

Butterfly Gardening

by Jacqui Knight (Madam Butterfly) March 2007 - 1450 words

Butterflies are not only fun to watch, but they add colour and romance to your garden.

“They’re flowers that fly!” says Jacqui Knight, from the Monarch Butterfly NZ Trust. The group was established to foster information and education about the Monarch, *Danaus plexippus*, but quickly found that there was little information available for home gardeners and schools about butterflies and moths (Lepidoptera) in NZ.

In the USA, UK and Europe lepidopterists are very concerned about the loss of insect life with the change in our environment. Nothing appeared to be done in this country until the Monarch Butterfly NZ Trust embarked on their program.

“We have rolled our butterfly fauna back to the mountains and far-flung places,” said NZ lepidopterist Brian Patrick. “So that now many once familiar species are no longer found in cities, towns or the surrounding countryside. Sadly, young New Zealanders are no longer familiar with even our commonest butterflies because of the elimination of them from our cities, towns and countryside.”

There are less than 100 species of butterfly in this country as well as some attractive day-flying moths – and much of their habitat is threatened, so these colourful, beautiful insects need our help. With a little planning a butterfly garden can add entertainment to your landscaping.

During their life cycle, Lepidoptera species (butterflies and moth) require nectar-producing plants for adults to feed on as well as host plants where the females lay eggs and caterpillars or larvae will thrive. Flowers are what bring them to your garden; their shape or arrangement, colour and scent all play an important role.

Butterflies are attracted to groups or stands of plants that provide a mass of colour. Purple, yellow, pink, white, orange and red flowers all work well but because butterflies are nearsighted, a single plant may not produce enough colour for them to see.

As they need to land in order to feed, the shape and arrangement of the flowers needs to provide a good landing surface. Asters are great in this regard, while salvia and morning glory have tubular flowers with large amounts of nectar.

Aster, bee balm, catmint, coneflower, cosmos and dandelion are some great examples. Then there’s honeysuckle, hyssop, lantana, lilac, marigolds and especially good is Mexican sunflower (*Tithonia rotundifolia*).

Some other favourites are phlox, pinks/Sweet William (Dianthus), primrose and sunflowers. And last but not least: verbena, viburnum, yarrow and zinnia. But certainly this list is not complete – just try and get a mix of colour, height, texture and flowering periods.

Butterflies feed by using a straw-like structure called a proboscis to sip nectar from plants – and before they sip they sense the nectar quality with their feet! When not feeding, the proboscis is rolled up and tucked underneath the butterfly’s head. Butterflies use chemical receptors to detect fragrances in the air.

Flower fragrances help attract butterflies to a flower garden. Flowers with strong sweet scents such as heliotrope (*Heliotropium arborescens*), and viburnum will bring them flying in.

“However hybrids and cultivars often don’t have high nectar values,” said Jacqui. “In some cases older plant varieties are better – get cuttings or seeds from friends, neighbours and whanau.”

Many butterflies overwinter in trees in sheltered areas, and if your garden has a variety of nectar-producing plants flowering throughout the year, such as the butterfly bush (*Buddleia* spp.), Hebes and *Asclepias*, butterflies will lift your spirits on those rare winter days when the sun comes out.

“My poinsettia and bottlebrush (*Callistemon* spp.) bring the Monarchs in over the winter months,” added Jacqui. “These are older plants, and they are rich in nectar.”

The right location is also critical. The ideal butterfly garden will have six or more hours of sunlight and be sheltered from strong winds. The butterfly garden can be spread among different areas of your landscape. Placing flat stones in an open area of the garden will provide a place for butterflies to bask in the sun to dry damp wings, warm their bodies and seek refuge from predators.

The landscape around your butterfly-attracting plants should provide shelter during harsh weather. Trees and rows or clusters of shrubs will serve the purpose.

In the wild, butterflies are often seen congregating around a puddle of water. Such ‘puddling’ is done to obtain minerals and nutrients from the soil. You can create puddling areas by using a garden hose to create a mud puddle or by using a shallow pan buried in the garden area. Fill the pan with a mixture of one gallon of coarse sand and a half-cup of salt, and keep the mixture moist. But don’t leave it long enough to become a mosquito breeding area.

Providing host plants for the larvae or caterpillars will also bring the butterflies, the females of which will lay eggs. The Monarch requires milkweed (*Asclepias* or *Gomphocarpus* spp.) as the host plant for its larvae, while Admirals need stinging nettle.

According to Jacqui Knight, UK lepidopterist Nigel Venters says the NZ Red Admiral is the most beautiful of all the Admirals worldwide.

“It’s something that only NZ has,” she added. “But in many places you can’t find it any more, although it was once common all over the country. So many people don’t even know our Red Admiral, *Kahukura*, exists!”

“Because stinging nettle is considered an unwelcome weed and may be undesirable in gardens, some people find an out-of-the-way place to put it, where it isn’t a problem.”

She says it used to be considered as a fresh, valuable plant, loaded with nutrients and valuable minerals, and that people knew you could quickly counter the sting with a dock leaf.

“But now so many people think it has to be exterminated.”

Then there’s the brilliantly coloured Cinnabar moth which lays its eggs on ragwort, but is usually found only in the lower half of the North Island.

The use of insecticides will harm your efforts. While they may control your insect problem pesticides also kill Lepidoptera adults and larvae, and will throw the ecosystem out of balance. Consider using biological controls, such as hand-squashing aphids and encouraging ladybirds as your primary method of insect control.

Remember, if you are successful at attracting butterflies, you may have caterpillars on landscape plants, so you’ll need to accept any caterpillar damage. Caterpillars can be relocated to other host plants or other areas of the same plant when feeding damage is noticeable. Most plants recover from minor defoliation.

The Monarch Butterfly New Zealand Trust is compiling lists of other ways of safely controlling pests that affect butterflies, such as plant disease, predators and parasites, which is on their website, <http://monarch.org.nz>. They welcome new members, and for the small sum of \$20 a year, members receive a wealth of information about butterfly-gardening.

Autumn is an excellent time to be starting a butterfly garden.

“If you plant host plants now, they will be well-established for the summer,” said Jacqui. “Many people go and buy host plants in the summer, when they have desperately hungry caterpillars. This is such a waste of money.”

It may take more than one season for a butterfly garden to be successful, but it is most worthwhile.

So to summarise:

- Pesticides do harm butterflies, so avoid using them whenever possible.
- Choose older varieties over hybrids or cultivars.
- Choose plants that will bloom at different times throughout the season. Try experimenting with a variety of plants that appeal to different butterfly species.
- Sunny gardens attract the most butterflies, so plant in the brightest part of your garden.
- Some important details to consider are sunny spots for basking, shelter from wind and rain and sources of fresh water. Mud or sand puddles are used by adult male butterflies to obtain essential salts, needed for reproduction.
- Nectar plants provide food for all adult butterflies, while the host plants, which supply caterpillars with food, attract only that particular species. Keep in mind that some host plants are also great nectar plants, e.g. Asclepias.
- Most caterpillars feed only on specific types of host plants, so female adult butterflies deposit their eggs only on those plants their offspring will eat. By including host plants in your garden, you could witness the entire life cycle of the butterfly. Host plants for Monarchs are Asclepias species and Gomphocarpus species. Hosts for Coppers and Boulders are Muehlenbeckia, while both Admirals needs stinging nettle.
- Do your research before you begin planting to determine which plants to use, and how much space is required.
- Remember that some plants are prohibited pests – but check out all those in the family with a reputable source such as the regional council or DOC information. It's usually only one form that has become a nuisance.