Wild Ones

NATIVE PLANTS, NATURAL LANDSCAPES

SUMMER 2022 • Journal • VOL. 35, NO. 2

Cover Photo: Rita Hennessy

A voice for the natural landscaping movement.

Why chapters?

By Sally Wencel

Sally Wencel

Wild Ones Executive Director Jen Ainsworth recently asked me to help answer this question: Why chapters?

Locally, we crossed that Rubicon 10 years ago when a group of native plant enthusiasts formed the Tennessee Valley Chapter. No, I won't go into our "origin story" – that's for another time and place. At this mark in my chapter's history, though, I am reflecting on why we formed in the first place. Why would a group of master (and otherwise) gardeners, master naturalists, garden club members, birders, environmentalists, hikers, botanists – et al – come together to form a new organization when there are many clubs that cater to these interests?

Why indeed? I think it is because Wild Ones offers a place for us to come together to share our knowledge and to advocate and educate the public. Wild Ones puts it all together – and provides us a platform to do something about our shared concern about the degradation of the environment and the disastrous effects of climate change.

Like many of you, I receive constant appeals for donations from well-regarded environmental advocacy groups. Maybe like you, I scoff when I see the appeal about "saving the honeybees" or when they suddenly recognize the selling power of the monarch butterfly. I do support these organizations, but I get greater fulfillment from working in my community to effect change. Wild Ones chapters provide those empowering places for us. Furthermore, change begins at home.

Climate change makes our shared concern more urgent. Wild Ones recently received a second grant from the Stanley Smith Horticultural Trust. The first round supported our development of the Native Garden Design program and webinar series. From what members tell us, this program is a springboard for chapter educational programming.

This second round of garden designs aims squarely at climate change and what we can do to remediate its effects through our landscaping practices. Our aim is to give chapters the tools – educational materials, designs, plant palettes – to show people how they can take personal action to help. I hope you have participated in Wild Ones board member Eric Fusilier's webinar series and read and shared his articles providing clear and concise information on how native plants can help address environmental degradation through phytoremediation.

Taking this example one step further, how can chapters take what we know to be true – that native plants and sustainable landscaping practices are critically important – and put it into action? As chapters, we can work with local governments to advocate for these landscaping practices, including climate action plans, zoning changes and green infrastructure programs, to name a few. We have the knowledge and hands-on skills to share with policymakers. In my area, water quality programs invite our participation, especially in the public education arena. I volunteer to certify homeowner properties to qualify for stormwater fee reductions and guide homeowners toward better stormwater management. Native plants are integral to the certification! I would not have had this opportunity without the chapter's ongoing partnerships with local government and water quality organizations.

There are plenty of other reasons for chapters, but enabling both individual and collective action is an important reason for me — and for our planet.

Wild Ones
NATIVE PLANTS, NATURAL LANDSCAPES

Promoting environmentally sound landscaping practices to preserve biodiversity through the preservation, restoration and establishment of native plant communities

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Established in 1977, Wild Ones is a national not-for-profit organization of members who teach the benefits of growing native plants and work together to grow and restore natural landscapes.

Wild Ones' definition of a native plant:
A native plant is a species that occurs naturally in a particular region, ecosystem and/or habitat and was present prior to European settlement.

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NEWS
ACROSS THE NATION

COLORADO

The Colorado Native Landscaping Coalition (CNLC) is a growing coalition of mission-aligned organizations working in collaboration to advance policies that will transform landscaping across Colorado. Current coalition partners are Wild Ones - Front Range Chapter, People & Pollinators Action Network, Audubon Rockies, Denver Audubon, Colorado Native Plant Society and the Colorado Wildlife Federation.

In addition to offering guidance on municipal programs and materials that promote native landscaping and regenerative maintenance practices, CNLC has developed "Recommended Native Landscaping Policies for Colorado Local Governments and Water Providers," available by contacting CNLC at CoNativeLC@gmail.com. No other state has a comparable set of recommended landscape transformation policies. More detail on the policies will be presented in a later issue of the Wild Ones Journal.

Colorado lawmakers are considering House Bill 1151, which would launch a statewide turf replacement program. The legislation would pay homeowners and business owners to voluntarily replace their nonnative, ornamental lawns with plants and landscapes better adapted to the state's dry climate. Similar programs across the West have saved billions of gallons of water, paying property owners anywhere from a few dimes to a few dollars for every square foot of turf they replace. These types of programs, offering money for the removal of water-dependent lawns, are likely to become more common as states, counties and cities across the West search for relatively painless ways to conserve the resource, water experts told The Denver Post. If the measure is enacted into law, the Colorado Water Conservation Board would have to develop a statewide turf replacement program by July 2023.

FLORIDA

Disney recently unveiled the first pollinator garden at the mickey-shaped solar array near Epcot at Walt Disney World resort.

The project will allow Disney to innovatively use the space in and around this solar facility to increase the habitat available to pollinators, which are in decline due to habitat loss and other factors, ABC7 reported.

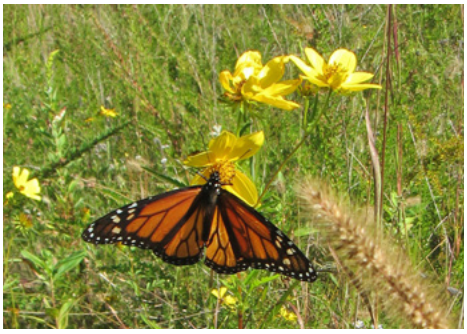
The garden will provide a welcoming habitat for butterflies, bees and other insects native to central Florida.

KENTUCKY

Fort Knox employs a comprehensive, strategic and aggressive plan to maintain a balance of trees, grasses and wildflowers, and part of the plan involves cultivating seven different milkweed species.

Fort Knox biologist Mike Brandenburg said they have stopped mowing areas, instead installing "pollinator focus areas" in place of lawns.

"This effort makes us much more ecologically rich," Brandenburg said. "We need to be sustainable, so we get the benefits from this ecological diversity to provide for habitats…"



The monarch butterfly, probably the world's best-known butterfly, has become the symbol for a whole class of imperiled pollinators.

Photo: Mike Brandenburg, Fort Knox Environmental Management Division

PENNSYLVANIA

The University of Pittsburgh (UP) is developing a tracking system that could be attached to monarch butterflies and transmit data about their migration route throughout their three-month journey to central Mexico.

"Tracking animal migration is a critical ecosystem indicator," said Inhee Lee, assistant professor of electrical and computer engineering at UP. "Migrators travel long distances across entire continents, and it can give us unprecedented insight into their migratory paths, how the environment around them is changing, and how species interactions are impacted by changing movements and distributions."

To track them, researchers have created a new wireless sensing platform called mSAIL, specifically designed for monarch migration, according to Science Daily. The tiny, 62 mg, 8×8×2.6 mm chip is attached to a butterfly's back and can simultaneously measure light intensity and temperature, wirelessly communicating that information back to researchers once the butterflies reach their destination.

The next step of the project is to mass produce over 100 mSAIL sensors that can reliably operate during the three-month monarch migration period.


Member Garden
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Member Garden
Profile removed by request

Member Garden

Profile removed by request

Wild Ones re-opens the Seeds for Education grant program

Group awards $9,500 in funds to 24 youth-serving organizations

By Katie Huebner

For more than 20 years, Wild Ones has proudly partnered with youth-serving organizations to bring back critical wild spaces and instill an appreciation for nature in the next generation by funding native plant projects through the Lorrie Otto Seeds for Education (SFE) grant program.

Administered by Wild Ones, the SFE program honors Otto, who inspired school garden projects in the 1970s in the Milwaukee, Wisconsin area.

Wild Ones awards SFE grants for acquiring native plants and seeds for outdoor learning areas that engage youth (preschool to high school) directly in planning, planting and caring for native plant gardens throughout the United States. The youth involved learn about the benefits of native plants while getting a close-up view of butterflies, songbirds and other creatures that use the plants for vital food or shelter.

The program was temporarily suspended in 2020 due to many schools and care programs going virtual during the COVID-19 pandemic. This allowed Wild Ones an opportunity to thoroughly review the program and improve the application process before relaunching it in 2021, ensuring the program is inclusive and welcoming to youth-serving organizations in all communities.

In 2022, Wild Ones awarded more than $9,500 in funds and partnered with 24 youth-serving organizations in 19 states on critical native plant projects. The organizations Wild Ones provided funding to this year include:

- Beacon Park School, California
- Casa dei Girasoli Montessori School, South Carolina
- Central Ridge Elementary School, Florida
- City of Lakes Waldorf School Loring Campus, Minnesota
- Elkhart Monarch Flyway, Illinois
- Elmhurst Elementary School, North Carolina
- Grayhawk Elementary School, Arizona
- Hayward Twin Oaks Montessori School, California
- Inly School Inc, Massachusetts
- Jefferson County History Center, Pennsylvania
- McCrossan Boys Ranch, South Dakota
- Monarch Montessori of Denver Charter, Colorado
- Northern Youth Project, New Mexico
- Occidental College, California
- Pearce Hall Alternative School, Missouri
- Perry Early Learning Center, Michigan
- PS5 PTA, New Jersey
- Russo McEntee Academy, California
- Santa Cruz Alternative Family Education, California
- Sleeping Giant Middle School, Montana
- Toler Elementary School, California
- Waterways Association of Menominee and Shawano Counties Inc., Wisconsin
- Watkins Middle School (Southwest Licking School District), Ohio
- Waynesburg University, West Virginia

Wild Ones Executive Director Jen Ainsworth said: "We are pleased to support the youth and staff at these great organizations as they learn about native plants, pollinators and supporting biodiversity and nature with their projects. We look forward to sharing with Wild Ones members the impact these projects have on their communities as they develop in the coming months and years."

Wild Ones would like to extend our deepest appreciation to volunteer SFE program committee members, including board members Rita Ulrich and Sally Wencel, and program chair and board member Michele Hensey, for their time, effort and expertise to successfully coordinate this program.

We would also like to express our gratitude to the following volunteers for their thoughtful review of all 2022 SFE applications: Michele Chalice, Partner at Large; Pamela Janssen, Wild Ones Chesapeake (Maryland) Chapter; Sheri Glowinski, Wild Ones Illinois Prairie Chapter; Tamara O'Brien, Wild Ones Western Pennsylvania Area Chapter; and Maurya Orr, Wild Ones Greater DuPage (Illinois) Chapter.

Wild Ones apologizes for 2021 Annual Appeal errors

Wild Ones was made aware that the list of 2021 Annual Appeal donors and donations published in the spring issue of the Wild Ones Journal contained critical errors. We sincerely apologize for publishing these inaccuracies.

Wild Ones understands the great importance of only sharing accurate, reliable information and we were disheartened that these errors distracted from the success of the campaign and celebratory intent of the article. We promptly corrected the errors and have published a new list on our blog at https://wildones.org/thanks-to-our-donors-winter-2022/.

Wild Ones promises to continue striving for trustworthy, accurate data and will do better going forward. Thank you for your patience, understanding and continued support.

Wild Ones announces Wildly Important Goals for 2022

By Jen Ainsworth

In 2021, the Wild Ones Board of Directors and staff adopted Wildly Important Goals (WIGs) to strategically focus on specific organizational targets. Wild Ones identified and is working toward several critical WIGs in 2022 and staff and board members have been busy dedicating time and energy mapping how to accomplish these goals.

The first WIG is to update the Wild Ones brand by Dec. 31, 2022. Wild Ones is a longstanding voice in the native plant movement and the only national organization whose mission is to educate and advocate for native plants. We must identify and differentiate ourselves as leaders in this important work and make it clear why joining Wild Ones is the best way to engage in the native plant movement. To ensure that our brand reflects who we are and resonates with current and potential members, Wild Ones will be working with a partner agency to evaluate our brand and provide recommendations on how we can best represent ourselves.

This work will result in updated brand standards and assets, such as logos, website themes, color schemes, messaging, etc. There will be a phased branding implementation plan for Wild Ones and chapters to update printed materials, merchandise, websites and other digital spaces with these new assets. This transition process will be determined once we have selected a firm and begin work.

The second WIG is to develop a cultural competency strategy by July 31, 2022. The more members we welcome to the organization, the more culturally diverse we become. We need to heighten our awareness of how both members and the public perceive and experience Wild Ones. Cultural competency addresses the ability to effectively engage people who have differing views, experiences, cultures, beliefs, abilities and financial means.

Cultural competency is a process and a practice. This goal is still early in development. First steps include examining Wild Ones communications and messaging for culturally insensitive language, expanding the accessibility of digital resources and initiating conversations with American Indian Nations and tribal communities of east central Wisconsin. We are starting with these tribes as we work to build relationships with tribal leaders in communities that are closest to the WILD Center in Fox Crossing, Wisconsin, which is the only land that is owned and managed by Wild Ones. Through listening to and learning from these people, we hope to be able to provide guidance to chapter volunteers on how to connect with and support historically marginalized communities.

Some possible outcomes of our cultural competency strategy include a land acknowledgment program, cultural competency training opportunities, and an evaluation of the accessibility and availability of Wild Ones programs and volunteer opportunities. We will share more about this strategy as it takes shape.

Our third WIG is to increase average membership retention from 60% to 65% by Dec. 31, 2022. Many new members joined Wild Ones over the past two years, and many tenured members renewed, showing their ongoing support. We must ensure that the member experience is both positive and beneficial and that members will continue to participate and find value in Wild Ones!

You may notice that the target for improvement is relatively small: a 5% increase in member retention. This is intentional. In the past, Wild Ones did not collect much information about why members chose not to renew, so much of the work this year will be to better understand and improve the processes in the member lifecycle (from joining to renewing/lapsing).

Wild Ones believes these goals are the most effective way to focus our resources this year and that these goals will put us in the strongest position to further our mission…

Wild Ones believes these goals are the most effective way to focus our resources this year and that these goals will put us in the strongest position to further our mission of promoting environmentally sound landscaping practices to preserve biodiversity through the preservation, restoration and establishment of native plant communities.

We look forward to sharing details about these Wildly Important Goals as they evolve and as plans solidify in the coming months. Updates will be shared in Wild Ones Board of Directors meetings. Members are welcome to attend the virtual bi-monthly Wild Ones board meetings where plans for each of these WIGs will take shape. As always, if you have any questions or comments, contact us though support@wildones.org.

Combatting deer and rodent damage with toxic plants

By Chelsea Ruiz

Tired of bunnies wreaking havoc in your freshly installed planting? Deer mowing down your carefully constructed border? Squirrels, voles and geese pulling out plugs, eating roots and otherwise being garden menaces?

We are too!

For individuals who are a.) sick of battling nature for garden peace and b.) not gardening with concerns of pets or small children eating plant materials, let us introduce you to the world of gardening with toxic plants.

This garden idea is the opposite of the edible garden. It's the poisonous garden.

Part of the reason the daffodil, native to southern Europe and North Africa, is so ubiquitous isn't just for its early season charm; the plant's toxicity makes it unpalatable to herbivores. Why reinvent the wheel, especially when planting natives? These plants have spent millennia devising and refining their secondary metabolites, or substances manufactured by plants that make them competitive in their own environment, to deter herbivores. It would be almost rude not to use them!

Try weaving these toxic perennials and vines into your garden design to put off aggressive herbivory in the garden. All of these plants contain different kinds of toxic compounds that irritate the digestive system and will not require any additional inputs to ensure that they are left alone. If you're feeling really inspired, create your own native plant version of a Danger Garden (à la *The Poison Garden at England's Alnwick Garden*).

Finally, a deer-proof garden

The plant list for toxic plants isn't long so we suggest combining your toxic plants with other natural deer deterrents. Natural deer deterrents include strong-tasting plants (like members of the onion or mint families, strong-textured plants (foliage with spikes, rough textures or hard edges) and warm-season grasses to add complexity to the design. Suggestions include:

- Native mint or onion family members: beebalm (*Monarda),* creeping mint (*Meehania cordata*), mountain mint (*Pycnanthemum*) or nodding onion (*Allium*).
- Native plants with unpleasant textures: coneflower (*Echinacea*), rattlesnake master (*Eryngium*), black-eyed Susan (*Rudbeckia*), fleabane (*Erigeron*) or sage (*Salvia*).
- Native sedges, rushes and grasses: switchgrass *(Panicum),* big bluestem or broomsedge (*Andropogon*), little bluestem (*Schizachyrium*), muhly *(Muhlenbergia),* rush (*Juncus*) *or* sedge (*Carex*).

Want to know what exactly makes these plants toxic and what active chemical compounds are contained in their foliage and roots? Here is a list of references:

- University of Vermont Poisonous Plants
- Poisonous Plants of the Southern United States
- University of California Safe and Poisonous plants
- U.S. Forest Service Plant of the Week – Common sneezeweed (*Helenium*)
- North Carolina Extension Toolbox – White snakeroot (*Eupatorium*)

Photos: Barbara A. Schmitz

The unpleasant texture of fleabane (*Erigeron*), left, and rattlesnake master (*Eryngium*), right, make them a deterrent to wild animals like deer and small mammals.

Tinkerer, gardener, marketer, content creator – Chelsea Ruiz enjoys a bit of everything. While working in horticulture research and in public gardens, Ruiz gained hands-on gardening experience and became intimately connected with which garden rules work – and which are a bust. Marketing native plants was a natural fit when it became clear that customers were eager for this hands-on knowledge. She now transmits plant experience, trial evaluation results, and horticultural skills to a commercial and residential audience. A marketing assistant for North Creek Nurseries, catch her work on The Plug and on Facebook and Instagram @northcreeknurseries.

Part 2 of a 4-part series

Broadening our focus: Optimizing how we use native plants

By Eric Fuselier

Without soil, life on land would be impossible. So much more than just a medium for plant growth, soil is also a habitat for living organisms. Soil can store and purify water, and can even modify Earth's atmosphere.

Our society depends on soil to grow our food, as a substrate to build upon, and to support the web of life upon which all life depends. Past civilizations that did not conserve the soil on which their societies were founded eventually suffered the consequences of their poor choices and collapsed. The early agricultural societies that once thrived in the fertile crescent learned this difficult lesson once their soil became too degraded for food production. In more recent times, American society learned some hard lessons about the impacts of poor soil management during the Dust Bowl of the 1930s. Even today, we could easily suffer the same fate as so many other societies have in the past if we are not wise in our approach toward soil management and fail to prevent the soil from degrading yet again.

Soil is considered a non-renewable resource because the time that it takes to form is much, much longer than a human lifespan. Therefore, it is essential for landowners and land managers to ensure that they conserve the soil they are managing to prevent it from eroding away and washing permanently into the ocean.

Soil erosion adversely impacts the aquatic ecosystems that many species of insects and fish depend upon to live or to complete their life cycles. Too much suspended sediment in local waterways restricts the depth sunlight can reach within the water column. Without sufficient sunlight, algae and aquatic plants living in the water are unable to perform photosynthesis, the process by which the oxygen that fish and macroinvertebrates depend upon to breathe is dissolved into the water. Without photosynthesis occurring in the water, these organisms are unable to survive.

Indiangrass (*Sorghastrum nutans*) can be used in landscapes to improve environmental quality by preventing soil erosion and reducing the amount of nutrients entering local waterways.

In addition to the negative impacts to aquatic organisms that result from reduced levels of dissolved oxygen due to insufficient sunlight and a reduction in photosynthesis, high levels of suspended sediment can also lead to soil particles becoming lodged in fish gills, which can further restrict their ability to breathe and cause them to suffocate. Maintaining low levels of suspended sediment in our local streams, rivers, lakes and reservoirs is important for both water quality and maintaining healthy aquatic ecosystems.

Aside from erosion control, another soil management technique that has been adopted since the advent of agriculture has been to apply fertilizer, in one form or another, to replace nutrients in the soil that were removed when the previous year's crops were harvested and moved off-site. Nutrient cycling is an important function in any ecosystem, agricultural or otherwise. However, excess nutrients in aquatic ecosystems can be detrimental to aquatic life through a process known as eutrophication.

While aquatic habitats do require a healthy level of nutrients to support the organisms that live in them, when nutrient levels become excessive it can lead to an over-

Big bluestem (*Andropogon gerardii*) has been called the prince of the tallgrass prairie. It grows from short, scaly rhizomes and roots that saturate the top 2 feet of soil and often extend 12 feet below the surface.

growth of algae. When these algae die at the end of the growing season and are consumed by microorganisms, these microorganisms use up the dissolved oxygen in the water, resulting in anoxic conditions where fish and other aquatic organisms suffocate due to a lack of dissolved oxygen for them to breath.

In this article, we continue to look at how the "Big Four" native warm-season grasses — big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), Indiangrass (*Sorghastrum nutans*) and switchgrass (*Panicum virgatum*) — can be utilized on the landscape to improve environmental quality by preventing soil erosion and reducing the amount of nutrients entering local waterways.

Erosion and sediment control

By trapping sediment, the Big Four native warm-season grasses once again prove useful. With their dense foliage, the Big Four are great for slowing down stormwater runoff and filtering out any soil or sediment it contains before it reaches aquatic ecosystems. Planting a buffer of one or more of the Big Four along the edges of local waterbodies or adjacent to tilled agricultural fields can help keep soil contained in stormwater runoff out of local waterways.

The deep root systems of the Big Four also prove useful in holding soil in place. By planting the Big Four along streambanks, we can slow stream bank erosion, especially in deeply incised streams that are often a result of an increase in impervious surfaces associated with urban and suburban development upstream.

Nutrient pollution

Plant species that produce high biomass and have fast growth rates are excellent for reducing the amount of nutrient pollution entering our waterways. Because these species are able to take up large quantities of nutrients in a short amount of time and incorporate them into their biomass, they can be an effective means of removing these nutrients from the soil and from stormwater runoff before they enter local aquatic ecosystems.

A common source of excess nutrients in freshwater systems includes fertilizers applied to lawns and managed landscapes in urban and suburban areas. Including the Big Four native warm-season grasses in rain gardens, bioswales and detention ponds that receive stormwater from lawns and garden beds can help reduce the amount of these nutrients entering aquatic ecosystems. But keep in mind that each species varies in their tolerance for moist soil. Switchgrass can handle medium to wet soil and typically does well when planted in the lower elevations of a raingarden or bioswale, but there is still a place for big bluestem, little bluestem and Indiangrass higher up on the berms and edges of a raingarden or bioswale where the soil has better drainage.

Other sources of excess nutrients in freshwater systems include fields and agricultural lands where fertilizers are applied, as well as sediment originating from eroding streambanks, logging activities and construction sites. This sediment commonly contains phosphorus that contributes significantly to nutrient pollution in waterbodies.

Planting a filter strip of one or more of the Big Four native warm-season grasses within riparian areas along the banks of streams and rivers, and along the edges of lakes and ponds can reduce the amount of nutrients contained in stormwater runoff from entering these waterbodies. And as when planted for erosion control, the deep fibrous roots of the Big Four native warm-season grasses are a highly effective means of stabilizing the soil on streambanks and other locations and can thereby reduce erosion as a source of excess phosphorus in aquatic ecosystems. Reducing the amount of phosphorus entering aquatic ecosystems is key since the eutrophication process is typically limited by phosphorus levels instead of by nitrogen.

Once again, we see that the Big Four are useful species to include in the landscape if we want to improve environmental quality. Whether we are trying to reduce or prevent erosion, or trying to prevent the eutrophication of our waterways, the Big Four can be thoughtfully placed on the landscape to provide optimal results for the benefit of both the human and non-human beings on our planet.

Wild Ones National Board member Eric Fuselier is an environmental scientist at Olsson where he conducts environmental impact studies and works with civil engineers and landscape architects to minimize the environmental impact from the infrastructure projects they design. Fuselier chartered the Wild Ones Ozark Chapter in 2020, and currently serves as chapter president.

Watch Eric Fuselier's Green Infrastructure webinar series on the Wild Ones website.

Genetic diversity and plant preservation

By Neil Diboll

The divergence between the goals of horticulture and ecology create a conundrum for the modern gardener, especially those committed to the preservation of plant species and the organisms that depend upon them for survival.

Horticulture is directly dependent upon the maintenance of a broad genetic storehouse within each plant species to serve as stock for future plant selections. Thus, it is incumbent upon us, as stewards of the planet, to preserve and propagate open-pollinated, genetically diverse native plants within our respective regions. In this way we can ensure the survival of these plants, as well as their use in sustainable, ecologically sound and economically feasible landscapes of the future.

Plant genetic diversity plays an important role in our gardens, landscapes and natural areas, with latitude, longitude, elevation and the general climate being key factors. Isolated populations can experience in-breeding depression due to a narrowing of the gene pool in a single location with no opportunity to outcross with other populations to maintain genetic diversity. Outcrossing with other distant populations of the same species can reinvigorate a local population through "hybrid vigor."

Hybrids between different populations are often more vigorous than non-hybrids, and masking of homozygous recessive genes can cause harmful mutations, retard the plant's vigor and other problems. For example, hybrid corn consistently out-yields corn from standard non-hybrid corn.

Research has shown that plants with multiple ploidy are often more capable of adapting to difficult or changing growing conditions due to their extra genetic information. However, there is a cost to the plant for maintaining multiple ploidy in the materials and energy required to carry this extra "genetic baggage."

Polyploidy is generally more prevalent in long-lived perennial plants. It also tends to increase with higher latitudes and elevations. It is also common in wetland plants, particularly in salt marshes and estuaries where the water fluctuates between salty ocean, brackish and fresh waters.

How important are local ecotype plants?

There is much debate regarding the importance of local ecotype. The importance of planting local ecotypes within a plant's native range depends upon the individual plant species, the distance it is being moved and the climatic differences between the two sites.

Studies have shown that plants can be successfully moved longitudinally east to west hundreds of miles, provided that the climatic conditions are not appreciably different. However, a generally accepted rule of thumb is that plant material can only be moved two to three degrees latitudinally, north or south of its original location. This is due to differences in temperature regimes, day length and length of growing season.

In addition, studies have shown conclusively that moving the same species up or down a mountain slope results in decreased plant vigor and survival at the new elevation.

Apomictic plants – natural "seed clones"

Some plant species exhibit a condition called apomixis, in which each flower produces "cloned seeds" that do not undergo fertilization by another flower. This phenomenon has been documented in members of the rose family (*Rosaceae*), aster family (*Asteraceae/Compositae*) and grass family (*Poaceae*), among others.

Neil Diboll

It is believed that practically all the black chokeberry plants in North America are identical clones from apomictic reproduction. This species occurs in both a diploid form (two sets of chromosomes like people) and tetraploid (four sets of chromosomes). The tetraploid is most common, and there is almost no genetic variation between the individual plants and no sexual reproduction except for isolated diploid populations in New England.

Interestingly, many apomictic plants originate from natural hybrids, and many are polyploid, such as tetraploid (four sets of chromosomes), hexaploid (six sets) and octoploid (eight sets). Perhaps the presence of the wider diversity of genetic options afforded by polyploidy helps overcome any limitations in adaptability incurred by the lack of variation through sexual reproduction.

Perils of inbreeding depression
Some plant populations or local ecotypes have been documented to suffer from loss of vigor due to inbreeding depression.

For example, lakeside daisy (*Tetraneuris herbacea*, formerly *Hymenoxis acaule*) is a rare plant that grows on sand dunes in the Great Lakes region. Populations on Lake Michigan were found to not be reproducing and were crossed with a population on Lake Erie hundreds of miles away. The offspring were fully capable of setting viable seed. Thus, the introduction of "fresh genes" into a small, local population that had become inbred led to more vigorous plants and prevented the local population from being extirpated.

There is an inherent conflict between horticulture and ecology. Horticulture seeks to select and breed genetically "superior" plants to better serve the needs of humankind, while ecological gardening emphasizes biodiversity and the preservation of distinct local gene pools of each species. Many ecologists criticize gardeners' focus on showier cultivars as a self-serving indulgence that potentially threatens the genetic integrity of the species, especially with regard to native plants.

'Nativars' – improved varieties or not?
There is much controversy surrounding the introduction of native cultivars, or nativars, that result from selection, breeding and hybridization of herbaceous native plants. The contention by ecologists is that selecting plant strains for purely aesthetic characteristics may rob them of the genetic flexibility they need to adapt to an ever-changing world through loss of important genetic traits. The priorities of many gardeners include bigger, longer-blooming flowers, bolder foliage coloration, improved disease resistance and enhanced plant appearance. But the priorities of most ecologists include preservation of diverse gene pools so plants can adapt to future climatic perturbations and provide essential ecological services to pollinators and other fauna.

Open pollinated plants vs. plant selections, hybrids, etc.
In order to assure consistency in appearance and plant behavior, almost all cultivars are propagated asexually by division, cuttings and tissue culture. This potentially leads to a narrowing of the gene pool compared to "open pollinated" plants that are commonly propagated via pollination. The theory is that this preserves the natural diversity of a species' genetic legacy, as well as its future adaptive capabilities.

In a garden setting, the preservation of a species' genetic diversity may seem irrelevant to the survival of any given species. However, with increasing fragmentation of native plant communities due to development and loss of habitat, gardens are becoming increasingly important repositories of native plant genetics. This becomes more important when taking into account the loss of habitat for insects and other invertebrates that depend upon native plants. The rapid decline in pollinator populations is a warning flag that the ongoing loss of natural areas is having a significant impact on these populations. One third of the foods we rely upon are dependent upon pollination, mostly by native insect species, via fertilization and fruit and nut production.

Why native plants are essential to tomorrow's gardens
The garden of the future will be challenged by numerous ongoing changes, both locally and globally. The meteorological shifting sands caused by climate change is leading to highly variable weather patterns. Extreme heat, cold, drought and the increased frequency of high rainfall events will make gardening more challenging. As with any change, it may also present opportunities to grow new plants that were previously not tolerant of cold winters or other factors.

Long-term ecological history indicates that during periods of warmer, drier conditions, woody plants tend to decline, while herbaceous flower and grasses tend to survive. This makes prairie plants excellent candidates for landscaping in regions that experience higher temperatures and lower annul precipitation in the future. As competition for a finite supply of fresh water becomes more intense, the cost of irrigation will increase. At some point, the demand for water in agriculture may limit the availability of water for maintaining residential landscapes. Fortunately, many native plants are accustomed to growing under low rainfall conditions.

Native plants are finding increased acceptance in our landscapes, not only because they are attractive in their own right, but also because they reduce maintenance and total costs. A combination of wilder, open-pollinated native plant landscapes, along with more formal nativar gardens appears to be the direction in which modern horticultural is heading.

Climate change and horticulture
There is much debate concerning how humans should respond to climate change with regard to preserving plants whose habitats may be impacted negatively by warming temperatures. Ecologists generally agree that preservation of diverse gene pools is essential to ensuring that plants will be able to adapt to a warmer climate. Some favor the active transportation of southern ecotypes northward, especially for species whose southern ranges may become inhospitable to their survival as temperatures increase. Others favor assisted migration, or moving southern species northward into habitats where they are not known to occur, at least not in recent times.

Some native plants have already made the move northward on their

own over the past two decades.

Seeds are constantly being transported to new locales by birds, wind and other natural vectors. Some southern species that did not survive in colder northern zones are now capable of doing so.

Slower-growing, more conservative plant species, especially those that do not have the benefit of transport by birds and wind, are generally less able to migrate rapidly into new areas. This includes trees that produce large nuts such as oaks and hickories that cannot be carried over long distances by birds or other animals. Trees and shrubs that produce berries are more easily transported by animals due to their lighter weight and tendency to be ingested without harming the seed itself. However, almost all fruits are ripe in autumn when birds are migrating southward, so the opportunity for these species to move northward is limited.

Many now ask if we have a responsibility to assist in the northward migration of species that may lose some or all of their natural plant ranges due to warming temperatures. Is there an 'ecologically ethical' way to accomplish this without potentially creating other problems? If so, what guidelines should be used in this process?

Ecological purists argue that plants should remain within the natural ranges they occupied at the time of European settlement. But botanical history shows this is neither possible nor consistent with the planet's history of evolutionary change and continuous migration of species, be they plant or animal.

Many herbaceous and woody plants have been found to be naturally cold hardy in locations far north of their existing ranges. Some have been bred for cold hardiness simply by selecting plants that survive cold winters and propagating them over multiple generations to develop reliably cold hardy strains. As with any selection process, there may be other important adaptive traits that are lost in this process, such as disease resistance, drought resistance, nectar quality, etc. Once again, the importance of retaining diversified genetic stock for every species provides the opportunity to select for other important characteristics in the future.

To counter the above argument, there are woody trees and shrubs that are cold hardy north of their range as adults, but sensitive to cold as juvenile seedlings and saplings. These species are generally hardy in USDA Zones 4-5 when transplanted as young trees or shrubs. However, their seedlings are killed with the first hard frosts and self-sustaining populations cannot be established.

Neil Diboll is a Lifetime Honorary Director of Wild Ones and president and founder of Prairie Nursery Inc.

GETTING SEDGY WITH GREEN MULCH

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Ever walked in a meadow and seen animals hard at work spreading wood mulch? Chickadees carefully placing a piece here, squirrels using their tails to smooth a patch over there? It's a sight to see as nature works to reduce weed competition and add organic matter to the soil.

But you know that's not REALLY how nature works; in nature functional and ecological landscapes are about plants! -- green vegetation at every level from the ground layer up through taller perennials and grasses to trees. Nature uses green mulch (plants) to fill open spaces. Plant layers build soil, conserve moisture, compete against weeds, filter water into the ground, and provide habitat benefits for wildlife. So why do we insist on going against nature and applying mulch every year in our urban landscapes?

Top: *Carex pensylvanica* (Pennsylvania sedge) with *Oxalis violacea* (violet wood sorrel) peaking through. Photo courtesy of Mt Cuba Center.

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Wild Ones names Larry Weaner an honorary director

Wild Ones is proud to introduce Larry Weaner as an honorary director to serve a 2022 through 2025 term. Wild Ones recognizes and honors distinguished individuals who are respected and known for their expertise in the fields of ecology, botany, plant science, horticulture, entomology, climate change and conservation.

Weaner received his associate degree in ornamental horticulture from the Pennsylvania College of Technology. He founded Larry Weaner Landscape Associates in 1982 and gained a national reputation for combining ecological restoration with garden design traditions. In 2008, he received the top three design awards from the Association of Professional Landscape Designers and his work has been profiled in many regional and national publications. An active guest lecturer for horticultural and environmental organizations throughout the U.S,

Larry Weaner

Weaner developed New Directions in the American Landscape, a conference series dedicated to advancing the art and science of natural landscape design.

Wild Ones Executive Director Jen Ainsworth said, "Larry has made significant contributions to help change the way we include native plants in our landscaping; we are fortunate to be able to work with him to broaden our mission."

Monarch butterflies' predators copy their poison resistance at a genetic level

By Ellen Phiddian

Monarch caterpillars live on poisonous milkweed, which makes the adult monarch butterflies noxious to most predators. Over the past decade, researchers have been able to spot a number of key genetic mutations that allow monarchs to tolerate milkweed toxins.

Now, a study has shown that four of the monarch butterflies' North American predators also have these mutations, in a fascinating display of convergent evolution.

A team of U.S. researchers have found that a bird, a mouse, a wasp and a nematode have all evolved mutations in genes that code for a key protein, called the sodium-potassium pump.

These mutations are nearly identical, despite the vast morphological differences between the species. These mutations also match those in the butterflies themselves, which the researchers spotted a couple of years ago.

The sodium-potassium pump is crucial to the function of heartbeats and nerve firing, so the milkweed toxins that interfere with its production are dangerous. Milkweed can cause heart attacks in creatures as large as humans and horses.

So it makes sense that mutations in the genes that code for this pump would make species more resistant to milkweed. Nonetheless, researchers were surprised by how similar these genes were.

"It's remarkable that convergent evolution occurred at the molecular level in all these animals," says co-author Simon Groen, assistant professor of evolutionary systems biology at the University of California, Riverside.

"Plant toxins caused evolutionary changes across at least three levels of the food chain."

The researchers investigated the genomes of the black-headed grosbeak (*Pheucticus melanocephalus*), the eastern deer mouse (*Peromyscus maniculatus*), the small *Trichogramma pretiosum* wasp and the *Steinernema carpocapsae* nematode.

Both the bird and the mouse are known to eat monarchs, while the wasp parasitizes monarch eggs and the nematode parasitizes the caterpillars.

"It looks like, amazingly, [grosbeaks] are evolving resistance using the same kind of machinery in the same places in the genetic code as the monarch and the aphids, the bugs and the beetles, that feed on milkweeds, as well," says Noah Whiteman, professor of integrative biology and of molecular and cell biology at the University of California, Berkeley.

The researchers aren't sure whether there are other mutations that assist with milkweed tolerance, but they're interested in finding out.

"My guess is, there are other parasitoids out there, and predators that have also evolved resistance mutations that are interacting with monarchs, and it's just a matter of time before they're discovered," Whitehead says. "We know that this isn't the only way to evolve resistance to cardiac glycosides, but it seems to be the predominant way — targeting this particular pump."

Photo: Bill Bouton

Photo: Barbara A. Schmitz

Monarch caterpillars (below) eat milkweed plants, meaning that the adults are filled with toxins that dissuade most predators. But not the black-headed grosbeak (above), which has developed the same genetic mutations as the butterflies so that it can withstand milkweed toxins.

The researchers have published their findings in *Current Biology*.

Originally published by Cosmos magazine, cosmosmagazine.com.

Ellen Phiddian is a science journalist at Cosmos. She has a bachelor's degree in chemistry and science communication and a master's in science communication, both from the Australian National University.

Wild Ones grows the Native Garden Design program

By Katie Huebner

In early 2021, Wild Ones began the Native Garden Design program by publishing free, professional garden designs for the public with the premise that using native plants in landscaping can not only be beautiful, but also promote pollinators and wildlife, slow stormwater runoff and be achievable for gardeners of all skillsets in terms of scope and budget. By the end of the year, the program produced nine ecoregion-specific designs for Boston, Chattanooga, Chicago, Denver/Front Range, Milwaukee, Minneapolis, St. Louis, Tallahassee and Toledo.

The designs can be downloaded from the Wild Ones website. Each design includes a digital plant list featuring color photos of each native plant incorporated in the design. The design .pdfs and accompanying plant lists are easy to print for quick reference while selecting plants at a local native plant nursery and planning a yard layout.

Another component of the program was the creation of a print resource geared toward those new to native gardening titled, "Creating Your Own Native Garden Design: A Guide to Creating Beautiful Home Landscapes." Copies of this informative and colorful guide were provided to Wild Ones chapters to share with Wild Ones members and the public. The digital content of the guide is available at nativegardendesigns.wildones.org under the "Get Started" section.

Both the designs and the guide were generously supported by a grant from the Stanley Smith Horticultural Trust (SSHT).

The positive feedback we received after releasing these resources made it clear we needed to continue growing the Native Garden Design program as an effective way to fulfill Wild Ones' mission. We applied for and were granted additional funding from SSHT to increase the number of native garden designs we provide in 2022 and develop a new print guide focused on landscape resilience in wildly shifting climates.

Wild Ones has several new designs currently in the works that will focus on areas of the country that have been most affected by climate change damage and drought. These areas are challenged to alter landscape practices and need inspiration and new channels for education on how to restore and beautify the land. Regions being considered for new garden designs include the Gulf Coast, Great Lakes, Mid-Atlantic/Southeastern, Midsouth, Northeast Metropolitan, Southwest/Arid Desert or Canyonland, and the Pacific Northwest. Rain garden designs are also being considered.

Along with the designs, Wild Ones is creating a new printed guide, "Benefits of Landscaping with Climate Resilient Native Plants: A Guide to Environmentally Conscious Home Landscapes." The guide will cover the topics of carbon sequestration, water management, temperature extremes, flooding and drought. Copies of this guide will also be provided to chapters along with additional copies of the "Creating Your Own Native Garden Design: A Guide to Creating Beautiful Home Landscapes."

We look forward to sharing these resources and hosting conversations with the new designers we are partnering with on the designs later this year.

Mysteries of native orchids

All photos courtesy of Karen Newbern

Yellow lady's slipper (*Cypripedium parviflorum*)

By Karen Newbern

What comes to mind when you think of orchids? Mysterious? Exotic? Tropical? While all of these are descriptive of this diverse plant group, you might be surprised that native orchids can be found on all continents except Antarctica.

Botanists estimate that there are about 28,000 orchid species worldwide, with more than 200 found in North America. Florida boasts nearly 100 native species, while Hawaii, surprisingly, only has three. In my home state of Wisconsin, about 40 species have been documented.

One of the most interesting aspects of orchids is their unusual life histories. Many tropical species are epiphytes, growing on trees or other plants, with their roots exposed to the air. The roots anchor the plant, absorb moisture and draw nutrients from organic debris and animal droppings. Terrestrial orchids, on the other hand, have complex relationships with certain types of fungi in the soil, which provide minerals and carbohydrates needed for seed germination and growth. Many orchids also have highly specialized relationships with bees, moths and other pollinating insects.

Get to know some natives

Cypripedium, or lady's slippers, are probably the best known of the native orchids, with 12 species native to the U.S. The "slipper" is a modified petal called the lip, which traps pollinating insects and forces them to climb over the reproductive structures to escape the plant. The tallest of this group, the showy lady's slipper (*C. reginae*) can reach almost 3 feet in height. Yellow lady's slippers (*C. parviflorum*) have a wide range, extending from the eastern U.S. and Canada west to the Rocky Mountains and north to Alaska. The white lady's slipper (*C. candidum)* is a prairie species with striking white flowers. Pink moccasin flower (*C. acaule)* has an unusual flower with a split in the lip instead of the typical round opening. It occurs in northern coniferous or mixed hardwood forests.

One of the most unusual lady's slippers is Ram's head lady's slipper (*C. arientinum)*. This diminutive plant has a distinctive lip that resembles an upside down cone with dark burgundy veining and a white fuzzy rim. It grows in a narrow range from New England through the Great Lakes and into Canada.

Platanthera is a large genus (45 species in North America). Plants are called butterfly orchids as the flowers resemble a butterfly in flight. Depending on the species, the flowers may be greenish yellow, lavender purple, white or even bright orange. The purple fringed orchid (*P. psycodes*) grows in swampy forests, moist meadows and sometimes



Left to right: Ram's head lady's slipper (*Cypripedium arientinum*); Slender lady's tresses (*Spiranthes lacera*); Striped coralroot (*Corallorhiza striata*).

along roadsides. The prairie ringed orchid (*P. leucophaea*) has lovely white flowers, while the stunning flowers of an orange fringed orchid (*P. ciliaris*) are dark yellow to orange.

Spiranthes, the lady's tresses orchids, have small white flowers in a spiral arrangement around the stem. It's a large genus, with almost 30 species in North America. Plants are usually found in grasslands or woods, but will sometimes colonize disturbed areas such as roadsides. The slender lady's tresses (*S. lacera*) has a delicate single spiral of blooms, while others such as nodding lady's tresses (*S. cernua*) have a more robust double spiral.

Corallorhiza, the coralroots, are so named because the rhizomes resemble coral formations. The North American genus is made up of 10 species of nearly leafless, non-photosynthetic woodland orchids. Most have no chlorophyll and depend on mycorrhizal fungi for nutrients. It is believed that they are pollinated by mosquitoes and gnats. Spotted coralroot (*C. maculata*) has small whitish flowers dotted with purple, while striped coralroot (*C. striata*) has numerous burgundy-striped flowers on each stalk. Both species are widely distributed in the U.S.

*Neottia (*including former genus *Listera)*, or twayblades, are named for the paired leaves that are borne at the base of the flowering stalk. Many of these orchids may only be a few inches tall with greenish-yellow flowers, making them very difficult to find in their native habitats. Heart-leaved twayblade (*N. cordata*) is one of the tiniest, standing only 2 to 10 inches tall when in bloom. It has a large native range, stretching from North Carolina to Maine, around the Great Lakes, across Canada and throughout the western U.S.

Goodyera is a small, but interesting genus. The four North American species are called rattlesnake plantain, referring to the beautifully mottled white and green basal leaves. These are small orchids, frequently less than 6 inches tall in bloom, with spikes of tiny white or greenish flowers. Downy rattlesnake plantain (*G. pubescens*) is found throughout the eastern half of the United States.

Arethusa bulbosa, or dragon's mouth orchid, is the only species in its genus. It grows in acidic bogs and fens in the Northeast and upper Midwest. The single, bright pink flowers are borne on a flowering stem about a foot tall. Flowers resemble an animal's open mouth, and the purple splotched lip acts as a landing pad for pollinating insects.

Calopogon tuberosa, or grass pink, is commonly found in moist sandy meadows, bogs and swamps. Several neon pink (rarely white) flowers, up to 2 inches across, are borne on each stalk. Unlike most orchids, the specialized lip petal is on the top of the flower rather than at the bottom. It is found throughout the eastern U.S. and southern Canada.

Calypso bulbosa, the calypso

Above: European broad-leafed helleborine orchid (*Epipactis helleborine*); Right, top: Creeping rattlesnake plantain (*Goodyera repens*) has flowers that twist themselves to face the sun; Right, bottom: Creeping rattlesnake plantain (*Goodyera repens*) can be easily identified by its multicolored leaves.

orchid or fairy slipper, is a small, but strikingly beautiful orchid of cool forests and bogs. Found in Canada and the northern and western U.S., it is only about 7 inches tall when in bloom. The single leaf at the base of the flowering stem withers after blooming, making it very difficult to locate.

Pogonia ophioglossoides, also known as rose pogonia or adder's mouth, is the only one of the genus found in North America. It is relatively common in bogs and swamps in the eastern U.S. and Canada.

Epipactis helleborine, the European broad-leafed helleborine orchid, is a weedy species that was intentionally introduced from Europe sometime before 1879. It is now widely naturalized throughout the eastern half of the U.S. The small, greenish-purple flowers appear in late summer. Although an attractive plant, its aggressive tendencies make it a threat to populations of native plants, so control is recommended in most cases.

Orchid conservation

Orchids are one of the most threatened plant families in the world. Some are naturally rare because of their complex life histories. More serious threats include habitat destruction, soil degradation, climate change and excessive (and usually illegal) collection for the horticulture trade, food or medicine. To protect native orchids, we must support efforts to preserve as much of their habitats as possible.

In addition, orchids should never be removed from the wild. Not only does this deplete wild populations, but transplanted orchids seldom survive due to their complex fungal relationships and habitat requirements. If you would like to try growing native orchids, seek out reputable nurseries that sell only tissue propagated plants. A list of trustworthy sources of native plants can be found at https://nativegardendesigns.wildones.org/nursery-list/.

Most importantly, take time to learn about the native orchids found in your area. Check out Go Orchids – you can search for native orchids by location or species. Who knows, the next time you visit your favorite preserve or natural area, you might be lucky enough to find some of these mysterious, exotic beauties.

Karen Newbern has worked for nearly 35 years as a naturalist and environmental educator. She developed a special fondness for native orchids while working at the Ridges Sanctuary in Baileys Harbor, Wisconsin. Karen is a Wild Ones member and is the treasurer and membership chair for the Door Peninsula (Wisconsin) Chapter.

TOADally perfect:

How to create toad habitat in your yard

An adult American toad (*Anaxyrus americanus*).

Photo: Rori Paloski, Wisconsin DNR

By Barbara A. Schmitz

OK, I'll admit I was a little jealous. I had slowly been transforming my yard into a Garden of Eden for birds and pollinators. And it had worked in that I was seeing a lot more bees, butterflies, dragonflies and other insects, as well as birds, fluttering throughout the yard and landing on my growing number of native plants.

But one thing wasn't coming to my yard: toads. Don't ask me why, but I love toads, and was jealous of my friend who had lots in her yard, despite not having as much native landscaping. So my husband got on board and we upped our efforts.

I live in Wisconsin, which is home to American toads (*Anaxyrus americanus*). But American toads can be found throughout almost all of the United States east of the Rocky Mountains, and their range extends north into central Canada and south into Mexico. In winter, they spend months burrowed deep in the soil. But once the temperature rises, you can hear their presence. And if you're lucky, you just might see them, too.

So last May, we added a little pond for them, made from the plastic cover of an old garbage can, and lined it with pebbles and stones. As more and more flowers bloomed, the pond became more and more hidden. We also added lots of places for toads to hide, in addition to the leaves and plants already there, cutting out notches on tree stumps that line our native plantings or building toad houses out of planks from an old cedar fence. But other things can be used to make toad houses too, from flower pots, to stones and ceramics, according to the Welcome Wildlife website.

The American toad can easily be identified by its dry rough skin and large swellings behind the eyes (parotoid glands), according to the Wisconsin Department of Natural Resources. Its dorsal color can vary from brown to reddish to olive, with scattered dark spots, each encircling one to three wart-like bumps on the back.

Their thick skin, which traps in body fluids better than most amphibians, allows toads to live greater distances from water than most frogs. Toads live in a wide variety of habitats ranging from prairies to wetlands to forests. But they can also adapt to urban settings where they live in gardens and parks.

According to Pennsylvania State University, the American toad is active from April to November depending upon the local climate and weather conditions. During their active seasons, they typically spend daylight hours in their shallow soil burrows, under logs or within leaf piles. They emerge at night to actively feed on a wide variety of insects.

In their natural habitats, most American toads live for a year or less, though some toads may live for 5 to 10 years.

A toad's main tool for food gathering is its tongue, which is long, sticky and rapidly extensible. American toads regularly eat flies, crickets, locusts, grasshoppers, bees, wasps, beetles, spiders, caterpillars, earthworms, slugs and snails. It is estimated that 88% of their prey are invertebrates that are classified as agricultural pests. In three months, a single toad will consume just under 10,000 insects!

Knowing my impatience with toads finding our new backyard haven, my friend Kathy decided to speed up the process last summer. She told her 20-something-year-old son of our efforts, and during his next visit home, he captured two of her toads and her family came over to move the toads into their new home in our backyard. Once released, they quickly jumped away and haven't been seen since. But come this spring, there was no doubt. Those toads — or maybe others — were in fact, there. Their long, drawn-out, high-pitched, musical trill gave them away.

Breaking ground: Wild Ones plants seedling chapters across the U.S.

CHAPTER NEWS

By Lisa Olsen

Mimicking nature's break from winter dormancy, Wild Ones experienced a surge of interest this year in founding new chapters across the country. Many new members were inspired to join Wild Ones following Ohio State University's Tending Nature Speaker Series "Cultivating a Community of Support for Native Plants," with an overwhelming number of members raising their hands to launch seedling chapters in their communities.

Since January, Wild Ones has put down roots in Virginia, Arizona, New Jersey and Texas, and has expanded our number of chapters in Pennsylvania, New York, Massachusetts, North Carolina and Louisiana.

Wild Ones seedling founders share an interest in native plants and landscapes that benefit wildlife, as well as a growing concern about the detrimental impact of invasive species and the capacity of built environments to withstand the pressures of a changing climate. Donna Koch, retired teacher and founder of our first seedling in Virginia, said her passion for pollinators and habitat gardening stems from working in the yard as a child to backyard homesteading, growing food and tending chickens and honeybees. Koch writes: "Sadly, no Virginia chapters of Wild Ones existed when I was searching. That became a perfect opportunity to continue using my talents for educating family, friends and others by making the world (porch, yard, acre) a better place for native plants and life."

Seedlings are founded by people who wish to amplify their impact and hasten change in their communities.

Despite the physical isolation experienced by many these past two years due to the coronavirus, the pivot to virtual learning and online engagement has fostered new connections between like-minded individuals. Wild Ones Greater Baton Rouge (Louisiana) Seedling Chapter founder Janine Kharey says, "I am bolstered by others in different parts of the world to keep hoping I can set something in motion to make a difference."

Becki Wells, president of the Wild Ones Quad Cities (Illinois) Chapter, is interviewed by KWQC's Kyle Kiel about the benefits of planting native plants on May 3, 2022.

Most seedling founders are already active in their communities and many volunteer or work for other mission-aligned organizations. Some are Master Naturalists or Master Gardeners (or both), some are students and some are teachers (current or retired), some grow and sell native plants or plant-based products for a living, some are trained in landscape design or work for land management or conservation agencies. Some volunteer on municipal open space committees and tree boards, and many are involved in local green initiatives.

Another founder, Sharon Lamberton, shares what she believes sets Wild Ones apart. "Wild Ones offers the Richmond, Virginia area a fresh voice and a fresh ear," she says. "This gives Wild Ones the ability to work from the ground up, finding and filling gaps to build the kind of regional fascia that can make it easier for new sets of people to easily find the information and resources they need."

Lamberton says their goal isn't to waste energy trying to replicate good, existing resources such as the Digital Atlas of the Virginia Flora. "Rather, Wild Ones Greater Richmond Virginia can reach out, invite more people to the discussion, listen to what they need and then facilitate making the connections — both with us and with other native plant or conservation-oriented groups — that will help them confidently join this movement."

Lamberton says she chose to dive in with Wild Ones because she liked the open and inviting messaging she saw. She felt a Wild Ones chapter could reach people who aren't already active or knowledgeable about native plants, and connect them with area resources, helping them go from beginners to enthusiastic participants.

Wild Ones focuses on the why


Photo: Jane Allis

Members of the Wild Ones South Central Pennsylvania Chapter, founded in January 2022 and charted two months later, enjoy their chapter's field trip to the Mt. Cuba Center and gardens in Delaware. From left, Zach Richard, John and Deb Latsha, Terra Brownback, Jane Allis and Lorrie Preston smile for the camera.

and how to of designing, installing and maintaining living landscapes, incorporating native plants into home and public gardens. Wild Ones Appalachian Highlands (Tennessee) Chapter co-founder Gail Olson says: "There is a growing interest in native plants in our area and I have been asked to speak to several gardening groups. None of these other groups focus solely on native plants. I believe we are filling a niche for gardeners who wish to learn specifically about plants native to our area."

Northwest Lower Michigan Seedling Chapter founder Monica Farrier has shared the PowerPoint presentation provided by Wild Ones to introduce newcomers to the organization. Monthly chapter meetings are free and open to the public, "giving participants ample time to learn about the organization and about the relevance of native plants before making the decision to become members." Farrier says they have been approached by several garden clubs, Master Gardener groups and conservation organizations about their efforts, and those groups are helping to spread the word about the new seedling chapter.

"The name recognition of Wild Ones has been helpful in giving our chapter credibility and importance in our community," Farrier says.

Several seedling founders recommend a proactive approach to networking and collaborating with other organizations that are already doing great work to promote native plants. Contact county extension offices, the local Natural Resource Conservation Service office, university environmental sciences departments and landscape design programs, and state and chapter leaders of organizations like Audubon, The Nature Conservancy and native plant societies.

Lamberton says: "I sent out emails to let them know I am actively working to establish a Wild Ones chapter and my goal is to find ways to work synergistically, amplifying their message. I figure the best way to grow well is to sow these kinds of connections right from the start."

South Central Pennsylvania Chapter founder Jane Allis concurs. "If a seedling gets members who are also Master Gardeners or in Audubon or similar organizations, they can be great contacts to network and spread the word," she says.

Tabling at community events, farmers markets and native plant nurseries are great opportunities to share Wild Ones' mission and connect with potential members. County fairs provide a festive and family-friendly space to engage with people in rural communities. Both seedlings and chapters are exploring collaborations with public libraries and nature centers, municipal agencies and water providers to enhance community outreach and educational programming.

In addition to social media engagement, seedling founders have sent press releases and event calendars to local papers and media outlets. Spring is prime time for gardening, and seedlings and chapters were featured in articles and television segments. Tapping established media connections, the young Western Pennsylvania Area Chapter was featured last fall in a story on the local NPR station, and this May, New Jersey Gateway Seedling Chapter founder Gisela Ferrer was interviewed on the podcast Ino Contigo. These media spots highlighting Wild Ones' mission yield spikes in interest and membership.

However, founders must allow for time to connect with new members to discover why they joined Wild Ones and what they want out of belonging to a chapter. These conversations will help to guide event planning and program development and will result in a stronger, more engaged chapter. Lamberton says: "Persistence and using both social media and face-to-face connections are essential, as are keeping an eye and ear to the ground for moments of serendipity, and follow-up to cultivate and facilitate connections that may prove fruitful later. Remembering that some seeds need stratification to germinate properly, I am trying to be patient and stay focused on the big goal."

That goal is to cultivate local communities of support for native plants. Seedling founders recognize that what you do in your garden is important, but what you share with others matters more. Wild Ones chapters provide that space to share.

Lisa Olsen is Wild Ones Chapter Liaison and a past president of the Wild Ones Front Range (Colorado) Chapter.

Are you interested in founding a local chapter in your community? Visit https://wildones.org/chapters/start/ to learn more.

Mark Your Calendar

JUNE
National Great Outdoors Month

June 4
National Prairie Day

June 6
National Gardening Exercise Day

June 13
National Weed your Garden Day

June 15
Nature Photography Day
Get outside and take photos of native plants and gardens so you'll have lots to enter in Wild Ones' upcoming photo contest!

June 20-26
National Pollinator Week

JULY
July 1 - Aug. 31
Member entries due for the Wild Ones Digital Photo Contest. Entries must be submitted online at https://wildones.org/photo-contest-info/

July 11
National Cheer Up the Lonely Day
How about taking someone a bouquet of native flowers from your garden or inviting someone to visit a native garden with you?

July 22
National Hammock Day
Since native plants require less maintenance than nonnatives, spend the day resting in a hammock in your yard or in a nearby natural area or park.

AUGUST
National Water Quality Month
It's a great time to share the news that native plants' deep roots help provide cleaner water. Is your community incorporating native plants in parks and roadside plantings? If not, let them know the benefits of doing so!

Aug. 6
Wild Ones Annual Meeting, 10 a.m. CT
Save the date for this online membership meeting. Stay tuned for details.

Aug. 17
National Nonprofit Day
Please remember Wild Ones as you celebrate National Nonprofit Day. It's a great time to make a special donation to help the organization grow.

NEW AFFILIATE MEMBERS

Beech Hollow Farms
Tanner Biggers
https://beechhollowfarms.com
Georgia Piedmont

Hollis F. Price Library - LeMoyne-Owen College
Stacey Smith
Mid-South

Elizabeth McIntosh
Twin Cities

Friends of Mi Casita
Richard Rubin
Partner At Large

Jenny Pilling
Madison

Catherine Fox
SoKY

Brandon George
SoKY

Glenn Olson
Prairie Edge

Gail Simmons
Kalamazoo Area

Plant It Further
Tamara O'Brien
https://plantitfurther.org/
Western Pennsylvania Area

Lisa Fleckenstein
Western Pennsylvania Area

Renaissance Nature Club
Cheryl Packard
Northeast Ohio

Nancy Meyer
St. Louis

RENEWING AFFILIATE MEMBERS

Bristlecone Gardening LLC
Cynthia Allen
http://www.bristleconelandscapes.com/
Front Range

Litzsinger Road Ecology Center
Bob Coulter
https://litzsinger.org/
St. Louis

Pollinator Friendly Alliance
Laurie Schneider
https://www.pollinatorfriendly.org/
St. Croix Oak Savanna

Liberty Hyde Bailey Museum
Executive Director
https://www.libertyhydebailey.org/
Kalamazoo Area

Rochester Garden Club
Jane Giblin
http://www.rocgardenclub.org/
North Oakland

The Garden Lady
Beth Coleman
Door Peninsula

Good Natured Landscapes LLC
Denise & Frank Sandoval
https://goodnaturedlandscapes.com/
Greater DuPage

NEW LIFETIME MEMBERS

Christina Finken, Partner At Large
Duane Kurapka, Partner At Large
Derek & Amanda Hackbarth, Menomonee River Area
Jess Isenberg, St. Louis
Terri Koontz, Lexington
Frances Peebles, Middle Tennessee
Margaret Tuten, Partner At Large
Laurie Rosenthal, Partner At Large
Claryce Evans, South Shore MA
Lydia Pan, Mountain Laurel
Mike O'Brien, Partner At Large

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Southeast Minnesota Prairie Partners 11
Dayton Area, Ohio 6
Loess Hills, Iowa 5
Grand Traverse, Michigan 5
Northwoods Gateway, Wisconsin 3
Ozark, Arkansas 2
SoKY, Kentucky 2

IN MEMORIAM

Carl Scholz, Door Peninsula Chapter, Wisconsin

Kathryn M. Salmi, Kewaunee Chapter, Michigan