




# Monarchs & Milkweed


## A Montana, Rocky Mountains & Northern Plains Guide


Essential Elements for Your Monarch Garden

 **Food:** While milkweed is crucial for Monarchs, it is also important to plant other nectar providing plants to diversify their food as adults. These plants also serve as a food source for countless other pollinator species. For a list of native nectar providing plants specific to your region, check out the National Wildlife Federation's, [Nectar Plants for Monarchs](#), page (see page 2).

 **Water:** Shallow water sources are best for Monarchs and other pollinators. Simply add small pieces of gravel to a birdbath or create shallow muddy patches around your yard.

 **Cover:** All butterflies need shelter from harsh weather and predators. Shelter options range from brush piles, dense patches of shrubs, or a bed of at least 10 plants clustered together.

 **Places to Raise Young:** All butterflies require a host plant, and for Monarchs this is milkweed. In fact, there are numerous native milkweed species, but without it, Monarchs cannot lay their eggs. In the Rocky Mountain region and Montana, plant Showy milkweed; the Northern Plains region, Common milkweed.

 **Sustainable Gardening:** Monarch populations have plummeted due to the decline of milkweed, but also the increased use of insecticides affecting all Monarch lifestages. Organic gardening and using native plant species is one of the best ways to combat this issue.

## Planting Milkweed

### About:

- Native plants are best planted in the fall, just before snow arrives, because the fresh snowfall protects newly planted seeds from birds and other predators. November is typically a safe time for planting milkweed in Montana.
- Milkweed seeds are found in pods and each seed is connected to what is known as “floss”, a white fuzzy part, essential for natural seed dispersal.

### How to Plant:

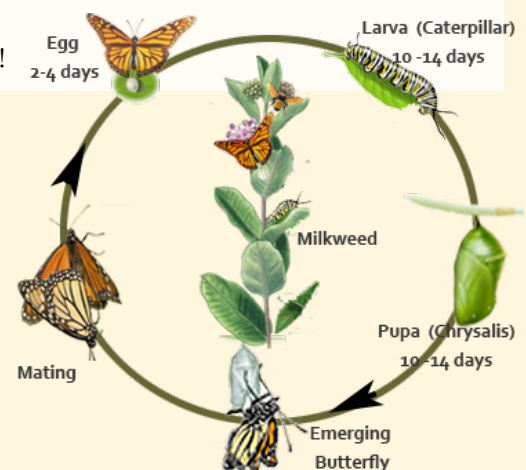
- If the seeds are still in pods, remove the seeds and “de-floss” them. It is okay to leave some floss behind. Next, begin by tilling a small patch of ground roughly 2 feet by 2 feet and removing all competing vegetation. Then, scatter the seeds in dense clumps covering them with roughly a ¼ inch of soil or leaves. It is very important the seeds receive ample water until fully established.

### Toxic:

- Milkweed is actually a poisonous plant! The Monarch caterpillar, which survives on a diet entirely comprised of milkweed, digests this toxin making them toxic to predators!

## Garden For Wildlife

In designing and planting a pollinator garden you are gardening with purpose. The National Wildlife Federation program, Garden for Wildlife™ is designed to help you create habitat for pollinators and other wildlife. As we transform our small pieces of Earth into wildlife sanctuaries, we are restoring habitat for our native wildlife in our communities, ensuring a better tomorrow.



# Gardening for Monarchs & Other Pollinators

## Tips & Design Ideas

### Life of a Monarch Butterfly




#### How do Monarchs find Milkweed?


Monarchs use sensory receptors to locate milkweed, primarily by sight and smell. However, their sensory receptors are unlike we humans. For example, Monarchs distinguish what plant species they land on through smell and taste receptors in their legs and antenna. Additionally, Monarchs have compound eyesight, meaning they see the world in thousands of separate images, sort of like seeing the world in a series of still photos rather than a movie. They also detect ultraviolet light radiating from flowers, allowing them identify different species.


#### Lifestages


Once Monarchs have made their migration up North, they have anywhere between 2-5 weeks to lay eggs. During this time Female butterflies can lay anywhere from 300-400 eggs. Once an egg has been laid it will remain dormant for roughly 4 days. It will then hatch into a caterpillar and survive by eating the milkweed for 9-14 days before transitioning into a chrysalis or pupa. Here it will remain still for 9-15 days before emerging as an adult butterfly. This new generation will then migrate to Mexico, their journey sometimes reaching 3,000 miles! Monarch will remain in their winter grounds for 7-9 months before migrating north to begin the cycle again.


### Tips and Design Ideas

 **Pick a Sunny Spot:** Most pollinators depend on nectar-producing plants that usually grow in sunny areas. Therefore, try to let your pollinator garden receive at least 6 hours of sunlight a day.

 **Prepare a Planting Bed:** When preparing to plant it is important to first remove grass, weeds, and other competing plants from the area. Soil health should also be assessed. If the soil is nutrient-poor, compact, or clay-heavy it can be remedied by gently adding compost to loosen and enrich the soil. If you are just starting off, try a bed at least 10 feet by 10 feet, or multiple smaller beds. Lastly, think about how you can diversify or reduce your traditional lawn, to create more habitat for wildlife.

 **Choose Native Plants:** Native plants are usually best, because they have co-evolved with our native wildlife, and are better suited for this climate, i.e. drought resistant.

 **Plant Densely and Diversely:** Due to co-evolution, native plants attract a higher number of native pollinators. This is because many plants have special ultraviolet designs and signals that draw specific pollinators and other wildlife to them. Keep it clumpy! By planting in clusters, you are creating pollinator beacons throughout your lawn.

 **Think Seasonally:** When designing your garden, it is important to think seasonally. Make sure you have plants blooming in spring and summer, but also into the fall and winter to support myriad other wildlife.

### Additional Resources

Monarch Mission: <https://www.nwf.org/Eco-Schools-USA/Resources/Curriculum/Monarch-Mission>

Nectar Plants for Monarchs: <https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/Monarch-Nectar-Guides>

The Story of an Organism: Common Milkweed: <https://natureinstitute.org/txt/ch/Milkweed.pdf>

For more information please contact the National Wildlife Federation's Northern Rockies, Prairies, and Pacific office in Missoula, Montana at [alhadefn@nwf.org](mailto:alhadefn@nwf.org).

