OHIO STATE UNIVERSITY EXTENSION

Ohio Woodlands Water Wildlife

Spring 2016

The Ohio Woodlands, Water, and Wildlife Newsletter is published in part with funding from the Renewable Resource Extension Act (RREA).

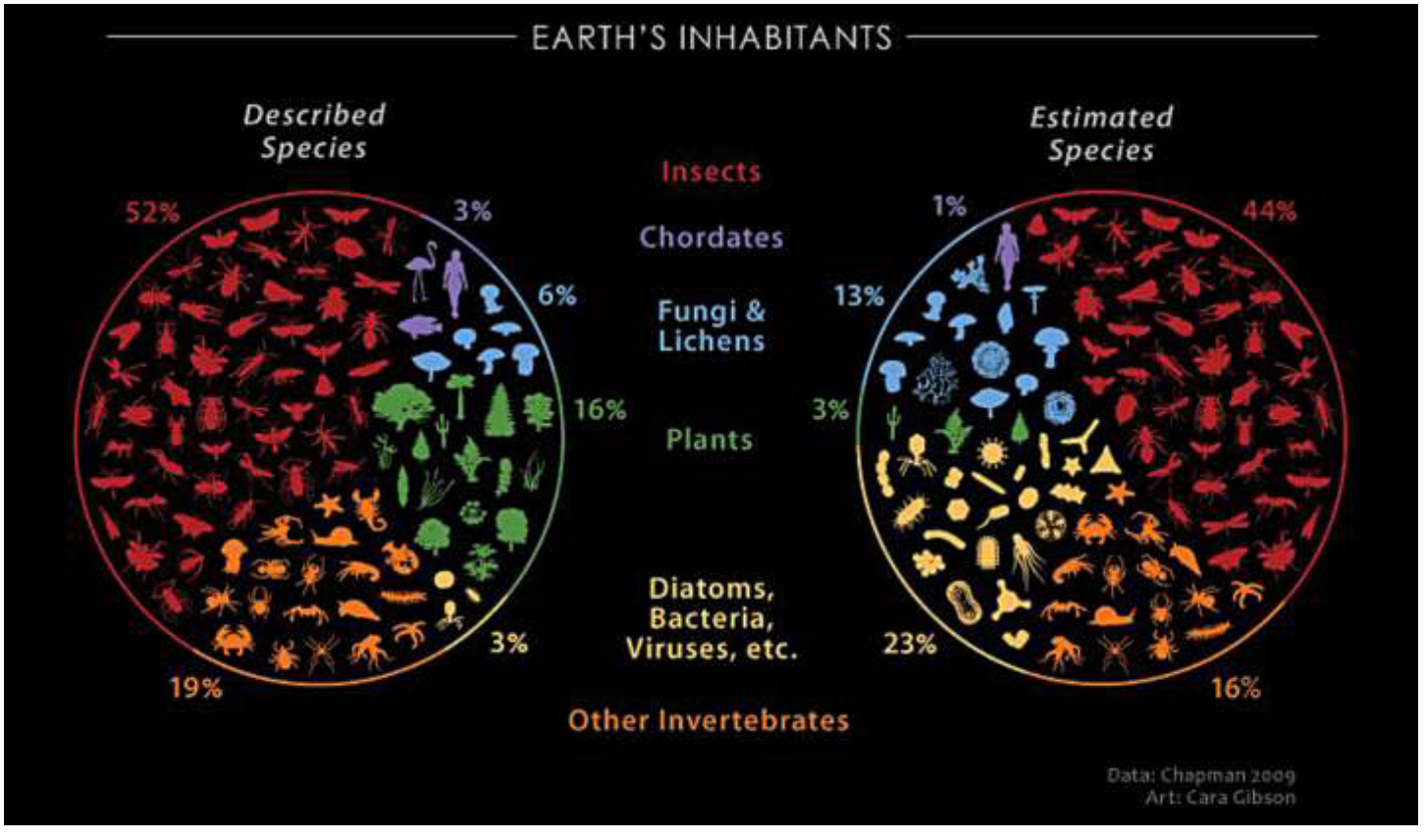
Providing Pollinator Habitat: A Win-Win for Many Species of Wildlife!

Marne Titchenell, Wildlife Program Specialist, OSU Extension

There is no disputing that pollinators and providing pollinator habitat is on the priority list of many private and public landowners these days. Due to declines in pollinator populations, all states have been tasked to work through federal, state, public and private actions in order to restore or create pollinator habitat with the goal of seven million acres over the next five years across North America as part of the National Strategy to Promote the Health of Honey Bees and other Pollinators. Ohio has been identified as a priority state for Monarch migration, whose populations have declined at an average of 50% in the number of adult monarchs observed across the State in the last 10 years (according to data from the Ohio Lepidopterists Monitoring sites).

Before going any further, let's take a step back and look at a bigger picture; specifically insects and not just pollinators, and their role in supporting other species of wildlife. E.O. Wilson, known as the "father of biodiversity" said, "Insects are the little things that run the world." Insects are critical in their roles of transferring a plant's energy from the sun up through the food chain. He also believed that a land without insects is a land without most forms of higher life, especially within terrestrial ecosystems.

Insects also "run the world" in sheer numbers. Below is a fantastic visual graphic of the earth's biodiversity by Cara Gibson. Note that there



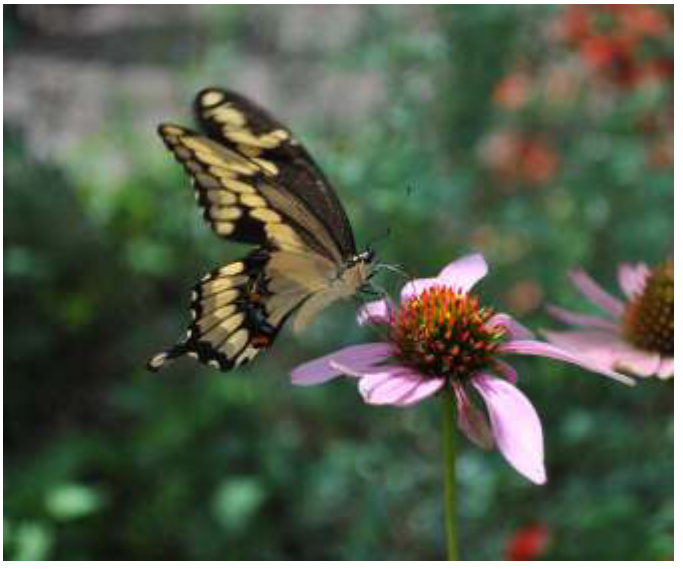
are still some species of fungi, lichens, bacteria and viruses yet to be discovered, but even with those factored in, insects top the scales.

Yet it's often vertebrates - especially mammals - that are so often the focus of our awareness, even though the fundamental ecosystem services of pollination and nutrient cycling are driven largely in part by insects! We don't often think of insects as a species of wildlife for which to provide habitat, but we should - especially when it comes to pollinators. Their populations are in decline and just like many other species of wildlife that are also in decline (i.e. bobwhite quail, grassland songbirds), a big limiting factor is the availability of habitat. The good news is that pollinator habitat is also habitat to many other species of wildlife. So creating pollinator habitat is a win-win for many species.

Many plants depend on pollinators to spread and thrive so that the plant in turn can provide food and shelter for a variety of wildlife species. For example: what does a tiny sweat bee have to do with bear, white-tailed deer, songbird and squirrel populations? This tiny sweat bee pollinates many flowers but one in particular is dogwood. Dogwood produces a berry that is a highly sought after food for each of these wildlife species. So you see in many ecosystems, pollinators are a keystone group of animals necessary for the reproduction of many trees, shrubs and wildflowers.

Would you like some more good news? Managing for pollinators rarely requires a major overhaul of existing wildlife management plans and goals. If you are already managing for wildlife on your property, it is often easy to incorporate a few specifics for pollinators. It may mean adding more blooming plants into the landscape or adding some at certain times of the year. Sometimes, you will find that while managing for a specific species of wildlife, you are at the same time managing for pollinators. Here are a few examples:

- Planting of native warm season grasses and prairie wildflowers can provide nesting, brood rearing, and roosting habitat for bobwhite quail and pheasants. Native warm season grasses (especially the bunch grasses such as little bluestem, big bluestem, Indian grass, and broomsedge) also provide nesting sites for bumble bees. Many of the same wildflowers that are 'good eats' for game birds are also tasty to pollinators (beggar weeds, partridge pea, native lespedezas, clover, pokeweed, ragweed, smartweed, and sunflowers). In addition, these wildflowers attract other insects which are critical to a young bird's diet. Over 80% of a pheasant chick's diet is made up of insects.



Swallowtail butterfly on purple coneflower. Photo credit: Marne Titchenell - OSU Extension

- Field borders make excellent travel lanes for many species of wildlife, especially migrating songbirds. Incorporating blooming wildflowers or shrubs and trees into these borders will also make them attractive to pollinators. Diverse and native field borders will also attract beneficial insects (syrphrid flies, parasitic wasps, and lady beetles) and insectivorous birds that may help to control pests in neighboring fields.

- Creating soft woodland edges is a good practice to provide habitat for songbirds, turkey, deer, and bobwhite quail, especially when certain plant species are included: blackberry, raspberry, dogwood, sumac, hazelnut, elderberry, and wild grape. Some of these same plant species are also very important to pollinators. Mason bees use the hollow or pithy stems of blackberry, raspberry, elderberry, and

sumac to construct nests. Queen bumble bees use woody cover along woodland edges, including downed logs, as hibernation sites.

- When we think of pollinators, we often think of wide open areas planted with a diversity of colorful blooms. We don't often think of woodlands, but we should! Woodlands are very important habitat to pollinators, providing food and egg-laying sites for many insects. The oaks of the U.S. support over 500 different species of lepidopterans (butterflies, moths, and skippers). Willows, black cherry, dogwood, serviceberry, hackberry, hawthorn, maple, black gum, sassafras, and spicebush are all important to pollinators. Those same plant species can also be found on lists recommended for other wildlife species, such as songbirds, deer, squirrels, and turkey. Both thinning and crop tree release are practices that can enhance habitat for wildlife AND pollinators. Crop trees chosen for pollinators may be those that produce nectar or are important host plants (a plant a female insects lays her eggs on). Thinning can enhance the growth of canopy and understory trees and promote growth and diversity on the forest floor. Be aware of woodland invaders – non-native invasive plants – as they reduce a woodland's diversity and resources available to pollinators and other wildlife.

- Decaying logs and branches on the forest floor are key resources to certain species of wildlife. For example, they serve as cover to woodland amphibians and snakes, provide insects for food, and cache sites for small mammals. To pollinators, decaying logs and branches provide overwintering sites to bumble bees and lepidopterans and larval development sites to sap and scarab beetles (the hairy scarab beetle is an important pollinator of native magnolias). Remember the tiny sweat bee we discussed earlier? The one who pollinated dogwoods? Well, that sweat bee will also use downed logs along woodland edges as nest sites.

- A critical habitat feature in many woodlands is a dead standing tree. These trees (called snags) are used by many species of wildlife as homes, cache sites, and hunting sites (i.e. raptors). So the next time you mark trees to be left behind for wildlife, know they will also be used by pollinators. Solitary bees will nest in abandoned wood-boring beetle tunnels. Bumble bees will nest in a dry tree cavity, and some lepidopterans will take shelter in cavities and under loose bark.

These are just a few examples of how providing habitat for pollinators can easily align with wildlife management goals and objectives. Sometimes managing for pollinators may mean incorporating a few blooming plants at key times of year- often the spring and fall. Below is a list of pollinator-friendly plants and their bloom times.

Common Name	Bloom Time
Spicebush (shrub)	March - April
Redbud (tree)	March - May
Wild blue phlox (forb)	April - May
Serviceberry (tree)	April - May
Dogwood (tree)	April - May
Violets (forb)	April - June
Elderberry (large shrub)	April - June
Chokecherry (tree)	April - July
Black gum (tree)	May - June
Bee balm/bergamot (forb)	May - July
Chokeberry (large shrub)	May - July
Sumac (tree)	May - August
Purple coneflower (forb)	May - August
Sunflowers (forb)	July - September
Witch-hazel (tree)	February - March

Recently, a new group has emerged in Ohio to help pollinators. The Ohio Pollinator Habitat Initiative (OPHI) is working with multiple partners throughout the state in order to provide education, outreach, hands on conservation/native seed collections and technical assistance to all that have an interest in pollinators and protecting our food supply. If you want to learn more about OPHI or get involved, visit the website (http://www.ophi.info) or contact Marci Lininger (marci_lininger@fws.gov), Jeff Burris (jeffrey.burris@dnr.state.oh.us), or Lori Stevenson (lori_stevenson@fws.gov).

Multi-State Collaboration Continues To Spread The News About EAB Via Online Training

Amy Stone, OSU Extension, Lucas County

While the emerald ash borer (EAB) might be "old news" to many, recent discoveries in the winter of 2016 have confirmations of this invasive wood borer in all Ohio's 88 counties.

So from the very first find of EAB in northwest Ohio in Whitehouse, a suburb of Toledo in western Lucas County, it took a span of 13 years for this pest to be confirmed in each Ohio county. Many things have changed or evolved over the years as researchers have gained knowledge and an improved understanding of the insect, the host trees, management options and impact both ecologically and economically.

Since the initial EAB discovery in Michigan in June of 2002, this exotic species has been found in 25 US states and in Canada (April 2016). The United States Department of Agriculture's (USDA) Animal Plant Health Inspection Service (APHIS) updates a regional map monthly to include any new discoveries and changes in the EAB quarantine. This map, and other information about EAB can be found on the regional EAB website: http://emeraldashborer.info/. This website has recently undergone major changes and is maintained and updated by folks at Michigan State University through the support of the USDA Forest Service and is the go to source of reliable information about EAB.

In addition to online information and printable resources, EAB University (EABU), a web-based training tool, can be found on the regional EAB website. EABU offers free webinars on EAB and other invasive species threats to our forests. All the sessions are recorded and can be viewed at any time if you miss the live presentations. Since the first of the year, the following sessions have been offered and can be viewed on the EABU YouTube Channel:

- Beech Bark Disease: Efforts to Look For and Cultivate Host Plant Resistance
- Setting EAB Management Priorities in Maryland
- Staging an Urban EAB Infestation to Improve Protection and Planning Efforts
- EAB Preparedness and the Early Years in Colorado
- Update on EAB Woodland Population and Damage Dynamics
- Is Firewood Still a Vector of Invasives? A Case Study of Firewood Movement Through the New Hampshire Speedway

Other recent EABU topics of particular interest have included EAB and the Great Lakes Restoration Initiative; Effects of EAB Treatment on Pollinators; Manage EAB or Manage the Forest?; Walnut Twig Beetle and Thousand Cankers Update; Biological Control of EAB: Putting it into Perspective; and Fringe Tree and EAB Infestation Update. Over 50 training sessions have been presented using this online training format.

If you have any questions about EABU, or session topics that you would like to see included in future training schedule or "semester" of EABU, please contact me at stone.91@osu.edu or 419-213-2029. I serve on the EABU team representing Ohio with Cliff Sadof from Purdue University, Robin Usborne from Michigan State University and Noel Schneeberger from the USDA FS.

Heartwood in the Heartland – Walnut Council Annual Meeting

The Indiana and Ohio Chapters of the Walnut Council are hosting the Walnut Council's Annual Meeting in Lawrenceburg, Indiana (a stone's throw from Ohio and Kentucky) July 31st – August 3rd. The meeting will kick-off on Sunday evening with a buffet dinner at the hotel, followed by an overview of the week's field tours and roundtable discussions on more than a dozen topics. Monday and Tuesday they will travel to field sites to visit the Burnett and Hammitt properties and Miami-Whitewater forest. They will cover plantation establishment and management, tree genetics, natural forest

management, lumber valuation from plantations, invasive species control, and ailanthus wilt. On Wednesday the sessions will highlight the latest news about thousand cankers disease and Asian Longhorned beetle. The main portion of the meeting will conclude with a primer on tick diseases and prevention.

There is a free optional pre-conference tour of the Oxbow area of the Ohio River on Sunday afternoon. Attendees will meet at the Oxbow wetlands for a walking and driving tour with a member of the Oxbow land trust. This 2500 acre spread of level river bottom farmland is where the Great Miami River empties into the Ohio River and three states come together – Ohio, Indiana and Kentucky. This area is a heavy feeding and nesting area for ducks, geese and shorebirds. It is also a heavily used staging area where migrating birds refuel and rebuild their energies for their long flights between distant northern breeding grounds and southern wintering areas.

On Wednesday afternoon there is a free optional post conference workshop that will consist of a tree problem diagnostic walk-about. Joe Boggs and Kathy Smith of Ohio State University Extension will lead a walking tour to teach identification of various trees insect and disease issues. The tour will begin at 1:30 pm at a nearby woods. Lunch and transportation are on your own. Due to space a limited number of registrations will be accepted.

The deadline for early registration is July 21st, although later registrations will be accepted. Please register at your earliest convenience to assist in planning. Full registration includes: Sunday dinner, indoor sessions, handouts, field tours (Monday, Tuesday), breaks and lunch (Monday, Tuesday), banquet (Tuesday), and meeting favor. A very nice full hot buffet breakfast is included in your room reservation. Only Monday dinner is on your own. Those unable to attend the entire meeting may register for an individual day or days or for the banquet separately as shown on the registration form. To register and for more detailed information go to http://www.walnutcouncil.org and click on Annual Meeting on the right.

2016 Calendar - Upcoming Events

June 3	Wetlands for Wildlife	OSU Mansfield
June 3	Name That Tree	OSU Mansfield
July 15	The Woods in Your Backyard	OSU Mansfield
July 31 – Aug 3	Walnut Council Annual Meeting	Lawrenceburg, IN
August 5	Tree Diagnostic Workshop	OSU Mansfield
August 6	Tree School	OSU Mansfield
August 17	Introduction to QGIS	OSU Mansfield
September 9	Forest Health 101: Non-native Invasive Insects	OSU Mansfield
September 20-22	Farm Science Review	London, OH

Keep checking the website for up to date class listings.

THE OHIO STATE UNIVERSITY
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

Non-profit Org.
U.S Postage
PAID
Columbus, OH
Permit # 711

Ohio Woodland Stewards Program
School of Environment & Natural Resources, 210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210

facebook
Ohio Woodland Stewards is now on Facebook.

Come find us at:
www.facebook.com/OhWoodlandStewards?ref=nf

Check Us Out On The Web!
Look for newsletter articles, links to fact sheets and other publications by browsing our site. Registration for upcoming Woodland Stewards classes may also be done electronically.
Website:
woodlandstewards.osu.edu
Kathy L. Smith
Program Director - Forestry
Ohio Woodland Stewards Program Coordinator

Contact Us!
For program information contact Mary Slyby at 614-688-3421
by email:
ohiowoods@osu.edu
or by mail at:
Ohio Woodland Stewards Program
School of Environment & Natural Resources
210 Kottman Hall
2021 Coffey Road
Columbus, OH 43210