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Concerning Monarchs:

Native Plants Unlimited is often where people source plants for their monarch butterfly and native pollinator way stations. Customers seek our opinion, and there is a lot of conflicting information. Online articles can be full of feel-good "wish-conservation" that is the opposite of helpful to monarchs and other butterflies.

We wanted to address some of these issues and let you know where we currently stand on them. Of course, we're loud and proud advocates for *wildtype* native plants. Whether you get them from us, another sale, seed collection events at parks, or sharing by with friends, we mostly just want you to get them! The caveats: try to get wildtype native plants that are raised without pesticides as best as can be managed. Unfortunately, sharing can lead to innocent exchange of misidentified non-native lookalikes and unhelpful "nativars"- it's happened to us too.

What is best practice for aiding monarchs and, incidentally, other native species as well? Here are some aspects to consider, along with our recommendations.

Avoid Non-native Nectar Sources

We've talked to folks (not usually customers) that insist their non-native butterfly and hummingbird attractor plants:

- do not reproduce in the wild,
- are adored by butterflies and hummingbirds and other pollinators,
- other politicized opinions that we won't dignify here.

It's easy to believe that, when a butterfly comes to an Asian butterfly bush, it knows what it needs and is actually getting good nutrition from the plant. Its probably getting *something*, but consider- butterflies are attracted to color. In a nectar desert (most of suburbia), they're forced to take what they can get. There are so many other plants that do it better, that evolved in concert with our monarchs, that we're *certain* provide proper nutrients and have a flower with a suitable physical structure. Monarch plantings should fulfill multiple ecological functions, like hosting caterpillars (aka baby bird food), and providing native habitat, as well as being a nectar (and pollen) source. Some native plants even provide specific habitat for amphibians, and non-pollinator insects. For more discussion on this topic, find our write up "Why You Should Insist on Wildtype Native Plants" in our blog post master list [HERE!](#)

The best news? Native plants are incredibly beautiful, and are adapted to grow here! Choose native species adapted to your soil and water conditions, and say goodbye to brown thumb!



Plant Only Native Species of Milkweed

When monarch decline became front page news, people wanted to help, but often couldn't find native milkweeds, or favored non-native species marketed as "showier". Native milkweed plants and seed are now readily available, and the negative effects non-native milkweeds can have on monarchs are now well documented. Several large online retailers exist that sell exclusively wildtype seeds and plants, so no matter where you live, you have access to native milkweed. [Learn more about why we do not support the use of Tropical milkweed.](#)

The TL;DR? Just say NO to non-native species, even if they are milkweeds!



Remove Non-native Predators

Invasive species aren't limited to plants. The Chinese and European mantids, *Tenodera sinensis* and *Mantis religiosa* respectively, have [enormous impacts on native insects](#), and even hunt larger prey like hummingbirds, small reptiles, and mammals. The egg cases (ootheca) of these species can be targeted in winter when they are easier to spot. [\[more information on why we recommend eliminating them from your native plantings\]](#)



A male Chinese mantis showing their distinct facial markings. This male and one female produced dozens of ootheca containing thousands of eggs in one season.



A native female Carolina mantis cleverly disguised as a milkweed pod. Photographed in the same field as the Chinese mantis on the left, the year after we removed the Chinese mantid eggs.

However, there is a native mantis, *Stagmomantis carolina*, (pictured, right) that you'll want to encourage. They are a necessary, beneficial predator that is sustainable in our ecology.

Note: Both native and non-native mantis vary widely in color/patterning, wing size between the sexes, and body size as they grow. Before removing any non-native, make double-sure you have a positive ID. [See how to identify native vs. Chinese mantis HERE](#). Shared with permission from [IN Nature](#).

Slow and Offset Habitat Loss

Indiana is now and will continue to be one of the fastest developing areas of the world in coming decades. It's vital we make room for native plants and keep invasive species from dominating untended areas. Encourage everyone you know to return some amount of the land they manage to growing native plants- trees, shrubs, vines and herbaceous plants all count!

Habitat can be lost in other ways, too. In recent decades, as small farms have been bought by larger agro conglomerates, fence/hedge rows have been eliminated. This, along with riding mowers becoming commonplace, has had disastrous effects on insect populations and rural species diversity. Marginal land, while often overlooked by us, can supply important habitat! Don't mow edge habitats and marginal spaces like low spots and slopes! Plant native trees and shrubs, establish prairie strips and, crucially, **discontinue use of pesticides**. This includes fogging for mosquitos and "Weed-n-Feed" lawn treatments that may actually include grub control (even if the container doesn't say so - read that fine print on the ingredient list!)

All spaces are important, whether residential yard, farm, park, roadside, commercial beds/lawn, or urban patio/balcony/common areas! Signs are available from conservation organizations that help explain to visitors and neighbors what you're up to.



Default to Not Captive Rearing Caterpillars

Planting natives does not mean it is our duty to captive-rear caterpillars of any sort! There is [evidence that the benefits of captive rearing do not outweigh the risks](#) *for most people*.

After talking with many customers, we want to emphasize that raising caterpillars isn't the simple task the internet often makes it out to be. Captive rearing requires a huge investment of time and effort, and even then accidents happen. Challenges include but aren't limited to: sanitizing everything, including food, against the protozoan parasite, *Ophryocystis elektroscirrha* (OE), finding ways to ensure they have the benefit of outdoor stimuli (wind, temp swings, light cycle, etc.) in order to develop properly, keeping them in separate enclosures, and so forth. [Read about the pitfalls of captive rearing caterpillars here](#). It goes without saying that ordering eggs and caterpillars to raise is detrimental at every level. Concerns include: lack of genetic diversity, parasites, sensory deprivation, stunted development, and more.

Just because a monarch is successfully released doesn't necessarily mean it reproduces or migrates successfully.

What makes *us* feel good may not actually be good for them. Planting milkweed doesn't make us responsible for raising the caterpillars. From home to the classroom, we need to take ourselves outside, not try to bring caterpillars inside. Make their haven outdoors! Our recommendation is to keep caterpillars wild, so butterflies are best equipped the live in the wild!



Optimize your Native Plantings For Caterpillars!

Region appropriate native plants are the answer, along with two critical points: **Plantings should be DENSE and DIVERSE!** No need to weed out seedlings, allow plantings to fill in. The more dense the planting, the more cover eggs and caterpillars have from mantids, birds, and other predators. The more diverse the planting, the richer the all-season buffet you provide, the more butterflies you have! [Evidence suggests that monarchs are more likely to visit and lay more eggs in diverse plantings!](#) Dedicate as much space as you can to native plants. You don't have to do this all at once; starting small and learning year by year wins the race. Enabling monarchs and other pollinators to just do their thing will reward you beyond your expectations!

One last note: Be Patient. In Indiana, we often don't see monarchs until mid-August! Mexico is a long haul, and the monarchs we see are *usually* the descendants of individuals that left Indiana last summer/fall. (2023 was a notable exception.) That means when you see a monarch here, you know that its grandparent or great grandparent left here last fall, overwintered in Mexico, and began the generational journey north in spring. Indiana has a wide range of longitude; so, depending on the weather, our region can host the first (unusual), second, third and/or fourth generations. You'll see most of them mid-August through early October. Patience.

Thank you all for caring and planting native!

