braided along the twig while pines have long needles in bundles called fascicles.

Materials:

- Long piece of cardboard
- Marker
- Ruler
- Scissors or a hole punch
- Tree ID book (optional)
- Twist ties



To start out, find a long piece of cardboard to use for a conifer quest board. Take a marker and write 'Conifer Quest' at the top of the board. Punch two holes, a quarter inch apart every six inches down the center of the board. Put twist ties through the holes. Next, go exploring! When a conifer is found, take a small sprig and attach it to the board using the twist ties. Be sure to only grab small amounts of the tree and make sure to have permission to take parts of trees on other people's property. Feel free to attach any cones that might be found as well. Try to identify the trees using a book like Peterson's First Guide to Trees or by using a key online. Write the name of the tree under each sprig as well as a description of the tree such as what the needles look like and anything unique about the tree.

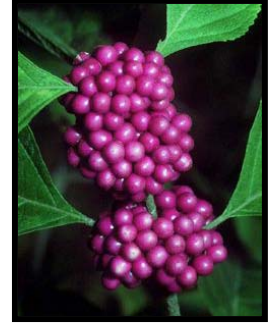


White pine (*Pinus strobus*) by Kerry Wixted

Habitat Tips: Winter Berries for Wildlife

As the temperatures begin to dip, backyard wildlife that remain active throughout the winter often shift their food preferences. While many animals are satisfied with supplemental feeding of seeds and nuts, certain species thrive off of berries and fruits. The following native plants are excellent berry resources for winter wildlife.

American Beautyberry (*Callicarpa americana*)- Beautyberries are small shrubs which can get up to 6 feet in height and can grow in most regions in Maryland. This shrub has elliptic, deciduous leaves which it loses in the fall. However, the bright violet or magenta berries will persist on the stems throughout winter. The fruits of American beautyberry are an important food source for many birds species including bobwhite quails, northern mockingbirds, American robins, eastern towhees, and brown thrashers. Raccoons, gray foxes, opossums, and white-tailed deer also consume the berries.



Beautyberry by Robert H. Mohlenbrock, USDA-NRCS PLANTS Database

Eastern Red Cedar (*Juniperus virginiana*)-Eastern red cedars can grow in any region of Maryland and are found in dry-moist soils. This tree has scale-like leaves and produces bluish-green berry-like cones from July-March. Eastern red cedars are dioecious, meaning that they need male and female plants in order to produce seeds. If you want your cedar to produce cones for wildlife, then consider planting at least 2-3 of the same species in your yard. Many birds and small mammals consume these colorful cones, especially in winter. These species include cedar waxwings, bobwhite quail, ruffed grouse, ring-necked pheasant, wild turkeys, rabbits, foxes, raccoons, skunks, opossums and coyotes.

Hollies

Both deciduous and evergreen hollies can be found growing throughout Maryland. The **American holly** (*Ilex opaca*) is an evergreen tree that is widely planted while other popular species include the shrubby inkberry holly (*Ilex glabra*) and the shrubby **winterberry** (*Ilex verticillata*). Hollies are dioecious, meaning that they need male and female plants in order to produce seeds. Like eastern red cedar, hollies are dioecious and need 2-3 of the same species in your yard to produce berries. Birds are the principal consumers of holly fruit, although deer, squirrels and other small animals eat them. At least 18 species of birds, including songbirds, mourning doves, wild turkeys and bobwhite quails, are known to eat the fruit.



Winterberry by Kerry Wixted

American Mountain Ash (*Sorbus americana*)- American mountain ash are small trees that grow up to 30-40 feet tall. They are typically found in the western portion of Maryland, though some commercially available plants are adapted to other regions. American mountain ash produce clusters of bright orange-red berries in late August and often continue to hold their fruits until late December. American Mountain Ash has a very high wildlife value- attracting everything from songbirds to small mammals.

Sumacs (*Rhus* spp.)- Sumacs can be found throughout dry, sunny areas in Maryland. Most native sumacs range from 2-20 feet tall, though staghorn sumac (*Rhus typhina*) can sometimes reach heights up to 50 feet tall. Sumacs produce upright clusters of red, fuzzy berries that often persist throughout the winter. These berries are used by songbirds, small mammals and insects. It should be noted that only poison sumac (*Rhus vernix*) causes allergic skin reactions in some people while its relatives in the *Rhus* genus do not.

Viburnums (*Viburnum* spp.)- Most viburnums grow from 10-15 feet tall and can be found in a variety of habitats throughout Maryland. Popular, native viburnums include maple-leaved viburnum (*Viburnum acerifolium*), southern arrowwood (*Viburnum recognitum*) and possum-haw (*Viburnum nudum*). All three species produce clusters of fragrant white flowers which later turn into clusters of blue berries that mature to a deep purple/black color. Deer, rabbits, mice, skunks, ruffed grouse, ring-necked pheasants, wild turkeys, and many species of songbirds eat the fruits of viburnums.



Maple-leaved Viburnum
by Kerry Wixted

Wild Acres In Action

Davidsonville Junior Girl Scout Troop #1557 scouts, Kayleigh, Kim, Bryce and Sarah, recently undertook a large habitat project to research, build and install 10 wildlife nest boxes throughout Camp Woodlands in Annapolis. The troop built and installed bat, squirrel, purple martin and opossum houses throughout the Camp as part of their Agent of Change Journey. Congrats to these scouts for a job well done!



Feel free to send me stories about your Wild Backyard!

2012-2013 Dates to Remember

- **12/16- 11-12:00pm** Winter Tree Identification Hike at Cunningham Falls State Park, \$2/person; Contact Andrew Simmons (asimmons@dnr.state.md.us) for more information
- **12/16- 3:30-5:00pm** Naturalist Show and Tell- join folks with the Natural History Society of Maryland to share and learn about discoveries around Maryland. Free. Baltimore, MD. (<http://www.meetup.com/marylandnature/events/91308342/>)
- **1/12- 9:00-4:00pm** The Woods in Your Backyard- This one-day classroom workshop presents ways that property owners can begin to develop and implement a plan to create and manage small woodlands and natural areas on their lots. Woods in Your Backyard manual included. \$40/person. Westminster, MD (<http://www.naturalresources.umd.edu/Publications/PDFs/WBYBrochure2013-Final.pdf>)
- **1/19 & 1/26- 8am – 12pm** Birds and Winter Food Sources- take a hike around Jug Bay Wetlands Sanctuary to view winter birds and the foods that they eat. \$5 entrance fee/adult. Lothian, MD. (<http://www.jugbay.org/>)
- **1/29- 7:30pm-** Oak Hybrids of our Region by Rod Simmons, hosted by the Maryland Native Plant Society at the Kensington Library in Kensington, MD. Free (<http://www.mdflora.org/>)
- **2/16- 10:00am-12:00pm** Great Backyard Bird Count training- Learn about our common backyard birds, how the GBBC collects data, then take a stroll with us to see some live wild birds. All ages welcome. \$5 entrance fee/adult. Lothian, MD. (<http://www.jugbay.org/>)
- **2/16-** Ruminant Revolution: Use of Sheep and Goats to Manage Unwanted Vegetation in Woodlands and Recreation Areas- This workshop will show livestock producers, landowners, and land managers how sheep and goats can be an effective tool for the control of invasive or unwanted species. Contact Nevin Dawson at ndawson@umd.edu or 410-827-8056 for more information. Wye Mills, MD.

Acknowledgements

- Dark-eyed Junco photo by Ken Thomas
- Dark-eyed Junco nest photo by USFWS
- American Beautyberry photo by Robert H. Mohlenbrock, USDA-NRCS PLANTS Database
- Scout photos from Troop #1557
- All other photos by Kerry Wixted

We want to hear from you!

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

Kerry Wixted
Maryland Wildlife and Heritage Service
580 Taylor Ave., E-1
Annapolis MD 21401
phone: 410-260-8566
fax: 410-260-8596
e-mail: kwixted@dnr.state.md.us

Habichat, the newsletter for Maryland's Stewards of Backyard Wildlife, is published by the Wildlife and Heritage Service, Maryland Department of Natural Resources. The facilities and services of the Maryland Department of Natural Resources are available to all without regard to race, color, religion, sex, sexual orientation, age, national

origin, physical or mental disability. This document is available in alternative format upon request from a qualified individual with a disability.