

Ohio Invasive Plants Council

Newsletter • Fall 2018



PRESIDENT'S CORNER

Fall is here. A break from the summer heat and the extended growing season of many invasive plants makes fall a good window for a final push to

remove woody invasives. It is also a good time for replacing invasive plants in your landscape with good non-invasive alternatives, many of which can be found in our "Alternatives for Invasive Plants in Ohio: A Guide for Landscaping and Habitat Restoration" brochure.

OIPC has four excellent workshops in 2018 promoting the use of alternative plants after removal of invasive plants. Three are completed, but we have another upcoming workshop in Perrysburg, partnering with Wood County Parks in October. Two recent workshops were conducted, one in partnership with The Dawes Arboretum and one in Dayton, partnering with Five Rivers Metro Parks. Both programs focused on promoting alternative plants for landscaping and habitat restoration. See the OIPC website for photos from the recent workshop at Possum Creek Metro Park in Dayton.

We continue to work with ODA on their new invasive plant list which prohibits the sale of 38 species in Ohio. OIPC has submitted another 30 species to ODA for consideration as additions to the current list.

If you are looking for opportunities to help control invasive plants in natural areas, one way is to participate in the Ohio Natural Areas & Preserves Association's Stewardship Projects. See the ONAPA website at www.onapa.org for more information on the 2018 projects. Many local metro parks and park districts, state and federal agencies around the state

may also have opportunities for volunteers to help control invasive plants. Each one of us can help to address invasive plant challenges on a local level!

As always, we look forward to working with any of our partners to plan educational efforts. If you have any upcoming events where OIPC could participate by providing a speaker, please let us know (see our website to contact any of our Board members). Help us spread the word about invasive plants and visit our website at www.oipc.infofrequently! If you need a plant identified or are looking for more information, please contact us through our website and we will respond as soon as possible.

Jennifer L. Windus,
OIPC President & ODNR (retired)

NEW OIPC BROCHURE AVAILABLE NOW

OIPC completed a full redesign of its general brochure which promotes OIPC and explains the issue of invasive plants, along with what OIPC This brochure replaces an earlier version and was redesigned by Mary Ann Webster of Spoonbill Designs Columbus. You may request copies of this brochure for programs and displays by contacting us through our website at www.oipc.info.



OIPC IS SEEKING APPLICATIONS FOR RESEARCH GRANTS!

OIPC is soliciting applications for our Invasive Plants Research Grants. This grants program funds research projects on invasive plants in Ohio for amounts up to \$1,000. Projects initiated by graduate students, land managers, or amateur botanists are welcomed.

We will accept and review proposals that focus on basic biology, ecology, management, distribution, or horticultural aspects of invasive plants in Ohio. Our highest priority for funding is for proposals that address questions about potential invasive plants for which the lack of published data hinders their evaluation by the OIPC Assessment Team. In addition, we will also prioritize proposals that directly connect to management of invasives. When the grant evaluation team reviews grant proposals, extra points are given for proposals that address these priority areas. More details about this opportunity, including questions needed by the OIPC Assessment Team, can be found at www.oipc.info.

Applications are due no later than November 1, 2018.

Emily Rauschert, OIPC Board Research Chair & Cleveland State University

ODA INVASIVE PLANT RULES Help Us Spread the Word About The New Rules!

New invasive plant rules went into effect in early January; the Ohio Department of Agriculture (ODA) declared 38 plant species as invasive - these species cannot be sold, propagated, distributed, or imported in Ohio. ODA has formed an Invasive Plant Advisory Committee to determine how species will be added to this list. OIPC is currently working on a list of species we would like to see added to the ODA list. Approximately half of the species on the list were on the market, so keep a lookout for these species and be sure to report any violations to ODA if you see

any of them for sale. Only two, Callery pear and European wand loosestrife, have a phase-out period. ODA's 11 nursery inspectors are responsible for ensuring these species are no longer for sale, but they can use help from gardeners around the state. Particularly look for Asian bush honeysuckles (3 species and their cultivars), Japanese honeysuckle, cattails, flowering rush, oriental bittersweet, and autumn-olive, which may still be for sale.

Check our website, www.oipc.info, for a full list of the 38 species that can no longer be sold in Ohio. Encourage your local nurseries to replace invasive plants with some of the good alternatives recommended in the new OIPC alternatives brochure. To view more details about the rule you can visit the ODA website.

Jennifer L. Windus,
OIPC President & ODNR (retired)

OIPC WORKSHOP in Northwest Ohio!



Wednesday, October 17th 10am-3pm W.W. Knight Nature Preserve 29530 White Road, Perrysburg

Join OIPC and Wood County Parks to learn more about invasive plants, control techniques, & alternatives for your landscaping & habitat restoration needs. Registration is open at www.oipc.info. Registration for the event is \$20 and includes lunch.

SAVE THE DATE: OIPC RESEARCH CONFERENCE Wednesday, February 13th, 2019

The OIPC Research Conference has been scheduled for this winter at the Nationwide & Ohio Farm Bureau 4-H Center at the OSU campus in Columbus. Registration, a call for posters, and a detailed agenda will be available soon on the OIPC website. It is not too early to get this date on to your calendar to be sure not to miss it!

NATIVE GRASSES FOR YOUR LANDSCAPE

Several prairie remnants occur naturally in Ohio. They are an important part of Ohio's natural heritage and they inspire the use of beautiful native grasses in landscaping. The grasslands of Ohio are dominated by a handful of grass species and a diversity of prairie wildflowers that create colorful displays in the summer and fall. The grasses offer visual contrast to the wildflowers and in landscaping they are a popular option for native plant borders and privacy plantings. In addition to filling the aesthetic goals of a landscaper's design, they benefit native wildlife and grow easily in their native environment. The grass species below are often available through local nurseries and garden centers. If you do not see them, ask for them by name. Customer demand can determine the plants provided through the nursery industry.

Indian Grass (Sorghastrum nutans)

This tall grass grows in many soil types and prefers full sun. One of the dominant grasses of the tall grass prairie; it is often found growing with big blue stem. This grass is useful in highly erodible areas and dry infertile soils and provides visual interest in the winter. Indian grass is beneficial to birds and other wildlife for food and shelter.

Big Blue Stem (Andropogon gerardii)

Big blue stem is Ohio's most robust grass; it grows in

well drained and poor soils. This grass can grow up to 8 feet tall and has the recognizable three spiked seed head that resembles a turkey foot. Big Bluestem is a clump forming grass which is great for wildlife nesting and forage cover. In the fall, the stems become very colorful.



Little Blue Stem (Schizachyrium scoparium)

One of the shorter of the dominant native grasses in the prairie regions of Ohio, little bluestem has been well accepted into the landscape industry. A hardy and tolerant grass, it does well in a variety of soil situations. Many butterflies and skippers utilize this species as a caterpillar food plant. It is a clump forming grass with a pinkish fall and winter hue, giving the plant both visual appeal and adding valuable ecological benefits.

Prairie Dropseed (Sporobolus heterolepis)

This finely leaved grass grows in low arching mounds, with flower stems that reach above the leaves. Again an interesting and popular grass for garden edges, it is native to prairies and grasslands throughout the eastern United States, although becoming increasingly rare in native habitats. It prefers well drained, alkaline soils in full sun and can be very draught tolerant. Note that in Ohio, prairie dropseed is a state endangered plant, only native to a few remnant prairies, savannas, and fens, so sources for this species should be chosen and planted carefully.

Side Oats Grama (Bouteloua curtipendula)

As its name suggests, this grass has a distinctive growth pattern of flowers along one side of the stem resembling oats. A shorter prairie grass, side oats grama is a self-seeder that tolerates mowing. This grass is also beneficial to wildlife and offers an interesting array of fall color.

Prairie Cordgrass (Spartina pectinate)

More commonly associated with wetter prairie areas, cordgrass grows densely with colony forming rhizomes. This results in highly beneficial habitat for nesting birds and other wildlife. Cordgrass grows up to 7 feet tall with distinctive long and dense flower and seed heads. This grass is a good choice for rain gardens and erosion sensitive areas.

Canada Wild Rye (Elymus canadensis)



The bluish stems of this perennial grass and the curved spikes of the flower and seed heads give this grass its distinctive appearance. Reaching 5 feet tall, Canada wild rye can tolerate a variety of sun and soil conditions. It can grow in partial shade unlike other prairie grasses. All aspects of the grass are useful to wildlife; birds eat the seeds, various insects use it and mammals graze on the stems.

Switchgrasss (Panicum virgatum)



This medium height grass (up to 3 feet) is tolerant of a variety of soil and sun conditions. It is clump forming and remains erect throughout the growing season. In the fall and winter, the seeds benefit foraging birds. This yellow grass can be utilized in rain gardens and along borders as a screen. Cultivars of this species vary greatly, so be sure to choose cultivars carefully and only use in landscaping.

NOTE: As with planting any cultivars in native habitats, we do not recommend planting cultivars of these grasses in native habitats, but they may be excellent in a landscaped environment.

Carrie Morrow, OIPC Treasurer & Columbus Franklin
County Metro Parks

SPREAD OF THE ORNAMENTAL GRASS Miscanthus sinensis

The tall leaves and silvery blooms of Chinese Silvergrass (*Miscanthus sinensis*) are a common sight in gardens across Ohio. However, this grass is also becoming an all-too common scene along roadsides, in fields, and along forest edges. This hardy, wind-dispersed grass species was originally brought to the United States for its ornamental value, but has since escaped cultivation and established wild populations throughout the eastern US, including now in Ohio (Fig. 1). It is considered an invasive species in many

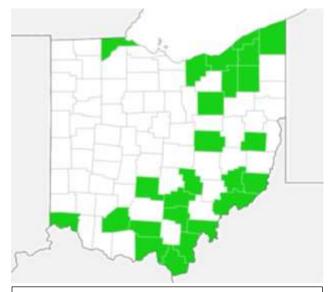


Fig. 1. Distribution of *Miscanthus sinensis* within Ohio. Shown are counties in which the species has been collected and identified (EDDMapS 2018).

of these states; in Ohio, it was scored as "Invasive" in the OIPC Invasive Plant Assessment. However, the species is not currently regulated by the ODA on the state invasive or noxious weed lists, which is why you can still find it sold in stores today.

As one of the most popular ornamental grass species in the US, there are over 100 cultivars of M. sinensis (more than any other ornamental grass species). The majority of these cultivars have been developed within the last 30 years. As you can imagine, an ornamental this popular has a high economic value. In 2008, sales of M. sinensis totaled \$40 million in North Carolina alone. Beyond its aesthetic value, this grass is also being considered for biofuel production. Unfortunately, many of the characteristics that make this species such a great choice for ornamental planting and biofuel production (such as hardiness and environmental adaptability) also give it a high invasive potential. Once established in wild populations, M. sinensis can outcompete native plant species and increase the fire potential of an area. Thus, while this species has aesthetic value and potential as a source of non-fossil fuel energy, we must be careful to manage it in order to protect our native plant diversity.

Miscanthus sinensis is native to East Asia and was first brought to North Carolina from Japan in 1893. However, the wild populations of *M. sinensis* now in the US are derived from several separate introductions from native populations in Asia. Multiple introduction events have increased the potential for genetic diversity in US populations, which may further explain its invasive behavior. This species has become naturalized in at least 25 states since its introduction, mostly east of the Mississippi River. Outside of cultivation, it can be found in fields as clumps of tall grass (Fig. 2), and sizes of wild populations have been estimated to be over 9,000 individuals.

Research in our laboratory has focused on the origin of wild individuals in the Eastern US, exploring the possibility that they may represent F₁ hybrids of specific cultivars. Our research was originally conducted with Dr. Lauren Quinn, and should be viewed as preliminary as it includes only 18 cultivars. So far, our results indicate that populations in OH,

PA, KY, NC, MS, and NJ consist of individuals with at least one cultivar parent. These represent a number of different cultivars, such as 'Little Nicky', 'Morning Light', and 'Siberfeil' just to name a few. Interestingly, some of these cultivars were not found to produce many seeds, as tested in a garden setting by Madeja, Umek, & Havens (2012), indicating that perhaps their role as pollen parents has been underappreciated. We are now increasing the number of cultivars in our analysis, which should result in a finer resolution of parentage of wild populations.



Fig. 2. Photo of wild *Miscanthus sinensis* population at the Red River Gorge Geological Area in KY, in an open area surrounded by intact forest. The putative source is old plantings at a nearby state park. Image courtesy of Lauren Quinn.

What we should do with a species such as M. sinensis is complicated by its economic value as a garden and biofuel plant, which must be balanced against its destructive harm to natural areas. Consequently, strategies to minimize the chance of this species escaping from cultivation should be implemented now to protect native flora. While it has been suggested that sterile ornamental cultivars could be developed, this may only help reduce (but not entirely eliminate) further spread. Such an approach may not be completely effective as sterility could eventually break down. Any further development of this species as an ornamental should select for certain traits like flightless seeds or reduced pollen viability, and implement management practices to also help reduce the invasive plant's reproductive output. Through these practices, we can hopefully reduce any further deleterious impacts that this

ornamental grass may pose to our natural ecosystems in Ohio and surrounding states.

Katrina Culbertson, Dept. Biological Sciences, University of Cincinnati

Theresa Culley, Dept. of Biology, University of Cincinnati & OIPC Invasive Plant Assessment Chair

NATIVE MILKWEEDS PROMOTE POLLINATOR HABITAT IN OHIO

Milkweeds have become increasingly recognized by Ohioans for their intimate relationship with the Monarch butterfly. While many Ohioans are only familiar with one or two species of milkweeds, there are 15 species from the Milkweed Family that are native to Ohio. Among these species, 13 are from the genus *Asclepias* and one each from the *Matelea* and *Cynanchum* genera.

As the name suggests, the Common milkweed (Asclepias syriaca) occurs commonly throughout Ohio. Large patches of these plants sporting large purplish-pink globes are quickly identified along unmowed roadsides in every county in Ohio. Taking a moment to observe flowering patches closely can be an exciting experience as they are often teeming with insects. Bees are usually the first critters one notices as they buzz and bounce from bloom to bloom often oblivious to your presence. A wide variety of beetles, butterflies, and other creatures



Common milkweed with a Zebra swallowtail butterfly. Photo Gary Conley

abound within and around the patch, forming a unique and lively microcosm.

Common milkweed is a beautiful and hardy plant,



Purple milkweed (*Asclepias* purpurascens). Photo by Gary Conley

but can be considered weedy species spreading easily by creeping underground roots. It is sometimes regulated as a noxious weed as it can be troublesome agricultural fields and pastures. More recently, Ohioans have become more aware of importance of these plants to our declining pollinator populations, including the imperiled Monarch. Although

Common milkweed can spread, it does so only into suitable habitat and is often confined to patches.



Sullivant's milkweed (*Asclepias* sullivantii). Photo by Gary Conley

Among the more common milkweeds, butterfly milkweed (Asclepias tuberosa) and swamp milkweed (Asclepias incarnata) occur throughout Ohio. Butterfly milkweeds be found can abundantly in dry habitats utilizing a fragile deep taproot to endure droughty conditions.

Conversely, swamp milkweed is often observed growing in roadside ditches and

other wet habitats using a dense fibrous root crown to draw moisture from the wetland soils. Purple milkweed, poke milkweed, and four-leaved milkweed can be fairly frequently encountered along wooded and unmaintained roadsides through much of Ohio. The remaining species are far less common to rare and must be sought out in the high-quality undisturbed habitats where they are known to occur. Introducing milkweeds into any landscaping or natural restoration projects can yield surprisingly lively additions, often attracting hordes of pollinating insects. Several management concerns should be taken into consideration before endeavoring to utilize milkweeds. Most importantly, milkweed plants should never be harvested from the wild. They do not transplant well and are considerably vulnerable to disturbance. Fall is the time to seek native milkweed seeds if you are harvesting responsibly from the wild or from a generous neighbor. Plant stock can be purchased from responsible local suppliers to propagate your project. Milkweed seeds do not often germinate well when placed directly into a project site, however most milkweed species do germinate well in a controlled setting such as seed flats, raised beds, or greenhouses. Successfully establishing milkweeds in your landscape can be quite rewarding as they play a very active role in the function of our local ecosystems.

Below is a list of milkweeds that are native to Ohio and many of them can be found though local plant suppliers, especially those who specialize in native plants. Some of the species may only be available by seed.

- Asclepias amplexicaulis, Clasping or Blunt-leaved milkweed (state-listed)
- Asclepias exaltata, Poke milkweed
- · Asclepias hirtella, Prairie milkweed
- Asclepias incarnata, Swamp milkweed
- Asclepias purpurascens, Purple milkweed
- Asclepias quadrifolia, Four-leaved milkweed
- Asclepias sullivantii, Sullivant's milkweed
- Asclepias syriaca, Common milkweed
- Asclepias tuberosa, Butterfly milkweed
- Asclepias variegata, White milkweed or Redring milkweed (state-listed)
- Asclepias verticillata, Whorled milkweed
- Asclepias viridiflora, Green milkweed
- Asclepias viridis, Spider milkweed or Green antelope-horn

- Cynanchum laeve, Honeyvine or Smooth swallowwort
- Matelea obliqua, Climbing milkvine or Angle-pod

NOTE: Two of these milkweeds are state-listed and only occur in remnant prairies and savannas in Ohio, thus choosing sources and planting them carefully is important.

Gary Conley, OIPC Board & GreenReach, LLC

2 EASY WAYS TO SUPPORT OIPC!



Support OIPC when you shop at Amazon.com!

OIPC is an eligible non-profit in the charitable program

AmazonSmile! Amazon's foundation donates 0.5% of qualifying purchases to an organization you select. Use this address to go directly to the page that benefits OIPC; smile.amazon.com/OIPC or start at smile.amazon.com and you will be prompted to select a charity. There is no cost to you since Amazon makes the donation on your behalf. Save the link and use it every time you shop with Amazon!



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support you must enroll annually so be sure to check if your enrollment has expired.

Visit: KrogerCommunityRewards.com

sign in or create a new account. Select OIPC and click on "enroll." The codes for OIPC are:

#23916 Cincinnati Region (includes Dayton and Lima)

#47319 Great Lakes / Columbus region (rest of Ohio)

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