## Backyard Habitat Packet



#### Yard Assessment

This packet is designed to move you toward an official Certified Habitat through the National Wildlife Federation. You do not have to certify your yard if you do not want to, but we will be following their guide for a backyard habitat. Their website has lots of valuable information and I recommend you check it out! I will be suggesting a great deal of resources and ways your yard can help with research during this program. Here is the web address to look over the certification process: http://nwf.org/ garden-for-wildlife/certify

- It's time to get to know your yard as a habitat. Please answer the questions as a family/household.
- 2. Draw a map of your front and back yard. Try to be as detailed as you can. Add details that would be important to you and wildlife.
- 3. Create a list of the plants you have in your yard. List how they help wildlife. Why do you like the plants? Are there some plants you do not like?
- 4. List some food sources you have in your yard.
- 5. Where can wildlife get water in your backyard?
- Do you have any shelter in your yard for wildlife? (Sometimes people put up houses they have made and other times elements such as trees and rocks can provide a home.)
- Take a 10-minute snap shot of the wildlife in your yard. List all the animals (insects, slugs, squirrels, ANY-THING) you see in 10 minutes.\*



### **Our Yard Map**

## **Backyard Habitat Packet Plants!**



#### It's All About the Plants

In many situations, plants make a habitat what it is! A forest could not be a forest if there were no trees. Of course, types of plants growing in an area are often determined by soil, climate, and terrain. Without plants in our Centerville-Washington habitats, we would have trouble attracting certain types of wildlife.

### **Choosing Plants for Your Habitat**

You may want to consider:

- Have a variety of bloom times and colors
- · Have a maximum benefit to wildlife
- Be native to the area
- Have some visual appeal to humans

A varied bloom time can mean a nectar supply for bees and other pollinators. Nectar as a food source is just one way the plants can benefit wildlife. Some of the plants are hosts for butterfly larva (caterpillars). Others provide shelter and nesting materials. Native plants are plants that originated from this area. They use less water and are more of a benefit to native wildlife.

To get an idea of what plants would work best for you, visit wildflower.org and use their search options. It can be really fun to build your garden! We have included a chart for you to use when considering new plants to add.

\*Using native plants in your garden is an example of a sustainable practice.

#### **Study Your Plants**

- Take pictures or draw your plant every week. This will help you learn to identify it in all growth stages. Put the pictures in a folder or album.
- 2. Measure your plants growth and record it on a growth chart. Does each plant have a different growth pattern?
- Make decorative identification markers out of recycled plastic. They can add some color to your garden before the flowers bloom.



### **Our Plant Chart**

Our Garden is (circle one)

Full Sun (more then 6 hours)
Our soil is: moist

Part Shade (2-6 hours) dry wet

**Full Shade** 

Name	Scientific Name	Bloom Color	Bloom Period	Benefits

#### **Notes:**

Other things to consider: height, leaf shape, spread, aggressiveness, toxicity

## **Backyard Habitat Packet Food Sources**

#### **Food in Your Garden**

Backyards can provide an abundance of food for wildlife. Whether you add feeders or natural opportunities to give wildlife some nourishment, it is very important. Food provides energy and nutrients animals need to grow and raise young. If an animal cannot find enough food, it may not be able to raise young in a given year. Some animals eat completely different foods as babies than they do as a grown-up. Baby hummingbirds are fed insects, while their parents eat both insects and nectar.

When providing food for wildlife in feeders, it is important to care for them properly. Hummingbird feeders can get dirty and need to be cleaned and refilled to keep the birds from getting sick.

#### **Ways to Test Foraging**

- Animal choice tests. Set out two food choices on paper plates or rocks and see which the animal selects first. Make sure the food is healthy for the animal. You can do this test with ants, birds, and squirrels. Offer seeds, nuts, veggies, and fruit.
- 2. Count foraging bees on your flowering plants. Do the bees seem to visit one plant over another?
- 3. You can see if your wildlife prefers to forage in a certain spot in your yard by moving the feeding stations around the yard. Is there a spot you get more wildlife at your feeding station?

#### **Foraging Behaviors**

When animals search for food in the wild, its called foraging. Different animals have different ways of foraging. Can you observe these foraging behaviors in your yard?

- Robins will turn their head while on your lawn to listen for worms under the soil.
- Bees will hover around flowers, looking for visual cues that the flower is offering nectar (we cannot often see the ultraviolet signals these flowers give off).
- Some birds such as <u>Cedar Waxwings</u> forage in groups. Some birds eat while others look out for predators.



## **Backyard Habitat Packet:** Food

Consider a hummingbird feeder as a food source.

### **Hummingbird Citizen Science**

Journey North is interested in Hummingbird sightings to monitor their migration patterns. Their map is a good way to know if Hummingbirds are back in our area. You can register through their webpage and report on many different signs of spring. The information you collect can be used to help with Hummingbird conservation.

#### **Helping Hummingbirds**

Hummingbirds need to eat every 15-20 minutes during the day. If you ever find a hummingbird that is lethargic, ask an adult to stick its beak into the hummingbird feeder. It should begin to drink and be released shortly. If this doesn't work, contact a wildlife rehabilitator.

#### **Ruby-Throated Humming Bird Facts**

- They cannot walk or hop.
- \* They prefer natural nectar sources, but will visit feeders when flowers are scarce.
- \* This species of hummingbird is the most territorial of all 338 species in the world!
- \* Females will lay two eggs per brood. She can have two broods per season.
- Their longest <u>migration</u> route is from Costa Rica to Canada.
- \* Visit All About Birds to learn more!

#### Your Hummingbird Feeder

Rinse your feeder with water to wash away any chemical residue.

Find a place to hang the feeder in your yard. You may want to find a near a place to perch so the hummingbirds can perch and guard their feeder. Yes, they will consider it THEIR feeder! They are very territorial.



#### **Hummingbird Nectar (1:4 ratio)**

- 1 cup white refined sugar
  - 4 cups water
  - Boil 1-2 minutes
- •Change and clean feeder every 2-3 days
- •Can be stored in the fridge for two weeks

Do not use organic/raw sugar or food coloring.

### **Backyard Habitat Packet Water**

#### **Water Sources**

Water is a crucial aspect of your habitat. While some animals can travel to water sources between yards, (birds, mammals, flying insects) others spend their whole lives in one square-foot!

Water sources can come in all sizes. Many living things absorb moisture from the soil or get it when they eat. Caterpillars get their water through their food.

#### **How Your Plants Help with Water**

Native plants can be very helpful with water conservation. Once they get through their first year, they do not require you to water them. Plants shade the ground and keep it moist. Just having native plants is contributing to water conservation!

Some plants provide water in creative ways! Cup Plants allow water to puddle in their leaves. This provides water even if it hasn't rained in weeks! Cup Plants can be a great way to provide a water source with no maintenance needed. However, Cup Plants can become aggressive, require wet spots, and need a good amount of sun. Cup Plants can be a great idea for a school garden if a man-made water source is too costly. If you think Cup Plant may be for you, it can be found at Oak Creek South Park along the creek near the Wetland Pond. Observing a native plant in the wild before purchasing it for your yard is always a good idea.

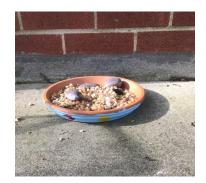


#### **Let's Get Creative!**

Certified Backyard Habitats can have décor! Man-made water sources must be maintained so many people avoid them. This water source is lots of fun, though, and not too hard to maintain.

Consider a simple birdbath-shown to the left! Make sure you change the water every few days to avoid mosquito breeding. Clean the bird bath with a vinegar solution and rinse VERY thoroughly if algae develops. When I change the water in my birdbath, I vigorously scrub it with a brush and that keeps it very clean. (Designate a special brush just for Habitat cleaning. It is very useful.)

You can also make a Butterfly Puddler (examples below), Fill the saucer with rocks and add a tiny bit of water so the top of the rocks stay dry. You will want to change the water every few days and clean as needed, just like the bird bath.





### **Backyard Habitat Packet Water**

### **Going Out of Town?**

If you are leaving for a vacation or an extended trip you may want to consider giving your water source a vacation, too. If left unattended mosquitoes will use the water for breeding. Winter can be hard on clay pots containing water as well, so consider putting it up for the winter.



Of course, providing water year-round is wonderful! If you want to have a year-round water source I recommend something with a heater so you do not have to worry about ice. A heated dog water bowl would work! Be sure to change the water frequently.

#### **Water Sources and Watersheds**

Water must go somewhere! Here are some activities you can do as a family to learn more about water.

Make a Watershed out of household items. PBSkids.org has a good example if you search "Build a Watershed".

When it rains watch where the water flows in your Habitat and how it leaves your yard. What does rain do on permeable surfaces?

What about non-permeable surfaces. \*
Observe your water source and make note of the wildlife that uses it.



\*Permeable surfaces allow water to sink through to the soil. Gravel is an example. Non-permeable surfaces do not allow the water to sink through. Cement and black top are examples of a non-permeable surface.

# **Backyard Habitat Packet Raising Young**

#### **Birdhouses**

Consider a birdhouse in your garden to provide a safe place to raise young.

If you get a wooden birdhouse, You can paint it. Acrylic paints will work without a sealer. Do not paint the inside and use colors that aren't going to make the box too hot. Black is a color you should stay away from! Of course, painting your house is completely up to you.

You can hang the box from a branch on a tree. If you do this, I recommend stiff wire to help minimize the swing.

#### **Observe Bird Behaviors**

Nest Watch isn't the only way to learn about the life histories of birds. Once your birdhouse is chosen as a nest site, pay attention to the activities you see. Males will often perch on or near the box to guard it. Females will gather nesting material and begin building. You may even see a behavior called **courtship feeding**. This is when the male brings the female food and feeds her. He is telling her he is strong enough to provide food for her while she is incubating the eggs. Once the eggs hatch, you will see the parents feeding the babies SO MUCH. Count how many times they bring food to the nest.

#### Citizen Science

If you are wanting to observe and document who uses the nest box for raising young, please consider joining nestwatch.org. They are a data collection site for Cornell University. They are looking for information on ALL nesting birds. There is some training on their site to do this ethically. It is illegal to touch or touch the nest while it is active so you have to open the door, take a look, and close it quickly!

We monitor all the boxes on CWPD property and I have considered it very rewarding. The new Nest Watch App makes it very easy to do on your property. Contact me if you have any questions about the process. I will help you get started if you need guidance.

Take a look at the NestWatch Manual and see if NestWatch is for you!



We hope you have fun with your new habitat!