

# Kids' Discovery Clubs

## Overall Objectives

**These child-based, exploratory stations located in 6 areas of the Park provide activities for young Guests and their families at Disney's Animal Kingdom. The objectives are:**

- to connect children (ages 3-8 years old) with the natural world through interactive, exploratory, micro-environments that encourage children to get involved
- to awaken their senses using different learning styles and ensure "family friendly" exhibits
- to embrace strong educational themes that deliver the conservation message: "Care for Wildlife and Wild Places"
- to provide activities for small Guests who are not tall enough to ride all the attractions
- to link each land of the Park with Rafiki's Planet Watch, our conservation center
- to increase Guest capacity in current low capacity areas

### **What should a child's micro-environment include?**

A child's space, or micro-environment, fosters and promotes caring attitudes in young Guests. It integrates play and learning, and focuses on the process of discovery and exploration of the natural world. The design includes activity elements that are at their level, fun, interactive, robust, and discovery-based. Each activity is designed to incorporate the storyline in the individual lands where they are located.

**ADA Guidelines offer Guests with disabilities an opportunity to take an active role in our Kids' Discovery Club activities.**

Be sure to "Place the Guest first, not the disability"

Do not assume a Guest with disabilities cannot participate in certain activities. Direct them the same way you would direct other Guests.

Provide exceptional Guest service by using props, pictures, or other learning tools to preserve the Magical Guest experience.

# Conservation Station



**Level:**  
3-8 Years

**Subject Area:**  
Earth Science,  
Naturalism

**Duration:**  
2-4 Minutes

**Setting:**  
Conservation Station  
Pathway

**Skills:**  
Animal Identification

How many different kinds of animals live in your backyard?

## Summary

Kids use their powers of observation to identify little creatures that live in their own backyards.

## Objectives

- To explore the area looking for wildlife in our backyard habitat
- To identify at least nine animals by sight
- To deliver the message "Care for Wildlife" by creating your own backyard habitat

## Materials

- 18 Assorted Animals
- Identification Cards (two different types)
- Crayons

## Making Connections

A backyard is a great place to discover wild animals, but not just the obvious ones like squirrels and birds. This is a great activity to help kids realize the diversity of life around them.

## Background

When kids think of their backyard, what usually comes to mind? A swing set, playing catch, a cook out? What about wildlife? Most everyone can identify birds and some small mammals, but what about smaller creatures, the ones that allow you to have a really close look? Children love to discover the world around them. Telling them about all of the great creatures that are so close to their home will spark their curiosity and inspire them to flip over logs to discover the wonders that lie beneath. This will hopefully make them want to conserve these new-found animals and help form a connection between themselves and nature. These are lessons that will last a lifetime.

## Procedure

### Warm Up

Ask the kids to name some animals they see around their homes. Do they do anything special to help those animals out? You may briefly discuss things like bird feeders, bird baths, and how they positively impact wildlife.

### The Activity

**Step 1:** Tell the kids we are looking for a few naturalists that can help us spot some animals in our backyard

**Step 2:** Hand them a book and lead them to our backyard

**Step 3:** Help our Guests find the animals by giving clues about what each animal would eat and where it might live

**Step 4:** Remember to get across the message that all animals are important to the ecosystem, even the creepy crawly ones. Care for wildlife at home by providing backyard habitats.

## Extensions

After they have found all of the animals on their board be sure to mention that zoos and places like Disney's Animal Kingdom are great places to see animals, but their own backyard is full of fascinating wildlife, too. Challenge them to find nine different animals in their own backyard once they get home.

Also, mention that at Conservation Station (Rafiki's Planet Watch) they can see many different backyard habitats that they can make at home to attract all sorts of beneficial animals like butterflies and bats, just to name a few.

## Sample Conversations:

“What sorts of creatures live in your backyard? You know, it’s often the little creatures that are so important to us. Bees and butterflies help to pollinate flowers. Millipedes and cockroaches break down decaying plant material and return the nutrients back into the soil and spiders and bats help to control insect populations. Read a book to learn more about the little things that run our world.”

“Wow, isn’t it amazing how much wildlife lives in your backyard! Why does wildlife come to your backyard? Because it contains food, water, and shelter. These are all things that every animal needs. Some animals come and go with the season, for example, you might see certain birds only in the winter. Why? Because the food they eat is disappearing... things like flowers, seeds, berries, and insects. You can add things to your backyard for the wildlife. Hang a bird feeder or decorate a tree with fruit, nuts, peanut butter, and seeds.”

“Do any of these animals live in your backyard? Look around your home and see how many little creatures you can find. There are lots of things that you can do to bring wildlife to your backyard, like adding bird feeders and squirrel feeders. Also, place a bird house or a bat house in your yard to provide shelter for these valuable neighbors.”

“What animals live in your backyard? There are probably animals living there that you don’t even know about. Leaving piles of leaves or branches is a great way to attract some of the small insects and arachnids you see here. Examine the small places under logs or stones in your yard. All these little animals have their place in your yard.”

“Great! You found them all. What do these animals need to live? Food, water, and shelter, right! There are lots of things you can do to create habitats in your backyard... by planting trees and shrubs in your yard you can create the shelter that many animals need. Also, by leaving dead trees and logs in your yard, you can create the perfect home for even more creatures.”

“Do you see any of these animals around your home? What about ants, bees, or spiders? All of these little creatures are very important. Spiders eat lots of bugs so that we do not have too many around and bees pollinate flowers to help them grow. You can help these animals by providing them with potted plants and native flowers, water sources, and shelter in your backyard. Just remember to use plants that are native to your area.”

“Do you know what this is? It’s a bat house. Bats are very important because they eat bugs that people think of as pests. A single bat can eat over 600 mosquitoes in one hour! By having a bat house near your home, you can help the bats and enjoy the benefits of living near these amazing animals.”

## Background Information:

### Ants

Of over 2,500 species of ants known all are social animals, living and working together in ways that have astonished lay people and naturalists alike. Among the most familiar insects, they have inspired many a comparison with human society. Carpenter ants and their relatives form one of the largest groups of ants. They build nests and burrows in dead wood, logs, and the timber of buildings, where they may do considerable damage if allowed to spread. Carpenter ants are found the world over in temperate regions. The workers, which are infertile females, are among the largest known ants. Ants are very helpful to the ecosystem because they help to aerate the soil and add nitrogen.

### Bats

The nearly one thousand different kinds of bats amount to approximately a quarter of all mammal species. They are found everywhere except in the most extreme desert and polar regions. About forty species live in the United States and Canada, but the vast majority inhabit tropical forests, where in total species they sometimes out-number all other mammals combined. Worldwide, bats play an essential role in keeping populations of night-flying insects in balance. Just one bat can catch hundreds of insects in an hour, and large colonies catch tons of insects nightly, including beetle and moth species, not to mention mosquitoes in our own backyards.

### Bees

Bees are distinguishable from wasps in a number of minor ways. Their legs have “pollen baskets” of stiff hairs, and the body is hairy, also. Bumble bees are larger than most others. Their elongated mouth-parts enable them to pollinate red clover, which no other bee can do. Nests are made underground by the fertile females (queens), which survive the winter. The colony consists of a queen, workers, and drones. Sweat bees, small and brilliantly colored, nest in the ground. They are attracted to perspiration, hence their name. Leaf cutting bees are larger and brightly colored, also. Their nests, made underground, are lined and divided with leaves which the bees have cut in ovals or circles from roses and other plants. The honey bee is probably the best known of all insects. Honey has been obtained from the wild and from kept colonies far back into history. In making honey, bees pollinate fruit trees and other plants. A normal colony of a queen, workers, and drones may contain up to 50,000 bees. Periodically bees swarm, and the old queen goes off to find a new colony, leaving a young queen behind.

In addition to gathering nectar to produce honey, honey bees perform a vital second function - pollination. About one-third of the human diet is derived from insect-pollinated plants, and honey bees are responsible for 80 percent of this pollination. Pollination is the fertilization of a flowering plant. It occurs when pollen is transferred from the anthers of a flower to the ovules of that or another flower. Honey bees are responsible for pollinating a variety of fruits, vegetables, legumes and more.

## Caterpillar

The caterpillar is the second of the four stages of lepidopteran development. The first is the egg, the third is the pupa or cocoon, and the fourth is the adult. There is no rule of thumb for distinguishing caterpillars of moths from those of butterflies. Both have chewing mouthparts, primarily for feeding on plants. A handful of species sometimes do tremendous damage to crops. Most caterpillars have 6 true legs on the thorax, and from 4 to 10 unjointed false legs on the abdomen. A few have irritating hairs or spines. Many caterpillars spin a silken cocoon, sometimes covered with hairs, in which they pupate. Butterfly larvae make no cocoon, but form a chrysalis. Some Lepidopteran winter as pupae, others as eggs or caterpillars, and few as adults.

## Centipede

Centipedes are found in tropical and temperate regions all over the world. The centipede has large venom fangs which are a modified first pair of legs. The mouth is composed of maxillae and mandibles, and on the head is ONE set of antennae. The trunk consists of many body segments, each with one pair of legs (sometimes between 15 and well over 100 segments). The last pair of legs are elongated and look similar to the antennae. Some of the largest species in the southwestern desert can get to be 10 inches long. Centipedes are nocturnal and burrow in the ground during the day, therefore they are rarely seen in the wild. Centipedes are not aggressive unless picked up. They will bite for defense. The venom enzyme they use is somewhat harmful to humans, and similar in feeling to a painful bee sting. The antennae on the head can be used to locate prey, and they can subdue or kill their prey with their fangs. The elongated back legs mimic the front antennae, thus confusing a predator as to which end is the head and which is the tail. The centipede can recover from an attack at the trunk of the body better than an attack on the head. The centipede has a diet of worms and insects. Larger tropical species feed on lizards and mice. They can live approximately 4-6 years.

## Dragonfly

Dragonflies are often seen near ponds and moist meadows, but some species dwell in the forest. Dragonflies, also known as darning needles or stingers, are reputed to be dangerous. However, they are only dangerous to small insects, like mosquitoes, which they eat on the wing. Dragonflies rest with wings outstretched. They will lay their eggs in the water; the nymphs develop there, feeding on other aquatic insects. They leave the water after several growing stages; the skin splits and the adult emerges.

## King Snake

The King snake (*Lampropeltis getulus*) from North America has seven subspecies, all with different coloring, ranging from pure black or black with light crossbands to a chain-like pattern on either a brown or black background. This species occurs over the southern part of the USA and Mexico in a wide variety of habitats, but particularly prairies and deserts.

All snakes have to shed, or slough, the hard outer coating of their skin periodically in order to grow. The actual sloughing is started by the snake rubbing its head against objects. The skin is usually shed in one piece, from the head and continuing down the whole of the body, turning inside out in the process. The time between skin-shedding varies; younger snakes shed their skin more often than older ones.

## Ladybug

Ladybird beetles, or Ladybugs, are probably the best known and most valued of our beetles. We have about 350 species in this country, though the family is world-wide in distribution. Both larvae and adults of many species feed on aphids. In California, where pests and scale insects cause serious damage to citrus trees, native and imported ladybugs have been successfully used to hold the pests in check. The common species are generally similar in appearance but differ in the number of spots. All have very short legs, which distinguish these beetles from other garden beetles. Ladybugs lay their eggs on plants infected with aphids or scales. The larvae feed on the aphids and pass through four growth stages. When mature, they pupate in the remains of the last larval skin. Adults assemble by the thousands before cold weather sets in and hibernate under fallen branches or rocks.

## Luna Moth

The Luna moth has seasonal forms where it is double-brooded. The summer form has yellow wing margins, whereas the spring form has pink to purple wing margins. Larvae feed mainly on sweet gum, hickory, walnut, birch, and oak. Pupae are active in the papery cocoon, usually spun on the ground. The Luna moth can be found living from Florida and the deep south, all the way up to eastern Canada.

## Monarch Butterfly

The Monarch, one of the best known butterflies, is noted for its migratory habits. In fall, flocks of Monarchs move southward to California and Mexico. Resting migrants or winter residents may cover entire trees. In the spring they return northward to their breeding areas, some as far as southern Canada. Three or four broods may be produced in one year. The male scent glands are marked by a spot of dark scales in the center of the hindwings; this spot is not found on the female. Females differ also in having broader black vein lines. Larvae feed on milkweed and related plants, the juices of which cause the Monarch's unpalatability to many birds. The Monarch's development takes about a month from conical eggs laid singly on leaves or blossoms to adults, which emerge from a shiny green, gold-speckled hanging chrysalis. The larvae, striped with yellow, black, and white, are about 2 in. long when fully grown.

## Praying Mantis

These large, slender insects, generally called praying mantises or mantids, are predators, feeding mainly on other insects. If confined, mantises are likely to become cannibalistic. They are colored a protective green or brown. Hard to see on foliage, they wait in ambush and snatch passing insects with their spiny forelegs. Mantids use their exceptional powers of vision and ability to rotate their heads to detect the movements of prey. In the fall, after mating, the female may eat the male. She lays several hundred eggs in a frothy mass that dries like hardened brown foam. Egg cases can be found in the winter and brought indoors to hatch. The young, similar to adults but light yellow, are difficult to raise.

## Rabbit

Cottontails are most active at dawn and dusk and are usually seen at these times, frequently along the edges of roads where they feed on grass. A great variety of plants are eaten, generally grasses and herbs, but cottontails, especially in the winter, also eat bark. Cottontails are not territorial, and the size of their home range varies with the habitat and species. Although not territorial, cottontails utilize a social dominance hierarchy, and when these rabbits spar, fight, or chase one another, it is usually in relation to the social dominance behavior. Newborn cottontails are about 4 inches long and weigh about 1.4 ounces. They are lightly haired. They are blind when born, but within a week their eyes open. By two weeks of age, cottontails have generally moved out of the maternal nest and are on their own.

## Spotted Salamander

Salamanders are animals known as amphibians. They can live on land and in water. About 135 types of salamanders live in the United States. The most typical salamanders are short-bodied, four-legged, moist-skinned vertebrates about 4 to 6 inches long. The tail is usually about as long as the body. There is much variation in size, and terrestrial salamanders range from 40 to 350 millimeters, with a few exceeding 1 meter (39 inches) in length. Members of most species live in moist places on land, but must return to water to breed.

## Scarab Beetle

Scarab beetles form a large family totaling more than 30,000 species, of which well over 1,300 are found in this country. Many are scavengers, adapted for living in or on the ground. Larvae are usually large white grubs found in the soil. Of the many scarabs, the dung beetles and tumble bugs are outstanding. These are the beetles held sacred by the Egyptians. The adults form balls of dung and roll them about giving the impression of being industrious workers. Eggs are laid in the ball, which is buried. The ferocious-looking rhinoceros beetles and their relatives, the ox beetle, are the largest of the scarabs. All are harmless. Some are 2 inches long; much larger tropical forms occur. Males have more prominent horns than females. The larvae are found in rotted wood or rich soil. Collectors prize the adults.

## Squirrel

The Eastern gray squirrel is a member of the rodent family. They can be found in the eastern United States from Maine to Florida, and west to Texas; they have been introduced to England. The habitat is mostly woodlands, but also farmlands and parks. This species of squirrel is strictly diurnal. At night, it retreats into the hollows of trees, or into its nest made of branches and leaves in a fork in a tree. It feeds on pine cones, nuts, berries, and also on insects, bird eggs, and young birds. The female will give birth to 2-5 young which are blind and furless. They leave the nest after 6 weeks. There are usually 2 litters per year. Gray squirrels can also be black or even white. They are known to be shy, but grow bolder when they get used to people.

## Tarantula

Tarantulas have brush-like hairs on the tips of their legs and abdomen that are extremely sensitive to vibrations. In addition to their eight legs, they have eight eyes on their backs that are light sensing organs. Their jaws, which are attached at the front of the head, move up and down. Tarantulas can be found in all patterns and color variations.

They are typically solitary. Despite their reputation for being vicious and aggressive, they will only attack when provoked or threatened. With a wide variety of defenses, some species ward off attackers by leaning back, raising their head and legs, and exposing their long fangs. Others turn their backs on their attacker and scrape fine hairs from the top of their abdomens, sending them airborne. Each of these hairs is covered with sharp points, like mini-quills, and can cause irritation or temporary blindness to the attacker. These defenses are used against predators. They use their long fangs to inject venom into their prey. Enzymes begin digesting the prey.

Females can live approximately 20-25 years and males approximately 5-10 years. Their diet consists of smaller insects. Some larger species will eat lizards, snakes, mice, and nesting birds.

## Tortoise

A tortoise is considered to be any of the land-dwelling turtles. In folklore these animals represent slowness, determination, and long life. The majority of the 40-odd living species are confined to Africa and Madagascar. There are also species found in other parts of the world. The genus *Gopherus* includes the four North American species known collectively as gopher tortoises. Gopher tortoises have brown shells about 20-35 cm long and have flattened front limbs that are adapted for burrowing. It inhabits sandy and wooded regions of the southern United States from Florida to Texas.

## Tree Frog

The tree frog is usually small, slender and long-legged, with sucker-like adhesive disks on the tips of the fingers and toes, which aid in climbing. Some do not climb well and live in the water, on land, or in burrows. There are more than 550 species of tree frog. They are found primarily in the New World but are present on all continents.

