

Potential Schoolyard Habitat Projects

This is a list of simple, attainable projects related to the enhancement of schoolyard habitat — whether the school is located in the center of an urban district, in a suburb or in a rural community. The feasibility of these projects will vary depending upon school location, district regulations, wildlife, and climate. In addition, some of these projects will require more short and/or long-term maintenance than others.

Building and/or installing mammal or bird houses/nesting platforms.

- ☞ These can be placed in a garden, up against a building, on a fence-line or on a light pole/similar tall structure.

Creating amphibian homes and placing them in an existing garden or flower bed.

- ☞ For example, painted terra cotta flower pots that are turned on their sides, half buried, can be used as shelter for frogs and toads.

Create and install “Critter Hotels.”

- ☞ Placing rocks, woody debris (logs, large branches) or even contained brush-piles (leaves surrounded with chicken-wire) placed at the back of an existing garden area or natural area creates shelter and nesting areas for insects, small mammals, reptiles and/or amphibians.

Build and mount “Insect Hotels.”

- ☞ Solitary bees (not the swarming, stinging bees) and many other beneficial native insects lay their eggs in crevices and small holes. For example, mason bees (solitary nesters that help pollinate many plants) will lay eggs in 5/8” holes drilled into a piece of wood. Many resources and instructions for building insect hotels/homes can be found on the Internet.

Removing invasive plants.

- ☞ Invasive plants are persistent weeds that are harming local environments. Contact your state Department of Natural Resources for lists and resources.


Planting native plants.

- ☞ Students can create a native-plant garden or plant native plants in and among plants in an existing garden bed. Once established, native plants typically fare well in all weather conditions and need little to no maintenance.


Installing a garden for butterflies, hummingbirds, or wildlife in general.

- ☞ You can access a wealth of resources through local nurseries, Master Gardeners, and organizations dedicated to wildlife and gardening. A garden can consist of a few plants in pots outside the classroom door, a large raised bed in the school yard or even a collection of nut or fruit-bearing trees planted on campus.


Providing a water source, such as a bird bath, fountain or shallow pond.

-  Water sources can vary depending upon the focus wildlife. The base for a large terra cotta pot (decorated on the **outside**) can be used as a shallow bird bath (both for birds and insects to access), while hardware stores typically sell pre-fabricated forms for fountains and/or ponds.

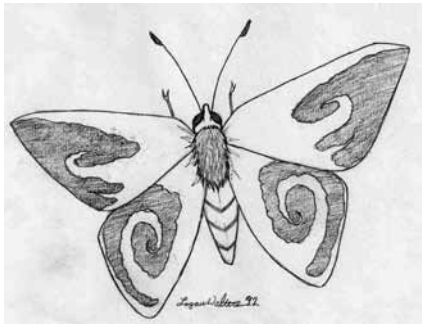
Create and/or put out bird feeders/feeding stations.

-  Different species of birds feed in different ways on different foods. Students will need to research to establish whether they want to install hanging feeders, platform feeders or ground feeders, as well as the type of food they would like to provide.

Build and install bat houses/boxes.

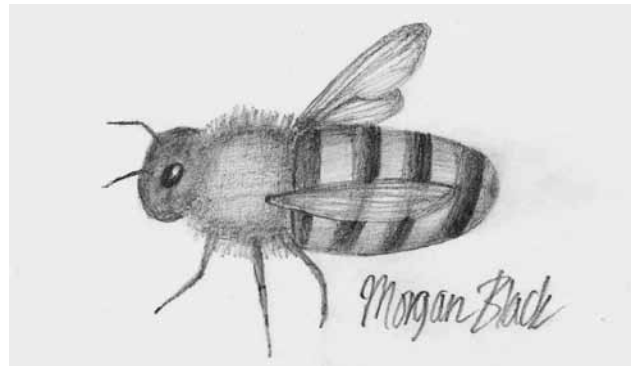
-  These boxes are simple to make and can be attached high on the side of a building (out of reach) or on a tall pole. A board or other materials should be installed below the house to catch any guano from the box.

Butterfly



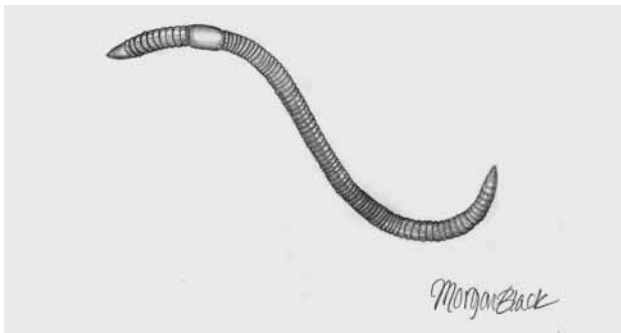
- ☐ **FOOD:** Adults = nectar from the flowers, especially flowers from native plants. Caterpillars = leaves of different types of plants.
- ☐ **WATER:** Adults = dew drops or puddles. Caterpillars = from the plants they eat.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Lays eggs on the bottom of grass, bush or tree leaves. They will hide under leaves.
- ☐ **SPACE and ARRANGEMENT:** Butterflies can fly far, but like areas where flowering bushes and trees are grouped together.

Mason Bee



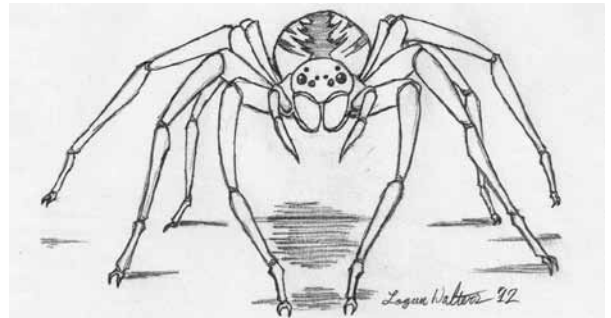
- ☐ **FOOD:** Adults = Drink nectar from native plants. Young = pollen that has been stored in the nest.
- ☐ **WATER:** Dew drops or puddles.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Does not live in a hive. Each bee builds its own nest in a small, deep hole in wood (such as fence posts or trees).
- ☐ **SPACE and ARRANGEMENT:** Mason bees like warm, sunny areas and will build nests near where they can find both pollen and mud.

Earthworm



- ☐ **FOOD:** Dead and rotting plants and other small organisms.
- ☐ **WATER:** From the food it eats.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Cool, dark and damp places such as under rocks, fallen logs, and leaf piles.
- ☐ **SPACE and ARRANGEMENT:** Worms don't travel too far, but will not stay in areas where the soil gets too hot and dry or where water creates pools or puddles.

Orb-Weaver Spider



- ☐ **FOOD:** Small flying and crawling insects, such as flies and other spiders.
- ☐ **WATER:** Gets most of its water from the insects it eats, may drink from a dew drop.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Likes sunny spots between flowers, bushes and tall plants, but will also build a web in window or door frames. It hides its egg sac near the edge of its web.
- ☐ **SPACE and ARRANGEMENT:** It will stay in one place — building a new web each night — as long as it is catching food and not bothered.

Crow



- ☐ **FOOD:** Almost anything = earthworms, insects and other small animals (even baby birds or bird eggs), seeds, fruit, fish and even human trash.
- ☐ **WATER:** Puddles, ponds, lakes and streams.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Builds a nest toward the top of a large tree (likes evergreen trees, but will use any tree).
- ☐ **SPACE and ARRANGEMENT:** Crows live in groups and will chase away larger birds such as hawks. They like areas that have at least a few trees, but don't like to be too deep in the woods.

Hummingbird



- ☐ **FOOD:** Nectar from flowers and insects, and sometimes tree sap.
- ☐ **WATER:** From the nectar they drink.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Builds a tiny nest usually in bushes or deciduous trees (trees that lose leaves in the winter- such as oak or birch) between 6 to 40 feet above the ground.
- ☐ **SPACE and ARRANGEMENT:** Many migrate and may only be here for part of the year. Found in grasslands, parks, gardens, the edge of forests, and woods where there is more space between the trees.

Sparrow



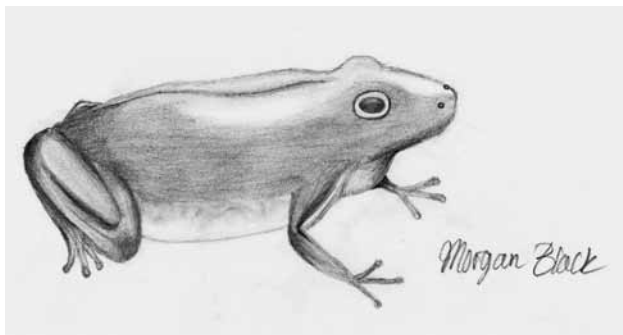
- ☐ **FOOD:** Seeds, grains, insects, fruit, and worms.
- ☐ **WATER:** Puddles and small ponds.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Spends most of its time in thick bushes or low branches of trees. Builds its nest low to the ground or on the ground (hidden in grasses, weeds or bushes) and sometimes in trees.
- ☐ **SPACE and ARRANGEMENT:** Can be found almost anywhere and are not afraid to live near people. They spend time in flocks (groups) when they are not raising babies.

Hawk



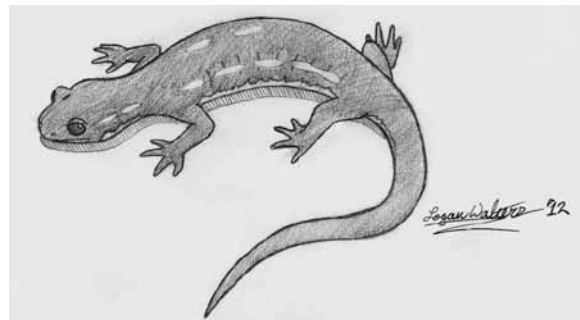
- ☐ **FOOD:** Small mammals, birds, and snakes.
- ☐ **WATER:** Mostly from the food it eats.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Builds a large nest usually at the top of a tall tree or on a cliff ledge, but sometimes on the edges of buildings ledges or on large signs (billboards).
- ☐ **SPACE and ARRANGEMENT:** Lives in places that are more open or spread-out, such as deserts, grasslands, parks and the edges of forests. Likes to perch on fence posts, telephone poles or trees.

Frog



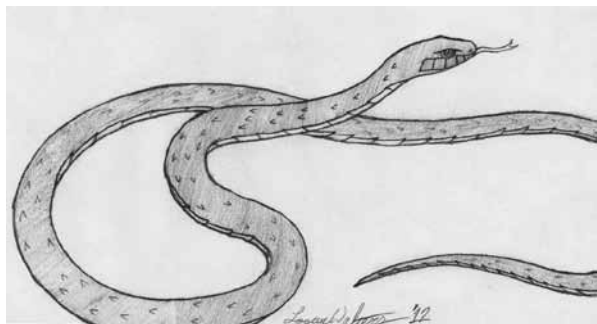
- ☐ **FOOD:** Adults = insects and small creatures, Tadpoles = algae and tiny floating creatures
- ☐ **WATER:** Through its skin.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Lives in or near a pond, stream, river or lake. Needs thick groups of plants for hiding. Lays eggs in calm shallow water — on or under plants or floating leaves.
- ☐ **SPACE and ARRANGEMENT:** Does not travel far. In colder areas, frogs will hibernate during the winter in moist soil or underwater.

Salamander



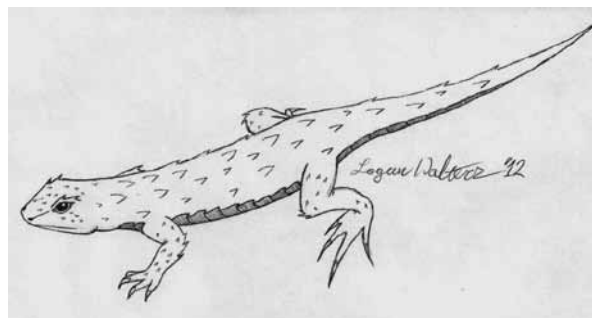
- ☐ **FOOD:** Adults = worms, insects, amphibians, snails/slugs; Larvae (babies) = small water animals
- ☐ **WATER:** Through its skin.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Lives in wet areas (under leaf piles) or in water (ponds, lakes). Lays eggs under rocks or logs, muddy areas or ponds. Babies usually live in water.
- ☐ **SPACE and ARRANGEMENT:** Adults mostly live underground near ponds, lakes or slow streams. Some don't travel more than 5-10 feet but others may go as far as 2 football fields and cross over roads.

Snake



- ☐ **FOOD:** Slugs, worms, reptiles, amphibians, birds, eggs, fish, and rodents.
- ☐ **WATER:** From its food, puddles, ponds, creeks.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): In cold winters, needs a safe place to hibernate like rock or log piles or tree stumps. Some keep their eggs inside them and others lay eggs in damp, warm places, such as under leaves or dirt in a sunny area.
- ☐ **SPACE and ARRANGEMENT:** Needs places for hiding and for warming itself in the sun, such as underground tunnels, rock piles, logs or sandy areas.

Lizard



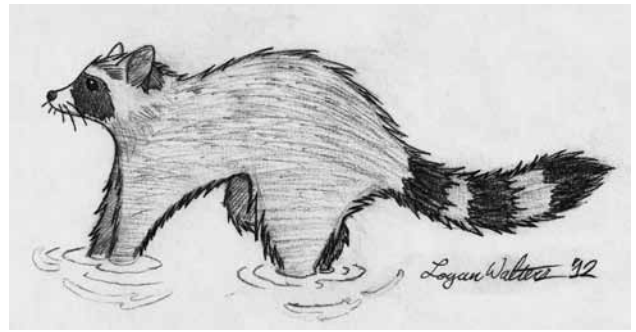
- ☐ **FOOD:** Insects, spiders, worms, reptiles, small animals, plants and fruits.
- ☐ **WATER:** From its food, puddles, ponds, creeks.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): In cold winters, needs a safe place to hibernate: rock or log piles, tree stumps. Most lay eggs in soft dirt or under leaves, rocks, or logs in sunny places.
- ☐ **SPACE and ARRANGEMENT:** Lives in many different areas – from deserts to forests. Needs places to hide (rock piles, rotting logs, leaf piles) and for warming itself (paths, big rocks, fence posts).

Squirrel



- ☐ **FOOD:** Seeds, nuts, berries. Sometimes bark, mushrooms, small animals, eggs, insects, or worms.
- ☐ **WATER:** From puddles, ponds, lakes, creeks.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Builds a nest of sticks, leaves and grasses toward the top of a large tree, either in the branches or inside a hole in the trunk (sometimes in a building).
- ☐ **SPACE and ARRANGEMENT:** Likes several trees next to each other and moves from branch to branch - climbing down to eat on the ground.

Raccoon



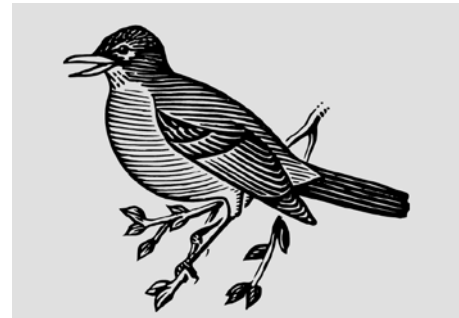
- ☐ **FOOD:** Fruits, nuts, insects, worms, fish, amphibians, other animals (even eggs) and trash.
- ☐ **WATER:** Puddles, ponds, lakes, rivers, streams.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Will make a den in hollow trees, rocky areas, thick bushes, attics or empty buildings. They will climb when they are scared, so they like areas with trees.
- ☐ **SPACE and ARRANGEMENT:** Can be found in the middle of big cities or out in the country (they travel farther in the country — at least 3 miles). Busy roads can be dangerous.

Bat



- ☐ **FOOD:** Insects, fruit or nectar and pollen.
- ☐ **WATER:** Ponds or lakes.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Some hibernate and some migrate. Live in caves, hollow trees, chimneys, buildings or under bridges in groups of 2 or 3 to over a million. Female (girl) bats keep their babies in groups (in warm places) and will then eat and sleep somewhere else.
- ☐ **SPACE and ARRANGEMENT:** They usually hide during the day and hunt at night. Will fly between 1/2 and 6 miles to find food and water.

Robin



- ☐ **FOOD:** Insects, worms, and fruit.
- ☐ **WATER:** Puddles, ponds, lakes, streams.
- ☐ **SHELTER** (PLACES TO HIDE OR RAISE YOUNG): Builds nest on branches in or just below the thick leaves of a tree, in gutters, outdoor lights, buildings, cliffs, or even on the ground. In winter, they roost (rest or sleep) in large groups (up to 25,000) in trees.
- ☐ **SPACE and ARRANGEMENT:** Can be found in yards, fields, city parks, golf courses, shrublands, woodlands, forests and even in the mountains. They feed on the ground.