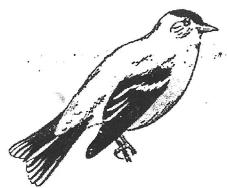
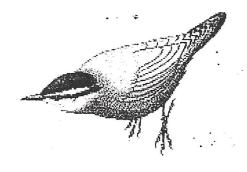
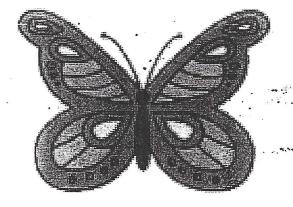
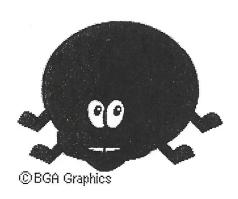
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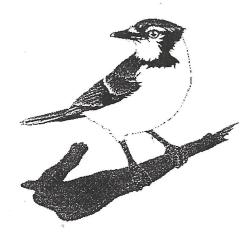




Backyard Planning for birds and butterflies
By Loree Fox
November 2002







#### BACKYARD PLANNING FOR BIRDS, BUTTERFLIES AND LADYBUGS

Birds and butterflies are seasonal and migratory. Some birds are in the yard year around and many are migratory. It is hard to develop a plan for a specific bird, however if one knows which species of birds are regulars and which are migrating or seasonal it is helpful, but first lets look at your backyard from a birds eye view. Is there shade? Is water available? Are there low shrubs as wells as tall trees? Do you have native plants in your yard? Birds are there just put up a feeding station and watch. One would be surprised how many there are.

Lets plan a bird scape for the garden or area available in the backyard. It is a good idea to have taller trees placed to lessen the force of the prevailing wind. Then arrange some lower shrubs among them. It is wise to use plants that are indigenous to your area. Lets look for trees that can give birds shelter in winter and ones that have fruits and berries for the birds to eat.

For winter shelter consider some conifers, they also make good wind breaks. Plant trees and shrubs of different heights in groups so birds can find shelter from the ground up. Mulching around the trees and shrubs is beneficial for holding moisture for trees and harboring insects the birds like to scratch out. For varieties of trees and shrubs look around your area and see what is growing. To determine which trees will grow in your area you can study the USDA plant hardiness zones.

One can bring in wild flowering plants, however many ornamental plants are attractive to birds and butterflies. Aquilegias, Honey Suckle, Monandra (Bee Balm) all have deep throats with honey that attracts humming birds also the humming bird moth. Choke Cherries, Service Berries, Dogwoods, are good low shrubs to plant in the garden. Different bird species need different resources, consequently these areas are limited to a degree, for instance the Stellers Jay and its eastern cousin the Blue Jay. The Stellers Jay is seldom seen east of the Rockies and the Blue Jay is rarely seen west of the Rockies. One will find that the birds in their backyards are indigenous to the area, so native plants and trees are what they like and are accustomed too.

Birds need water everyday to survive, so they need access to water for drinking and for bathing. Much of their water comes from insects they eat, also from streams, ponds, pools, dew and raindrops. Birds have an evolved waste system, they need to absorb and concentrate fluids for reserve by the body. Birds don't have sweat glands and must cool their bodies by breathing more rapidly to increase evaporation in the lungs, and bathing also keeps them cool. They also clean their feathers by running their bills thru the ranks of the feathers while bathing, and oiling them from an oil gland near their tail.

#### **Butterflies**

There are over 160,000 species of Lepidaptna (moths and butterflies). Butterflies may only live a couple of weeks but, my, what a couple of weeks they are. "They're all about breeding and laying eggs and eating; be pretty, find a mate, eat sweets," says Mary Jo Andersen, a zoo keeper at the Oregon Zoo. Not a bad life, even if it is a short one. And how nice if they choose to spend their lives in your garden.

To encourage them, you need both nectar plants for adults to sip and "host" plants on which to lay their eggs. Those same host or larval plants will provide fodder for the larvae that hatch. Some butterflies are so particular, they lay only on one specific plant such as the Monarch on milkweed.

Disappearing habitat means disappearing butterflies. In Oregon, the Silverspot and Fender's Blue are on the Federal Endangered Species list. Twenty more species throughout the country are also listed.

"Increasing urbanization means less and less habitat. In the Willamette Valley as we develop, we're getting down to very little native habitat," Andersen says. So giving butterflies a patchwork of back yard habitats helps them survive. That means offering more than a sip or two of nectar. Butterflies also need larval, or "host," plants, as well as water, shelter and sun.

"You have to have a balance or you're just helping one stage of life. It's great to have a garden full of butterfly bushes, but if they don't have larval plants, they won't stick around," Andersen says.

Some butterflies are so persnickety that they refuse to lay eggs unless they find the one plant they know is right. The Oregon Silverspot, for instance, lays only on Viola Adunca. The Cabbage White, on the other hand, can use any plant in the cabbage family. The trick is having enough diversity to attract a wide range of butterflies. But there are so many nectar and host plants, most gardens already have some.

To get more bang from your buck, encourage butterflies by grouping some of their favorites in a sunny area protected from the wind. Add a flagstone path so they can bask in the sun and a little mud puddle for "puddling" (they drink from moist areas rather than open water), and you'll have yourself a butterfly hotel.

You must forgo chemicals if you haven't already. In all stages of life, butterflies are killed by pesticides. That means you'll have to put up with some holes in leaves because caterpillars can be voracious little guys. Since many host plants tend to be weedy, such as nettles, grasses, dock and thistles, plant them in an out-of-the-way area where you don't mind some chomping.

#### **Ladybugs**

All bugs are insects but not all insects are bugs. The "Ladybug" has been misnamed because it really is a beetle. Bugs are jawless insects and have a sharp hollow bell for sucking plant juices or blood. Beetles have jaws to eat with. So not all bugs are beetles but they may be beetle food. So what we commonly call a Ladybug is actually the Ladybird Beetle.

The Ladybird Beetles are sometimes stalked by other insects. They have a scent it squirts at its enemies from its leg joint. This is to foil its attackers, sometimes it blinds them. Ladybird Beetles are an aphid and mealybug eaters. Consuming as many as 600-1,000 in its lifetime. Do not know how long they consider a life span.

The Ladybird Beetle does not have a "host" plant on which they prefer to lay their egg. They lay them on stems, leaves or blades of grass or tree trunks. Generally near aphids. In 5 days the eggs become a gray larvae and they begin to devour aphids and mealybugs. Within 3 weeks they change again and wrap up into a pupae in another week it tears itself out of the pupae, Voile it's a Ladybird Beetle ready to munch on aphids and mealybugs and other insects. They are considered carnivores and will bite you if you hold them too tight in your hand.

In the fall millions migrate to the tops of mountains in southwestern U.S. And are harvested by insect sellers.

Some will find cracks around your homes and will go into these cracks where they are protected and in spring you find them in your house.

Ladybird Beetles are very independent, if you buy some and turn them loose in your yard there is no guarantee they will stay around, however if they should lay eggs in your garden the larvae will scavenger the aphids and mealybugs.

Ladybird Beetles have been known to fly in hoards across the English channel at a time when England had a heavy infestation of aphids.

#### **Nest Boxes**

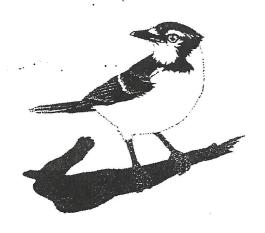
There are several nesting habits of birds. Some nest in trees, some in cavities, and some on the ground. We are going to talk about providing habitat for birds such as Wrens, Finches, Titmouse, Bluebirds, Tree Swallows, and Green Swallows. Nature generally provides cavities in trees but these species will adapt to nest boxes or bind houses.

The simple nest box style is easy to make and to hang or fastened to a tree. Nest boxes should be placed 5-6 feet above the ground and near trees or wooded areas. It should have a floor base 4-5 inches square and an inside depth of 9-12 inches. It needs to be constructed so one side or the base can open to clean the house after the birds have fledged. The basic nest box is great for most of the birds that come to the backyard feeders like, Swallows, Finches, and Sparrows.

The entrance hole should be 1  $\frac{1}{2}$  inches in diameter. The Mountain Bluebirds require 1 9/16 inches diameter hole, because they have wider shoulders. Finches and larger birds require longer entrance holes.

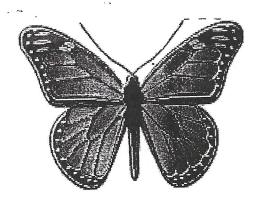
Swallows have only one brood a year and the Bluebirds sometimes have 2 to 3 broods a year.

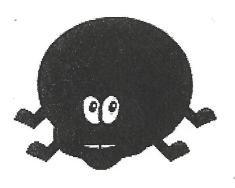
You should clean the nest boxes every fall.



## BACKYARD PLANNING FOR BIRDS, BUTTERFLIES AND LADYBUGS

**MEMBERS HANDOUT** 





## **BUTTERFLIES, LARVAE AND HOST PLANTS**



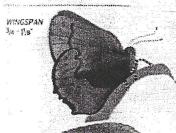
WINGSPAN 234-378 Western Tiger Swallowtail

WINGSPAN 3/2 -4"

'Rubykins' willow (Salix koriyanagi 'Rubykins')

Veined White Bittercress, cuckoo flower (Cardamine angulata, C. pratensis)

Monarch Milkweed, butterfly weed (Asclepias speciosa, A. tuberosa)



Western

WINGSPAN

Sara Orangetip Rockcress (Arabis blepharophylla)





Brown Elfin Oceanspray (Holodiscus discolor)

WINGSPAN

25/8-3"

Anise

Cow parsnip

(Heracleum lanatum)

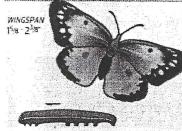
as well as

angelica (Angelica

gigas)

adunca and V. glabella)

Checkerbloom, mallow (Sidalcea oregana, 5. malviflora, Lavatera maritima, L. Burgundy Wine')



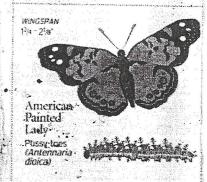
Orange Sulfur Lupine (Lupinus argenteus, L. rivularis, L. sericatus) as well as clover (Trifolium rubens)



Echo Blue (Spring Azure) Blood-twig dogwood Cornus sanguinea 'Winter Flame')

NINGSPAN

4-14

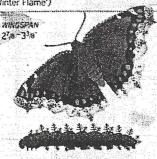


WINGSPAN 23m - 3"

Clodius Parnassian Western bleeding heart (Dicentra formosa)

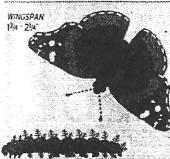


Ceanothus (Ceanothus sanguineus, C. integerrimus)



Mourning Cloak Spiraea (Spiraea betulifolia, S. densiflora, S. prunifolia)

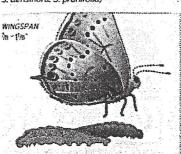




Red Admiral Hops (Humulus Jupulus) -



Purplish Copper Knotweed (Persicaria bistorta Superba; P. amplexicaulis), and dock (Rumex acetosa, R. sanguineus)



Western Tailed Blue Astragalus (Dorycnium hirsutum)



## SHRUBS FOR BIRDS WITH EDIBLE FRUITS

#### **MIXED HEDGE**

#### SHRUBS:

Dwarf amur maple Acer ginnala compacta, to 8 feet in 15 years. Leaves and flowers good in salads or made into tea.

◆ Serviceberry Amelanchier alnifolia 'Regent,' 8 feet tall and 'Smokey,' 12 feet tall. Purple berries to eat fresh or in pies, jam.

Chokeberry
Aronia melanocarpa 'Viking'
and 'Nero,' 6 feet by 6 feet.
Black berries for fresh
eating, pies or jam.

◆ Mayhaw · Crataegus aestivalis 'Big Red,' normally a small tree, but ours has grown to only 6 feet tall in 10 years.
Red, sweet-tart crabapple-like fruit great for jam, jelly or juice.

#### TREES:

◆ Jujube

Zisiphus jujuba 'Li' and 'Lang,' 10 feet tall.

Sweet, unusual fruit either fresh or candied. Grow both varieties for pollination.

♦ Japanese raisin tree
Hovenia dulcis, 10-20 feet tall,
can be kept smaller with
pruning.
Produces edible, raisin-like
stems.

♦ Pawpaw
Asimina triloba 'Mary Foos
Johnson,' 10-25 feet tall.
Medium-sized fruit that
tastes like banana custard.
Plant a second variety such
as 'Sunflower' or 'Prolific.'
Eat fresh with a spoon or
add to custard.

♦ Fig Ficus carica, about 10 feet tall. Huge crops of fruit loved by knowledgeable gardeners and birds alike. Self-fertile.

#### VINES:

Miscellaneous clematis Seeds attractive to some birds.

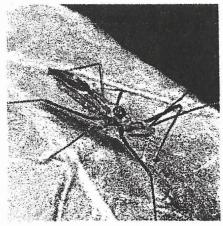
Cinnamon vine Dioscorea batatas, to 20 feet. Lovely, heavy fragrance, yellow fall color and a delicious tuber.

#### PERENNIALS:

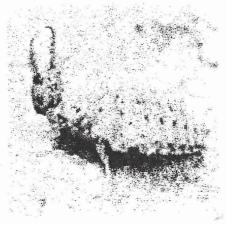
♦ Blackcap, black raspberry Rubus occidentalis 'Black Hawk,' to 9 feet. Produces well, readily seeds for new plants. Great for tarts, jam and fruit leather.

# BENEFICIAL INSECTS

## An Aid to Identification and Control



ASSASSIN BUG



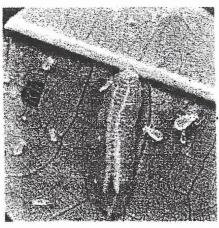
. ANT LION



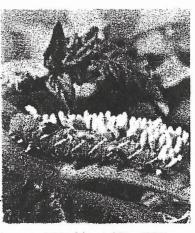
LACEWING.



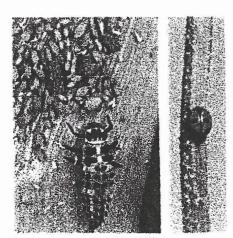
4. GROUND BEETLE



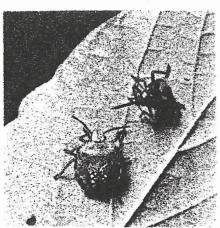
SYRPHID FLY LARVA



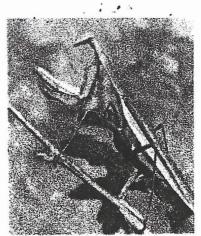
. TOBACCO HORNWORM
Parasitized by Braconid Wasp (Pupal Stac



LADYBIRD BEETLE
 Left - Larva Feeding on Aphids
 Right - A Typical Adult



PREDACEOUS STINKBUG (Top)
Ready To Attack Immature Stinkbug



PRAYING MANTID

#### BENEFICIAL INSECTS

- 1. Assassin Bug. The species that occur in Idaho are brown to black.

  Most species occur on foliage, although some enter homes. The

  majority are predaceous on other insects. The assassin bug can
  inflict a painful bite.
- 2. Ant Lion. The adult resembles damsel flies but is softer bodied and has conspicuous knobbed antennae. The larvae (sometimes called doodlebugs) have long sickle-like jaws and usually live at the bottom of a conical pit in dry, sandy or dusty areas. They feed on ants and other insects that fall into this pit.
- 3. Lacewing. Green lacewings are very common insects found on grass, weeds or shrubs. They often feed principally on aphids and are a very important agent in aphid control. A single lacewing may feed upon approximately 500 aphids during its development.
- 4. Ground Beetle. Ground beetles are generally found on the ground beneath objects. Some may be found on vegetation and flowers. Most species are nocturnal (some fly to lights) and hide during the day. When disturbed, they run rapidly and seldom fly. Ground beetles feed upon cutworms, wireworms and other ground living pests.
- 5. Syrphid Flies. The larva is predacious on aphids, mealybugs and other insects. The "hover fly" adult lays white, elongate single eggs among groups of aphids. The larvae are footless, slug-like, tan or greenish with pointed jaws which grasp the aphid, raise it into the air and suck out the body contents.
- 6. Braconid Wasp. These small wasps are important parasites of aphids and larvae of moths, wasps and beetles. The adult is a very small wasp with a short abdomen.
- 7. Ladybird Beetle. Ladybird beetles require a lot of aphids to maintain themselves and under ideal conditions may consume in the neighborhood of 1,000 aphids during its lifetime.
- 8. Predaceous Stinkbuq. These predatory species feed upon armyworms, cutworms, other calerpillars and beetle larvae, especially the Colorado potato beetle larva.
- 9. Praying Mantid. Idaho has a small native species, but the introduced species pictured here is established in many places in the state. They are predactious on anything they can catch and kill.



## Wildlife Habitat

Make a home for birds, butterflies, and nature's other creatures.



#### In your backyard

Habitat is a combination of food, water, shelter, and space arranged to meet the needs of wildlife. Even a small yard can be landscaped to attract birds, butterflies, beneficial insects, and small animals. Trees, shrubs, and other plants provide shelter and food for wildlife.

The plants you use for food and cover will help determine the wildlife species attracted to your backyard. Nesting boxes, feeders, and watering sites can be added to improve the habitat.

## Planning your wildlife habitat

Planning is necessary for attractive and productive wildlife habitat. You have both a horizontal area to work with—the size of your lot—as well as a vertical area that stretches from your soil to the treetops. The vertical area is composed of the canopy formed by the tallest tree branches; understory vegetation consisting of smaller trees, shrubs, and vines; the floor which is often dominated by low-growing groundcovers; and the basement where a variety of organisms exist in the soil. Different wildlife species live in each of these zones, so numerous habitats can be provided on a small piece of land.

Trees and shrubs are the backbone of any landscaping design and are important for wildlife shelter. Many tree and shrub species are excellent sources of food for wildlife. Proper selection of plant material can meet both the aesthetic needs of the homeowner and the food and shelter needs of wildlife. Remember that you are part of the habitat!

## Steps to create habitat for wildlife

- 1. Identify all existing plants, if any. Note:
  - Condition of the plants and their locations.
  - How much shade the trees and shrubs provide.
  - Are trees evergreen or do they drop their leaves in the fall?
  - Do they provide valuable food sources?
- 2. Make a sketch of your yard noting all existing plants, buildings, utilities, and pathways. You may even consider removing some plants. In some cases, trees have been planted too close to buildings or have grown much larger than the previous owner envisioned. Some species may be of little wildlife value and may not be particularly attractive. Once you have identified existing plants you want to save, start exploring options for plants that will work well with these species. The existing plants around your yard may be adequate to attract some wildlife, but a few changes can effectively enhance the existing habitat. Diversity in the landscape is necessary. Some plants provide food but very little cover; others provide cover but little food.

- 3. Add trees, shrubs, flowers, and groundcovers to your plan. Not all the planting needs to be done at once. If money or time is limited, consider it a work in progress.
- 4. Plant a variety of trees first. Select evergreen species for year-round cover and shelter. Select fruit or nut-bearing plants for a food source. Native species are well suited for providing wildlife habitat because they are adapted to the local soil, climate, and wildlife. Additional considerations for choosing and placement include:
  - Eventual size. Whether they are evergreen or deciduous (trees that drop their leaves)
     Deciduous trees planted on the south side of a house will provide summer shade, but will not completely block winter sun.
  - Neighboring properties.
  - Flowering and fruiting habit. Select plants that flower and bear fruit at different times
    of the year. Some shrubs that produce berries can provide food throughout the year.
    Trees with nuts and fruit can also provide seasonal foods. (See the tip sheet on tree
    planting for suggested species.)
- 5. Fill in with smaller shade-tolerant understory trees and shrubs. Adding these to an existing landscape will enhance the vertical structure that is common in natural landscapes. Many smaller trees and shrubs are colorful in the spring when they flower, and provide berries for fall and winter feed.
- 6. Flowering annuals (plants that live one growing season) and perennials (plants that live for more than a year) add color to the yard and can be added at any stage to attract birds and butterflies. If your yard is large, consider using part of it for tall native grasses that provide beauty, as well as a natural source of food and shelter. A native wildflower garden provides the same function. Even on a small lot, native wildflowers, as well as some common garden species, can provide attractive habitat for a variety of birds and butterflies. Avoid straight lines and perfect symmetry. Natural habitat has curves and clumps of vegetation. Wildlife is not particularly attracted to a well-manicured lawn. Wildlife is more likely to come out into the open for viewing when the boundary of the yard is designed and maintained as a retreat for animals.

#### Landscaping for birds

Food and cover are essential for the survival of all species. Loss of suitable nesting sites is a major factor in the decline of some bird species. In the wild, many species nest in cavities of dead trees. With the loss of hedgerows in some parts of the country and the removal of dead trees in towns, natural nesting sites are often limited. Also, some highly competitive, non-native species of birds have taken over some of the existing nesting sites once occupied by native birds.

Bird species are extremely variable in their habits. Some like deeply wooded areas; others prefer open fields and meadows. Many species are year-round residents, while others such as the cedar waxwing appear only for a few days a year during migration. Other species such as sparrows, blue jays, cardinals, robins, juncos, and chickadees are highly adaptable and found in many environments.

Many people are not aware of the value of dead, dying, and hollow trees, as well as logs on the ground, for birds and other wildlife. Dead trees provide homes to more than 400 species of birds, mammals, and amphibians. Fish, plants, and fungi also benefit from dead and dying trees. Consider leaving standing dead and dying trees in your yard unless they pose a human safety or property hazard, and use old logs and stumps in gardens and landscaping.

#### Additional food and shelter for birds

Few yards will be able to supply sufficient food or shelter for a variety of birds all year long. However, you can improve shelter and food supplies by building or purchasing feeders and houses, and by setting out certain foods.

All bird species have specific nesting requirements. Because of these requirements, your yard may not accommodate certain species. For instance, Eastern bluebirds prefer nesting sites that border open fields or lawns with a tree or fence post nearby to provide feeding perches. Chickadees prefer to nest in brushy wooded areas.

Before setting out nesting houses, find out which species are common in your area and can be encouraged to nest in your yard. Make or buy a bird house specifically designed for the bird you wish to attract. The size of the entrance hole is critical to prevent the eggs and young from being destroyed by larger birds--always check a list of appropriate hole sizes. Other considerations include box size, height above the ground, direction the entrance hole faces, and amount of sunlight. Boxes may need baffles or other protective devices to limit access by cats and other predators. A good reference publication is "Homes for Birds" by the U.S. Fish and Wildlife Service, Office of Migratory Bird Management. It is available at two internet sites: http://www.fws.gov/r9mbmo/pamphlet/pamplets.html or http://birding.about.com/.

Many species of birds can be attracted by a variety of feed in different styles of feeders. There are many styles of bird feeders available, from window-mounted feeders to those that hang from branches and stands. Many birds will readily eat right off the ground. Bird feed comes in a variety of choices; however, sunflower seeds appeal to many birds, as well as small mammals. Woodpeckers, nuthatches, and chickadees are especially attracted to suet. Citrus fruit, chopped apples and bananas, and raisins will be eaten by numerous species, including robins, titmouse, nuthatches,

Feeders may also attract wildlife species you may not want to feed such as starlings, crows, and squirrels. Feeder type and placement and the type of food can help deter unwanted species.

Unlike many other species of birds, hummingbirds rely on nectar as their source of food. These tiny, migratory birds are commonly seen in the summer in northern states gathering nectar from colorful flowers. Hummingbirds are typically attracted to red and yellow tubular flowers, although they frequently visit others. Hummingbird feeders can be purchased and filled with a sugar-water solution, consisting of 1 part sugar to 4 parts water. Every 3 to 4 days, wash the feeder with soap and water, rinse thoroughly, and add new sugar water.

#### Food and shelter for butterflies

woodpeckers, and mockingbirds.

Colorful butterflies and moths add beauty and interest to your backyard. There are hundreds of different species of butterflies and moths in North America. Butterflies and moths are insects. They hatch into larvae (commonly referred to as caterpillars), eventually become pupae, and develop into colorful adults. How long the process takes depends on the species and the climate.

Butterflies and moths are amazingly particular in their food choices. The larval stage of the butterfly may require food quite different from that of the adult. Some larvae consume tremendous amounts of plant material, seemingly devouring plants overnight. A common example in the garden is the tomato hornworm which rapidly strips tomato plants of their leaves. An equally voracious, but beautiful, larvae is the Eastern black swallowtail which is found only on plants in the carrot family, including celery, carrot, dill, and parsley. A close relative is the Eastern tiger swallowtail that eats the foliage of wild cherry, birch, poplar, ash, and tulip trees.

Adult butterflies require food in liquid form such as plant-produced nectar. They get some of it from flowers and from juices of extra-ripe fruit. The types of flowering plants you grow will determine the kinds of butterflies you attract to your backyard. In addition to the plants listed for hummingbirds, butterfly bush is especially attractive. Find out what species are common in your area and use plants they like. Nectar feeders can be placed in the yard to attract butterflies. Do not use insecticides near plants for butterflies. Learn to recognize larval and egg forms. That large green and black caterpillar eating your dill may one day turn into the gorgeous butterfly you were hoping to attract!

Butterflies, like all insects, are most active when temperatures are warmer. While moths are commonly found at night, most butterflies are active on sunny, warm days. Butterflies will benefit from a basking site where they can warm up on cool mornings. Add a light-colored rock or concrete garden sculpture as a basking site. Butterflies also need a source of water. A shallow dish of water or a depression in a rock that retains water is all they need.

## Attracting reptiles and amphibians

Toads, frogs, lizards, turtles, and snakes all have a place in the backyard. While many people may not want some of these animals in their yards, most species are harmless and often quite beneficial-feeding on destructive insects or rodents.

Shelter for reptiles and amphibians is easy to provide. Several rocks piled in a sunny spot will provide basking sites. Consider planting shade-tolerant groundcovers under trees and leaving a thick layer of leaves to provide cool shelter. Stumps, logs, and rock piles in a shady spot can be valuable.

#### Water for wildlife

Clean, fresh water is as important to birds, bats, butterflies, and other wildlife as it is for people. Water in a saucer, bird bath, or backyard pond is adequate for wildlife. Be sure to change the water every few days to keep it fresh. In hot weather, it may be necessary to refill the container daily.

Logs, rocks, and water-holding structures provide drinking and basking habitat for turtles, butterflies, and songbirds. Stones with depressions that collect water will help attract butterflies.

## A word about attracting mammals

Squirrels, chipmunks, rabbits, raccoons, opossums, skunks, woodchucks, mice; and deer are commonly found in many urban environments. These species are highly adaptable and, in many cases, are becoming unwanted visitors rather than welcome guests.

As with all wildlife, cover is essential for the survival of these species. Small brush piles intended for amphibians and reptiles will also provide shelter for rabbits and mice. Chipmunks and woodchucks are adept at digging their own burrows. Trees may provide shelter for squirrels, raccoons, and opossums. Food set out for birds may attract many of these animals. Squirrels, chipmunks, and mice will readily eat birdseed. Raccoons will feed on suet. Woodchucks and rabbits will eat a variety of vegetation including garden vegetables and flowering plants. Deer are browsers and will nibble at trees, shrubs, hay, and grain.

A few precautions can be taken to avoid unwanted encounters with these animals. Avoid setting out food that may attract scavengers such as raccoons. Keep garbage cans in a secure shed or garage or use metal cans that scavengers cannot chew through. Check the exterior of your house for loose or rotted boards that could allow access by mice or other rodents. Remember that these animals are wild, and if threatened they can bite. Raccoons can be particularly aggressive. All these species can carry diseases. Do not handle them.

#### Backyard habitat programs

The U.S. Fish and Wildlife Service's Office of Migratory Bird Management works with groups and individuals to conserve and manage migratory birds. This agency offers information about backyard habitats for birds and wildlife. Several pamphlets are available: <u>Backyard Bird Feeding</u>, <u>Backyard Bird Problems</u>, <u>Attract Birds</u>, <u>Homes for Birds</u>, and <u>Migratory Songbird Conservation</u>).

For more information contact:

U.S. Fish and Wildlife Service Office of Public Affairs Washington, DC 20240

#### Maintenance

For the first year or two, especially after a week or so of especially hot or dry weather, watch your trees closely for signs of moisture stress. If you see leaf wilting or hard, caked soil, water the trees well and slowly enough to allow the water to soak in. This will encourage deep root growth. Keep the area under the trees mulched.

Some species of evergreen trees may need protection against winter sun and wind. A thorough watering in the fall before the ground freezes is recommended. Spray solutions are available to help prevent drying of foliage during the winter.

Fertilization is usually not needed for newly planted trees. Depending on soil and growing conditions, fertilizer may be beneficial at a later time.

Young trees need protection against rodents, frost cracks, sunscald, and lawn mowers and weed whackers. Mice and rabbits frequently girdle small trees by chewing away the bark at snow level. Since the tissues that transport nutrients in the tree are located just under the bark, a girdled tree often dies in the spring when growth resumes. Weed whackers are also a common cause of girdling. Plastic guards are an inexpensive and easy control method. Frost cracking is caused by the sunny side of the tree expanding at a different rate than the colder shaded side. This can cause large splits in the trunk. Sunscald can occur when a young tree is suddenly moved from a shady spot into direct sun. Light colored tree wraps can be used to protect the trunk from sunscald.

#### Pruning

Usually, pruning is not needed on newly planted trees. As the tree grows, lower branches may be pruned to provide clearance above the ground, or to remove dead or damaged limbs or suckers that sprout from the trunk. Sometimes larger trees need pruning to allow more light to enter the canopy. Small branches can be removed easily with pruners. Large branches should be removed with a pruning sew. All cuts should be vertical. This will allow the tree to heal quickly without the use of sealants. Major pruning should be done in late winter or early spring. At this time the tree is more likely to "bleed" as sap is rising through the plant. This is actually healthy and will help prevent invasion by many disease organisms. Heavy pruning in the late summer or fall may reduce the tree's winter hardiness. Removal of large branches can be hazardous. If in doubt about your ability to prune properly, contact a professional with the proper equipment.

Under no circumstance should trees be topped. Not only does this practice ruin the natural shape of the tree, but it increases susceptibility to diseases and results in very narrow crotch angles, the angle between the trunk and the side branch. Narrow crotch angles are weaker than wide ones and more susceptible to damage from wind and ice. If a large tree requires major reduction in height or size, contact a professionally trained arborist. There are other methods to selectively remove large branches without sacrificing the health or beauty of the tree.

## "Suet: Facts.Feeders & Recipes"

The picture at the right is of a Red-breasted Nuthatch at our own homemade Suet Log Feeder. If you would like to construct a log feeder, we have provided instructions for you by clicking on the above link.

Suet is raw beef fat from around the kidneys and loins. Suet is one of the best foods to attract nuthatches, woodpeckers, wrens, titmice, creepers, kinglets, chickadees, thrashers, cardinals and even bluebirds and unfortunately the starlings and squirrels! To discourage the starlings, purchase a suet feeder cage that is covered on all sides but the bottom. Only those birds that can hang upside down will use this feeder.

If the temperature outside is around 70 degrees Fahrenheit and warmer, beef fat can turn rancid and melt. There are many commercial suet cakes that can be purchased and some of these are called "no melt", "berry" and "insect" cakes.



#### How to Render Suet:

You can trim excess fat off beef cuts and store in the freezer until enough fat is achieved or you can purchase beef fat from the grocery store or your nearby butcher.

- 1. Grind the beef fat with a meat grinder or finely chop the fat.
- 2. Heat the fat over a low to medium flame until its liquefied.
- 3. Strain by pouring melted suet through a fine cheesecloth.
- 4. Let cool to harden.
- 5. Repeat steps 2-3. If the fat is not rendered twice, the suet will not cake properly.
- 6. Let cool to harden and store in a covered container in the freezer.

### Household Items that can be used to pour suet in:

- Baker's Tin Foil Bake Cups
- o When you purchase a suet cake, reuse the container that it came in
- o When suet cools, roll in balls
- o Make a holding cell from heavy duty aluminum foil
- o Small bread loaf pans lined with plastic wrap or foil for easy removal.
- Margarine containers
- Any size baking/pie pans (when suet cools, cut into squares)
- o Pine Cones
- And, of course, our own "Nuthatch Suet Eggs"!

## Nuthatch Suet Eggs!

We use the "Jell-O Egg Jigglers" mold for some fun. These molds are given away at grocery stores during the Easter Holidays. For a picture of the molds and/or ordering information, visit Kraft Foods

- 1. Make suet using any one of the suet recipes listed below.
- 2. Cut twine or heavy string into 12" lengths (optional). (see Note 2 below)
- 3. Using a paper towel dipped in vegetable oil, lightly wipe inside of both sides of the mold and along the rims.
- 4. Close the mold, matching up the rims of the egg halves until you hear the firm snap.
- 5. Insert the string in the top hole (optional) and pour the suet mixture through a funnel.
- Refrigerate or freeze.
- To pry open the Jell-O Egg Jigglers Mold, open the mold using a dull flat knife (butter knife) between each egg. Do not open mold by pulling the handles apart. Shake gently to unmold eggs.

#### Note:

- 1. If you don't want to use the twine/heavy string, just pour suet in molds. Place eggs in a nylon mesh onion bag and hang anywhere in your backyard!
- 2. If the twine will be used, you can tie the eggs together and hang from a tree branch. The twine should not be more than 12" in length. If you want to tie the eggs around a tree trunk, use longer lengths of twine.

#### Suet Feeders:

There are a variety of suet feeders that can be purchased or made. The popular commercially available suet feeder is a wire cage that holds one cake of suet. Some bird feeders have a hopper for seeds and suet cages on the sides of the hopper.

## Easy-to-Make Suet Feeder:

We are providing you with instructions on how to make a very simple Suet Log Feeder. We use these every winter and have had great success. The birds that visit this feeder are: Common Flicker, Red-breasted Nuthatches, Carolina Wrens, Chickadees, Tufted Titmice, Downy Woodpeckers, Hairy Woodpeckers, White-breasted Nuthatches and unfortunately the starlings! Please send us email at birdnature@birdnature.com if you have built this feeder and if it was successful.

- Attaching wire mesh to a tree trunk or suspending it from a branch.
- Hanging a nylon mesh onion bag from a tree branch.
- o A log feeder.
- Simply smearing soft suet mixtures on tree trunks.
- Smeared suet on pine cones.

## Suet Recipes:

Birders Delight
Feathered Friends
It Must be Love
Peanut Butter Sandwich
Captain Crunch!
Apple Dumplings
Back to Basics
Healthy Treat
Zesty Berry

## Birder's Delight

1 Pound	Suet cut in small pieces
1 Cup	Yellow Cornmeal
1 Cup	Rolled Oats
1 Cup	Chunky Peanut Butter
1 Cup	Mixed Wild Bird Seed
1 Cup	Hulled Sunflower Seed or Chopped Pecans

## Preparation:

- 1. Melt suet over low flame.
- 2. Stir in ingredients.
- 3. Pour or pack into molds, feeders, or any household item.
- 4. Refrigerate until hardened or freeze.

## Back to Suet Recipes

## Feathered Friends

1 Cup	Chunky Peanut Butter
2 Cups	Cornmeal
2 Cups	Quick Cook Oats
1 Cup	Lard or Suet
1/3 Cup	Sugar
1 Cup	White Flour

#### Preparation:

- 1. Melt lard/suet and peanut butter together and stir.
- 2. Stir the remaining ingredients.
- 3. Pour the mixture into a square container about 1-1/2 inches thick.
- 4. Allow it to cool, then cut it into squares and store in the freezer.

#### Back to Suet Recipes :

Suet: Facts, Feeders & Recipe	Suet:	Facts.	reeders	Œ	Kecipes
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### It Must be Love

	1/2 Pound	Fresh Suet
100	1/3 Cup	Black Oil Sunflower Seed
	2/3 Cup	Mixed Wild Bird Seed
	1/8 Cup	Chopped Peanuts or Chopped Pecans
	1/4 Cup	Raisins

## Preparation:

- 1. Follow instructions for rendering suet.
- 2. While suet is cooling, stir ingredients together in a large bowl
- 3. Place the suet into the mixture and mix thoroughly.
- 4. Pour or pack into molds, feeders, or any household item.
- 5. Refrigerate until hardened or freeze.

#### Back to Suet Recipes

#### Peanut Butter Sandwich

1 Cup	Fresh Suet		
1 Cup	Peanut Butter	•	.250
3 Cups	Yellow Cornmeal		
1/2 Cup	Whole Wheat Flour		. •

## Preparation:

- 1. Follow instructions for rendering suet.
- 2. Over low heat, melt suet and add peanut butter. Stir until well blended.
- 3. Mix ingredients together in a large bowl.
- 4. Pour suet into the bowl mixture and mix thoroughly.
- 5. Pour or pack into molds, feeders, or any household item.
- 6. Refrigerate until hardened or freeze.

### Back to Suet Recipes

## Captain Crunch!

2 Pounds	Fresh Ground Suet
1/2 Cup	Chunky Peanut Butter
1/2 Cup Shelled Sunflower Seeds or Chopped Pecans	
Preparation	nn'

- 1. Melt suet in a saucepan over low heat.
- 2. Add peanut butter, stirring until melted and well blended.
- 3. Stir in the sunflower seeds. Mix thoroughly.
- 4. Pour or pack into molds, feeders, or any household item.
- 5. Refrigerate until hardened or freeze.

## Back to Suet Recipes

## Apple Dumplings

3 Cups	Rendered Suet			<sub>es</sub> ier
1 Cup	Whole Wheat-Bread (dried & crumbled)			
1/2 Cup	Shelled Sunflower Seeds	·· .		
1/4 Cup	Millet			
1/2 Cup	Chopped Dried Apples		:	

### Preparation:

- 1. Melt suet in a saucepan over low heat.
- 2. Mix the rest of the ingredients together in a large bowl.
- 3. Allow the suet to cool until slightly thickened.
- 4. Stir suet into the bowl of mixture. Mix thoroughly.
- 5. Pour or pack into molds, feeders, or any household item:
- 6. Refrigerate until hardened or freeze. . . .

### Back to Suet Recipes

#### Back to Basics

1 Cup	Suet
1 Cup	Peanut Butter
3 Cups	Cornmeal
1/2 Cup	White Flour

#### Preparation:

- 1. Melt suet in a saucepan over low heat.
- 2. Add peanut butter, stirring until well blended.
- 3. Mix the rest of the ingredients together in a large bowl.
- 4. Allow the suet to cool until slightly thickened.
- 5. Stir suet into the bowl of mixture and mix thoroughly.
- 6. Pour or pack into molds, feeders, or any household item.
- Refrigerate until hardened or freeze.

## Back to Suet Recipes

## Healthy Treat

3 1/2 Cups	Oatmeal
1 Quart	Water
1 Pound	Suet ·
1 1/2 Ounce Jar	Peanut Butter
3 1/2 Cups	Cornmeal •
3 1/2 Cups	Cream of Wheat

## Preparation:

- 1. Melt suet in saucepan over low heat.
- 2. Cook oatmeal in water for 2 minutes and remove from heat.
- 3. Stir in suet and peanut butter and blend.
- 4. Add cornmeal and cream of wheat.
- 5. Pour or pack into molds, feeders, or any household item.
- 6. Refrigerate until hardened or freeze.

## Back to Suet Recipes

## Zesty Berry

4 1/2 Cups	Ground Beef Suet
3/4 Cup	Finely Ground Cracker or Bread Crumbs
1/4 Cup	White Proso Millet
1/2 Cup	Hulled Sunflower Seed .
1/4 Cup	Dried and Chopped Berries, Raisins or Currants

## Preparation:

- 1. Melt suet over medium heat.
- 2. Mix together remaining ingredients in a large mixing bowl.
- 3. Allow suet to cool until lightly thickened.
- 4. Pour into bowl with other ingredients and mix well.
- 5. Pour or pack into molds, feeders, or any household item.
- 6. Refrigerate until hardened or freeze.

## Back to Suet Recipes

## Suet Log Feeder

This Suet Log Feeder is very easy to construct. You will need a log, a screw on hook and perches. Even if you don't follow these instructions, the birds will still use whatever type of log feeder you construct.

- 1. Cut a log that is approximately 9 1/2-10" in circumference with a length of 16". The log shown in the picture on the right is of white-barked birch (Betula). The log does not have to be straight. This log is slightly bent.
- 2. Drill a hole that is 1.1/4" round all the way through to the other side. Start at the top of the log.
- 3. Drill another hole, again 1 1/4" round all the way through, but this time turn the log so that it does not line up with the first hole that was drilled. See Picture.
- 4. Drill the next hole, below the second hole.
- 5. Drill the last hole, but align it with the first hole that was drilled.
- 6. (optional) Drill 8 holes, 1 1/2" in depth (not all the way through). The perch holes should be 1/4" below the 1 1/4" round holes that hold the suet. Perches should be at least 3" in length. Insert the perches and tighten.
- 7. Screw the hook at the top for hanging.
- 8. Fill the 1 1/4" holes with Suet. That's it!

Please send us email at birdnature@birdnature.com if you have built this feeder and if it was successful.

Home | Site Introduction | Survival Needs | Bird Identifications | Gallery & Profiles Habitats of Birds | Bird Migration | Odds & Ends | Birds and Nature Magazine | Resources | Search bleeding hearts and columbines. During late summer, hummingbirds come to bergamot and the late summer wildflowers. You also may want to purchase hanging plants, such as fuschia."

Other early summer flowers that attract hummingbirds include fly-honeysuckle, fire pink, tulip poplar, weigala and trumpet honeysuckle.

Mid- to late-summer flowers that attract hummingbirds also include spotted touch-me-knot, trumpet vine, cardinal-flower, garden phlox, coralberry, hollyhock, Turk's cap lily, rose of Sharon, butterfly milkweed, butterfly bush, bee-balm and impatiens.

Hummingbirds play a major role in pollination. Tubular flowers with long stamens are specially adapted to be pollinated by hummingbirds. Using long beaks and long tongues, the birds feed on the flowers' nectar. As they brush against the flowers, pollen sticks to their bodies. The pollen transfers to the next flower they visit.

Homeowners also can hang a feeder to draw hummingbirds to a specific location, like a kitchen window. Hummingbird feeders can be purchased at garden supply centers. "Hummingbirds will return to the same feeder each year," Brittingham says. "Many times they'll hover at the window, before you even put the feeder up."

Brittingham suggests filling feeders with a nectar of one part sugar to four parts water. "A stronger solution can be harmful to their kidneys, while a weaker one may not attract them. You don't need to purchase commercial nectar -- it's no better than what you can make at home.

"You should avoid honey and water mixtures," she says. "Some people think honey and water is healthier. But it ferments and grows a mold that can be very harmful to hummingbirds."

Although some people have recommended adding red food coloring to the nectar, Brittingham says it adds no benefit. "The birds will be attracted to the red plastic on the feeder," she says.

You also can entice hummingbirds by purchasing a misting attachment for a birdbath, available at some garden supply stores. "Hummingbirds like to fly through the mist to bathe," Brittingham says.

Finally, make sure the feeder and birdbath are out of reach of cats. "Cats are extremely proficient hunters -- and they hunt whether they're hungry or not," Brittingham says. "You also should minimize your use of pesticides. Pesticides may harm the flowers hummingbirds feed on, as well as the hummingbirds themselves."

For more information about hummingbirds, see the Penn State College of Agricultural Sciences publication, "Pennsylvania Wildlife No. 6: Attracting Hummingbirds." Single copies are available free of charge from your county Penn State Cooperative Extension office, or from the College of Agricultural Sciences Publications Distribution Center (call 814-865-6713).

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Butterny gardening

The Butterfly WebSite would like to thank Rick Hansen of the Oregon State University Extension Service for permission to reprint this article.

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## **Butterfly gardening**

Oregon State University, News and Communication Services Telephone: 541-737-4611

February 23, 1996

Oregon is blessed with more than 150 species of butterflies. A little more than half these species are found only in eastern Oregon and about 30 species are found only in western Oregon.

Home gardeners don't need a large yard to provide the basics for butterfly survival. All they need are nectar plants, larval host plants, resting areas, sun and water, explained Gail Gredler, home horticulturist with the Oregon State University (OSU) Extension Service.

Grow nectar plants for butterflies in anything from window boxes to wildflower meadows. Nectar-rich wildflowers include aster, bleeding heart, butterfly weed (Asclepias or milkweed), clarkia, columbine, coreopsis, goldenrod, Indian paintbrush, iris, larkspur, lupine, nettle, owl clover, sedum, thistle and yarrow.

Non-native flowers including bee balm, dahlias, cosmos, dianthus, daylilies, geraniums, heliotrope, impatiens, lavender, marigolds, shasta daisy, snapdragon, statice, sweet alyssum, sweet pea, sweet william, zinnias, and many of the members of the mint family are also great nectar sources for butterflies.

Flowering trees and shrubs including manzanita, ceanothus, rhododendron, elderberry, wild roses, red flowering current, butterfly bush (Buddleia), twin berry Oregon honeysuckle, Piper's willow and snowberry also provide nectar for butterflies.

Caterpillars, the voracious larvae of butterflies, must also have food. Plants that provide caterpillars food include alfalfa, anise, clover, fennel, hollyhock, mallow, lupine, milkweed, nasturtium, snapdragon, sunflower, violet, cottonwood, poplar, willow, oak and horse chestnut. In particular, Western tiger swallowtail caterpillars love alder, cherry, elm, maple, poplar and willows. Anise swallowtail larvae love members of the parsley family such as fennel, dill and cow parsnip. Nettles and hops are favorites of the red admiral. And painted lady caterpillars love borage, burdock and centaurea.

For resting and sunning, shrubs provide a safe place out of the wind for butterflies. Rocks placed in the sun or sunny bare patches out of the way of foot traffic are also great resting spots.

Take man

Dunciny gardening

Butterflies cannot drink from open water. The best way to provide drinking water is to have some wet mud somewhere in the yard where butterflies can land safely and sip. Or mist your plants early in the morning and they will sip from the water droplets. Avoid misting plants later in the day to avoid fungus problems.

Avoid the indiscriminate use of pesticides in the yard. Butterflies have become increasingly uncommon in urban and suburban areas because of pesticides and habitat loss.

For more information on creating a healthy habitat for butterflies, consult "The Audubon Society ..... Handbook for Butterfly Watchers," by Robert Michael Pyle, published by Charles Scribner's Sons or "Butterfly Gardening," Sierra Club Books and the National Wildlife Federation.

By Carol Savonen, 541-737-3380 SOURCE: Gail Gredler, 503-434-7517

Gardening news

Educational Materials catalog (choose the Gardening at Home section)



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Last Updated: April 27, 1998: butterfly@mgfx.com

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## .. The Butterfly WebSite Planting Guide

- Nectar Plants
- Nectar and Larval Plants
- Larval Plants
- Trees
- Other Desirables
- Proper Use of Planting Guide

Larger images of the plants shown can be seen by clicking on the image.

## E - Early Varieties ... L - Late Varieties

#### Nectar Plants

Buddleia (E)

Swallowtails, Monarchs, many others

Primrose (E)

Large assortment

Heliotrope (E)

Excellent for drying

Lilac (E)

Tiger swallowtail, Fritillaries

Lantana (E)

Kept in pots, winters indoors

Phlox (E)

Large assortment

Aster (L)



Baltimores, Painted Lady, Crescents, Black Swallowtails

Butterfly Weed (L)

Swallowtails, Sulphurs, Hairstreaks

Chives (L)



All types

Joe Pye Weed (L)

Swallowtails, Fritillaries, many others

Lavendar (L)

Excellent for drying and nectar

Loosestrife (L)

Fritillaries and others

Sedum (L)

Blues, Coppers, Sulphurs, and Hairstreaks

Wisteria (L)

On a trellis with a seat is excellent for watching activities of butterflies

#### • Nectar and Larval Plants

Spicebush (E)

All Swallowtails, Monarchs, and others

Thistle (L)

Fritillaries, Admirals, Painted Lady, Crescents

Milkweed (L)

Monarchs, Viceroys, Mourning Cloaks, Fritillaries

Goldenrod (L)

Checkerspot larvae, all types for nectar

Marigold (L)

Sulphurs as larvae, all Fall butterflies

## • Larval Plants

Clovers (E)



Sulphurs, Blues, Hairstreaks

Hollyhock (E)



Painted Lady, Skippers

Lupines (E)

Blues

Pearly Everlasting (E)

Painted Lady, great for drying

Parsley (E)

Black Swallowtails, Painted Lady, Crescents

Plantain (E)

Buckeyes

Violets (E)



Fritillaries, Dianas, Aphrodites, Snouts

Garden Carrots (L)

Black Swallowtail

Indian Paintbrush (L)

Checkerspots

Nettle (L)

Anglewing, Red Admiral, Painted Lady, Tortiises

Queen Annes Lace (L)

Black Swallowtail, others for nectar

Trefoil (L)

Eastern Tailed Blue

Turtle Head (L)

Baltimore, Checkerspot

#### • Trees

Willow

Tiger Swallowtails, Red Spotted Purples, Hairstreaks, Viceroys, Mourning Cloaks, Fritillaries

Wild Cherry

Tiger Swallowtail, East&West, Viceroy, Red Spotted Purple, Silk Moths

Poplar

Mourning Cloak, Viceroy, Admirals, Tortoiseshell

Apple

Red Spotted Purple, Viceroy, Silk Moths

Elm

Mourning Cloak, Question Mark, Anglewings

Hawthorn

Hairstreaks, Banded Purple

Hackberry

Hackberry, Snouts, Metalmarks, most of above

## Other desirables

Alyssum

Bergamot

Monarda

Candytuft

Catnip

Nepeta cataria

Common Stock

Matthiola incana

Cone Flower

Echinacea purpurea

Coreopsis

Grandifloa, lanceolata

Corn

Any variety

Dame's Rocket

Hesperris matronalis

Daisies

Dandelion

Day Lily

False Indigo

Baptisia australis

Fleabane

Erigeron

Gas Plant

Dictamnus albus

Lantana

Camara, montevidensis, sellowiana

Nasturtium

Petunia

Sage

Salvia

Scabiosa

Scabiosa caucasia

Snake Root

http://butterflywebsite.com/landscap/plantgde.htm

Cimicifuga racemosa

Snapdragons

Sunflowers

Helianthus

Sage

Valerian

Valeriana

Verbina

Zinnia

## Proper Use of Planting Guide

1. Choose species you wish to attract.

2. Select plants which these butterflies find favorable.

3. Both larval and nectar plants should be used. At least one early and one late variety of each is ideal.

4. Nectar plants will attract butterflies by providing a feeding station at which to rest.

- 5. Larval plants will keep them there by furnishing the proper habitat to deposit eggs. Newly hatched caterpillars must have a ready food supply.
- 6. A source of water will always increase your success. Either a small pan, dish or bird bath may work well. However a goldfish type pond with some flat rocks along the edge is the best.
- 7. An old stone foundation, or a gentle leeward slope will complete the habitat by serving as a natural wind break.



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## **Butterfly Farming Information**

Rick Mikula

## **Butterfly Houses**

This time of year we get many inquiries regarding what many people refer to as "butterfly houses." To many people in the industry a butterfly house refers to a living display of butterflies in a conservatory or atrium atmosphere that is open to public viewing. What people purchase for their gardens should be referred to as a "hibernating box." They are meant as places for certain species of butterflies to overwinter in. Call it whatever you feel comfortable with, but usually they do not work.

With the first warm winds of spring we all get the itch for our gardens and visits from our winged friends. Wanting to provide as much for our charges as we could, we buy what we feel is best for them. Now, if you have purchased a butterfly box do not give up. I always say that they are like chicken soup for a cold. They may not help, but they sure do not hurt. And if yours works, then you'll have bragging rights to the usefulness of your garden.

When most folks buy a box, they quickly place it in the sunniest part of the garden in hope that the butterflies will swarm to it like Purple Martins to a bird condo.

Not so. First, they would not be used until the Fall. Second, the butterflies that utilize them prefer the safety of the woods as opposed to the open garden setting. To make them more effective they should be placed in a woody section of your garden if it is possible. The host plants for the species preferring boxes should be planted nearby. Mourning Cloaks, Anglewings and Tortoiseshells will be most prone to use them. Elm, Willow, Nettles, Poplar, and my personal favorite Hops, are the favored host of your would-be tenants. Later, blooming nectar sources will also increase activity. Sedums and Asters are good choices, but your personal favorites will work also. By having the nectar source close by, they may be more likely to visit your butterfly house.

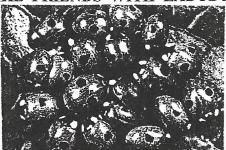
Many people have suggested painting the outside of the structure with purple and yellow flowers to attract attention. Once again it can't hurt. Another point of debate is the proper height. Some say 4-5 feet, others say higher, others lower. I say put it where you like it. During the winter, these hibernators can be found under logs on the ground, in the eaves of houses and state park signs, or in the grasses. They will overwinter at the any level where opportunities exist. As the cold winds of winter approach, there may not be much time for house hunting.

Should you buy a butterfly house? Yes! It would be better to build your own from the plans supplied by the Butterfly WebSite. Will it work? Probably not! But they look great and add to the charm of any garden. I have one. It is placed right in the sunniest part of my garden. It is at the wrong height and probably facing the wrong direction, and probably a lot of other wrong things involved. But who cares. It makes for great conversation!

It looks great and it won't hurt.

12/6/2002

#### MAKE FRIENDS WITH LADYBUGS



"Ladybug, ladybug, fly away home..." goes the children's rhyme, and that's just what ladybugs that you purchase for your garden might do. Well, not exactly fly away home, but fly away, at any rate.

Convergent lady beetles – the ones usually offered for sale-hibernate by the millions in the foothills of the Sierra Nevada mountains. They are scooped up, packaged, and shipped all over the country. But the beetles feast before their nap, so when they awaken they mostly want to fly-away.

Once they become hungry again, they relish such plant pests as aphids, mealybugs, scale insects, whiteflies, and mites. Each adult beetle wolfs down as many as fifty aphids a day. The females lay more than a thousand eggs in two months, which hatch into cute larvae that look like little alligators and gobble up to 25 aphids a day.

Although they eat voraciously when hungry, the effectiveness of even naturally occurring lady beetles is limited. This is because the beetles don't clean their plates, so to speak. They take off to greener pastures before they have really knocked out a pest population.

You can increase the effectiveness of naturally occurring lady beetles by making your yard more attractive to them. Do this with food. You might offer an artificial food such as wheast, a commercially available yeast and wheat mixture, putting it out on a tray or spraying it on a post or plants. You also can attract lady beetles by growing such plants as alfalfa, goldenrod, morning glory, and euonymous. Convincing naturally occurring lady beetles to stick around is more effective than importing lady beetles from the Sierra Nevadas.

The adult beetles are not very effective at controlling pests on house plants indoors, because they are attracted to the light of windows, where they congregate and die. The larvae, which cannot fly, are effective indoors, though. Either find some to bring indoors, or else bring in a leaf with lady beetle eggs attached. The eggs are in clusters of five to 50 on the underside of a leaf, and each egg is yellow and attached at its end.

Purchasing cartons of lady beetles to release outdoors does have one benefit: It dissuades gardeners from spraying pesticides for the justifiable fear of killing the lady beetles. Even if the released beetles do fly away, other beneficial insects can hang around and do their job when they aren't killed by pesticides.

By Lee Reich, The Associated Press Internet Site: http://www.canoe.ca/HGGardening