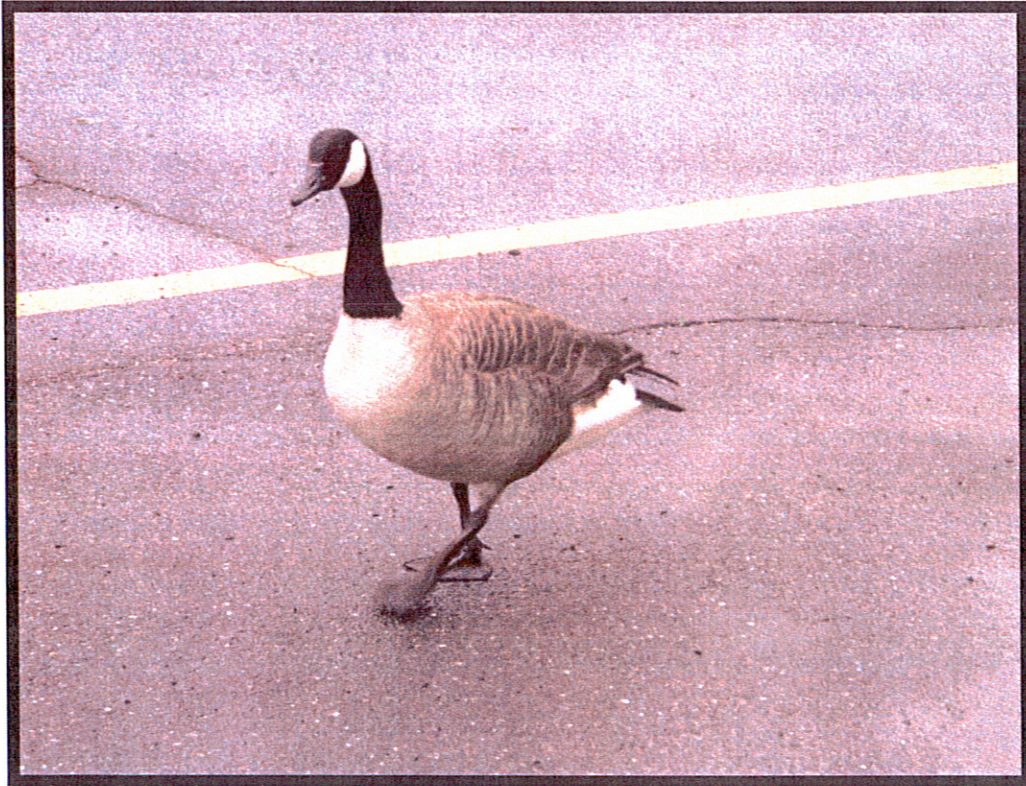


Field Guide to the Aquatic Gardens at Forest Park



Compiled By:
The 3rd Grade Students in Room 17 at
Mary O. Pottenger School

Animal Life



American Bullfrog

Rana catesbeiana

Description

Bullfrogs are a dull green color; they can also be a brownish color. Bullfrogs have eyes that are high on their head and eardrums, the size of their eye, behind their head. The female's eardrum is the same size as the eye, while the male's is larger than the eye. Bullfrogs have pupils the shape of a football. They have webbed feet and long legs that help them jump far and high. Bullfrogs are the largest frogs in North America. They can be 3 ½ inches to 6 inches long.

Habitat

Bullfrogs live in the eastern United States, Canada, and Mexico. Ponds are the bullfrogs' habitat, as well as pools and creeks.



Life Cycle/ Life Span

Bullfrogs start as an egg on underwater vegetation, or plants. Then, they hatch into tadpoles. Next, they grow arms and legs and lose their tail. Soon, they are adult bullfrogs. American bullfrogs live 7 to 9 years.

Diet

Bullfrogs eat insects, minnows, young birds, small snakes, crayfish, and even other frogs.

Behavior

Bullfrogs jump from one lily pad to another. The male bullfrogs wrestle for a female. Whoever falls back doesn't get her. Bullfrogs croak very loud. They do this by puffing out their chest. Bullfrogs push down their food with their eyes. The bullfrog will hibernate during the cold weather by burying itself in the mud.

Predators

Bullfrogs have many predators like dogs, skunks, snakes, hawks, raccoons, and opossums. When the bullfrog is in water, its predators are fish, birds, otters, and mink.

Interesting Facts

- During the winter, the bullfrog's insides freeze. But in the spring, the ice melts, and the frog is back in action.
- Bullfrogs have the loudest croak out of all the different types of frogs.
- For bullfrogs, changing color can take up to 2 hours.

American Toad

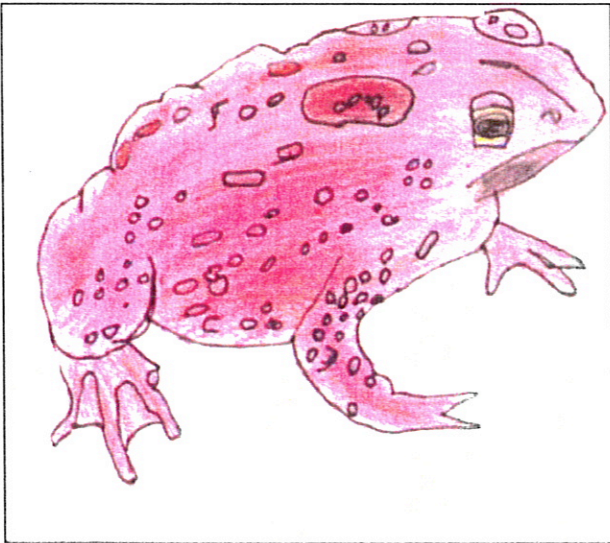
Bufo americanus

Description

The American Toad has brown, dry, rough, bumpy skin with a small tail. Toads have flatter bodies, darker, drier, and bumpier skin than frogs. The American Toad has short back legs. The American Toad has two lumps on the back of their head. These bumps, or glands, produce, or give off, a poison that can make people sick. The American Toad can grow to be 2 to 4 1/2 inches.

Habitat

The American Toad lives in a dry environment with land where it can burrow and dwell.



Life Cycle/ Life Span

The life cycle of a toad is egg, tadpole, grows back legs, grow front legs, lose their tail, become toadlets, and then become adults. In the wild, American toads probably don't survive more than a year or two. Some live for 10 years in the wild. One captive toad lived to be 36 years old and was killed by mistake.

Diet

The American Toad eats all types of insects such as flies, gnats, ants, and beetles.

Behavior

Toads are more active at night or on rainy days. Toads have a long, sticky tongue that they flip out and capture insect prey with. The American Toad can camouflage, or blend in, with their surroundings to hide from predators. The toad can sing longer than 20 seconds.

Predators

Predators to the toad are snakes and humans.

Interesting Facts

- Toads avoid, or stay out of, sunlight.
- There are 300 different kinds of toads.
- Toads are predators.
- **Toads are cold-blooded animals, which means their bodies are the same temperature as their surroundings.**

Belted Kingfisher

Ceryle alcyon

Description

The belted kingfisher's colors are gray, blue, and white. The difference between a male kingfisher and a female kingfisher is that a male kingfisher does not have a red chest band, whereas the female does. The kingfisher is a medium-sized bird with a large head, long bill, and a shaggy crest, or head feathers. It has a white belly, white spots by each eye, and white below its bill with a white and blue collar. Kingfishers grow to be 12 inches.

Habitat

Belted kingfishers are found around shorelines and wetlands in fresh and salt-water environments. They live near the water in burrows.



Life Cycle/Life Span

Female kingfishers lay between 5 to 8 eggs. It takes the eggs about 23 to 24 days to hatch. 23 days after hatching, a baby kingfisher can fly. 33 days after, they leave the nest and nature off. Belted kingfishers can live up to 15 years.

Diet

Kingfishers eat sunfish, insects such as dragonflies, water boatmen, and water striders; small muskrats, crayfish, and frogs.

Behavior

The belted kingfisher flies over its habitat looking for prey. Once it has spotted its prey, it dives in the water and opens its bill, seizing its prey. The belted kingfisher has a loud, rattling call. When flying, they fly with uneven wing beats.

Predators

The kingfisher's worst predator is the hawk. Other enemies are skunks, mink, raccoons, and snakes.

Interesting Facts

- The kingfisher beats its prey by hitting its prey around or hitting it against a rock.
- Kingfishers share their nest with swallows.
- A kingfisher has oil around its feathers so when it dives for its prey, it barely gets wet.

Bullhead Catfish

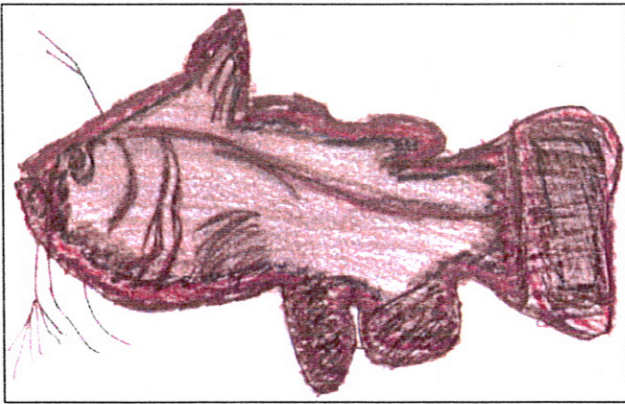
Ameiurus serracanthus

Description

Bullhead catfish are either black or brown with black spots on their back. Catfish have barbells on each side of their mouth, which look like the whiskers of a cat. Fish do not have scales. Bullhead catfish can grow to 12 inches and can weigh up to one pound.

Habitat

The habitat that catfish live in is fresh water. They can be found in ponds, rivers, and streams. Catfish can live in areas with little or no plant life.



Life Cycle/ Life Span

Females can lay between 3,000 and 50,000 eggs, depending on how big they are and how old they are. The eggs hatch in 4 to 10 days. Young begin swimming 3 to 4 days after hatching. Catfish can live for 10 or more years, however, few live more than 5 years.

Diet

Catfish eat smaller fish, crayfish, water bugs, worms, small mollusks, and other insects.

Behavior

Catfish may bite, which can be painful. They do this with their spine, which is located in front of their fins. Catfish love to eat at night. They hunt at the bottom of the pond using their barbells to sense, or tell, where food is.

Predators

Predators to the catfish are larger fish such as the chestnut lamprey and other types of catfish such as the flathead catfish.

Interesting Facts

- Most fish have scales, but catfish have smooth, leathery skin.
- This catfish can bite really hard.
- The bullhead catfish uses its feelers to find really small animals hiding in the mud.

Caddis fly

Varies

Description

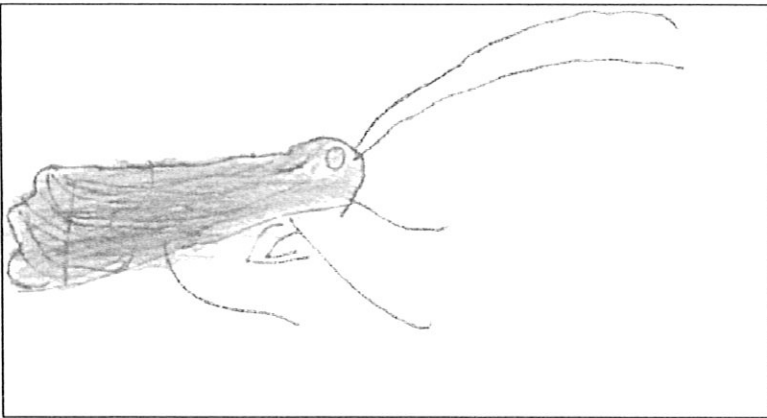
Some caddis flies are dull colored and some are bright colored. All caddis flies have long, hair-like antennae. When adult caddis flies are resting, their wings look like a tent. Adult caddis flies look like small moths with wings. Young caddis flies look like hairless caterpillars. Caddis flies are small, most are only ¼ inch or less.

Habitat

Caddis flies live in bodies of freshwater. Caddis flies live in streams, rivers, lakes, ponds, spring seeps, and temporary waters (vernal pools). The young caddis flies live underwater and the adult caddis flies live on land in damp woods and wetlands.

Life Cycle/ Life Span

Females lay eggs on the edge of the water. They do this by dipping their abdomen into the surface of the water. The eggs become larvae. The larvae go through 4 stages in the water, and become pupa. After the pupa stage, the adults grow wings and fly out of the water. Adult caddis flies only live for about a month. They spend most of their time nesting and mating.



Diet

Caddis fly larvae eat algae and other aquatic plants. Some species feed on other insects. Some eat the larvae of other Caddis fly species, while others scrape algae from stones or plants, or shred leaves.

Behavior

The larva stage of the caddis fly is able to spin silk to use as a net to hide. Caddis flies make homes out of wood, pebbles, and sand. Caddis fly larvae are scavengers and hunt or look for their food. Adult caddis flies fly quickly from the water and are found near lights at night.

Predators

Predators to the caddis fly are sport fish like the trout and fishermen.

Interesting Facts

- When caddis flies are young, they make shelters, or cases, out of pebbles or twigs.
- Caddis fly larva is also known as a "worm".
- While still in their case, caddis fly adults have sharp mouthparts used for cutting through the case. Once they come out of the case, these mouthparts are not used.

Crayfish

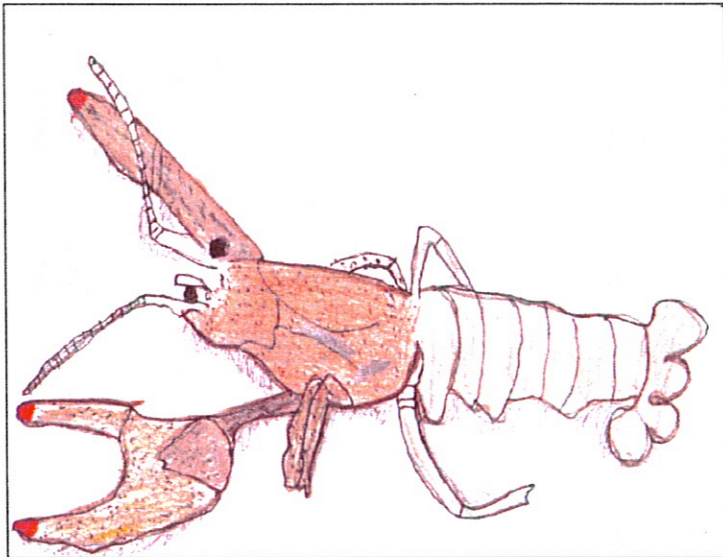
Cambarus speciosus

Description

Most crayfish are red while others can be green, brown, tan, or blue with black or orange markings. Their color changes depending on what they eat. Crayfish can grow to be 3 or 4 inches long.

Habitat

Nearly all crayfish live in freshwater ponds or streams. Some crayfish do live in salt water. Some crayfish live in or under rocks and mud.



Life Cycle/Life Span

A crayfish is born from an egg. Then it hatches and looks like a small adult. After that, it molts to a bigger crayfish. At last, it gets to be an adult. If it's a female, it will have kids. Crayfish usually live 2 to 3 years.

Diet

Crayfish eat lots of unusual things like: snails, insects, tadpoles, small fish, omnivorous fish, shrimp, meat, vegetables (frozen peas, boiled zucchini, carrots, etc.).

Behavior

Crayfish usually spend the day in their burrow or under a rock. At night, they hunt for food. If a crayfish loses its legs, new legs grow back.

Predators

Some things crayfish will watch out for are eels, trout, pikes, chub, perch, muskrats, leech, kingfishers, and people because they will eat the crayfish.

Interesting Facts

- Crayfish can also be called crawfish or crawdaddies.
- Crayfish have 10 legs, two of them are claws.
- Two other kinds of crayfish are the Western crayfish and the swamp crayfish.

Damselfly

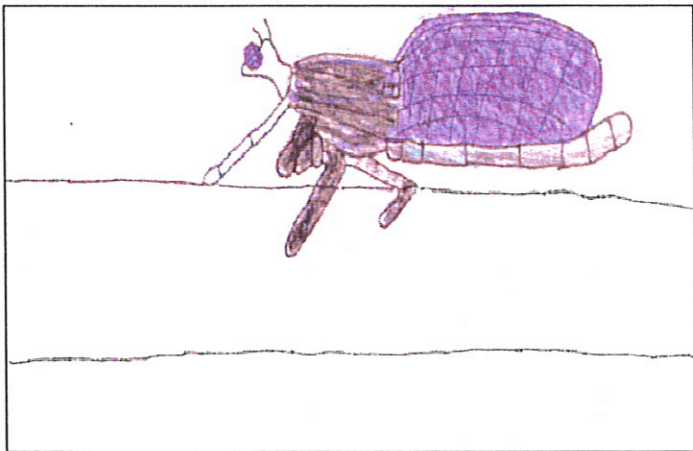
Argia

Description

Male damselflies are bright blue, while female damselflies are a dirty olive to brown color. Damselflies have clear wings, long, thin bodies, and bulging eyes. Some damselflies have black or red stripes on their wings. Damselflies look like walking sticks when they are getting ready to hatch and they are usually a darker color. The damselfly nymph gets up to 1 inch in size when ready to hatch into an adult. Damselflies will be different sizes depending on their age.

Habitat

Damselflies can be found around ponds and streams. Damselfly nymphs are hatched in clean, shallow water. They tend to stay in water where food is plentiful.



Life Cycle/ Life Span

Female damselflies lay their eggs on a soft plant beneath the water. Damselflies hatch from the eggs and begin their life at the bottom of the pond as nymphs. Damselflies go through 10 to 12 stages before emerging out of the water as adults in the summer or fall. Damselflies spend 1 to 3 years underwater and only 6 or 7 months as adults.

Diet

Damselflies eat pond plants, insects, and other arthropods that are found in the water. They also can be cannibals, eating each other.

Behavior

Damselflies use their back legs to capture their prey. They crawl or swim like fish. Sometimes the damselfly nymph will stop and remain motionless in the water or on the bottom of the pond. Damselflies migrate during the spring and fall. Damselflies will hibernate until the ice melts and then they migrate to find food.

Predators

Sunfish, spiders, robber flies, ducks, and trout are predators to the damselfly.

Interesting Facts

- Sometimes adult damselflies are mistaken as dragonflies.
- Damselflies are related to dragonflies.
- Damselflies can fold their wings behind their backs.

Dragonfly

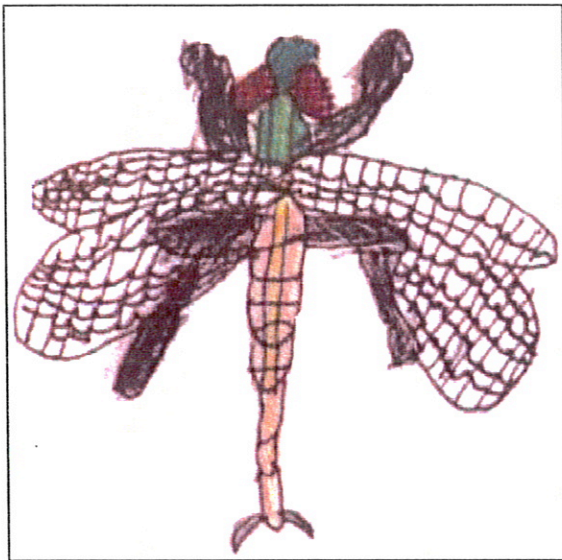
Hemianax

Description

Dragonflies have compound eyes that have 30,000 lenses. Some dragonflies are green while others are blue and black on the body. Dragonflies have 4 wings and can grow to be 3 or 4 inches long.

Habitat

Dragonflies live in several places like the pond, the rain forest, jungles, and sometimes fields.



Life Cycle/Life Span

The dragonflies' life cycle is larva, then splitting in half and being an adult. They do not go through a pupa stage. The life span of a dragonfly is 1 year to 3 years.

Diet

Dragonflies eat flies and gnats. They also eat tadpoles, small fish, and damselflies. Their most favorite snack to eat are mosquitoes.

Behavior

Dragonflies hunt prey, eat fruit, and go around looking for other things to eat. When dragonflies fly they can go as fast as 30 miles per hour. When ready to hatch, the larva will climb onto the stem of a plant, using its hooked feet, and hang out in the sun until it comes out of the water as an adult. Once it is out of the water, it waits for its wings to dry.

Predators

The predators to a dragonfly are the kingfisher and muskrats.

Interesting Facts

- Dragonflies catch their prey in mid-air.
- They can travel for more than 9 hours.
- Dragonflies have sharp hair to keep warm and be protected.

Giant Water Bug

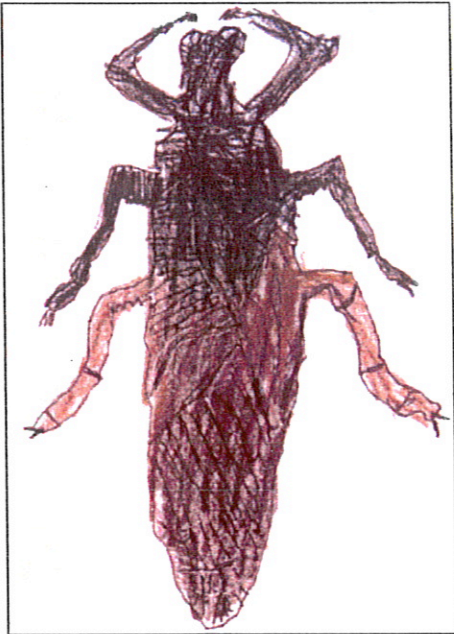
Lethocerus americanus

Description

The giant water bug is a dark brown to black color. It has 6 legs. The giant water bug has detailed patterns, or designs, on their back and wings. This huge insect grows to be 2 or more inches long.

Habitat

The giant water bug lives among plants at the bottom of the pond. They can be seen flying around lights at night.



Life Cycle/ Life Span

The giant water bug goes through simple metamorphosis. It begins as an egg, then a wingless nymph, and lastly, molting adult stages. Females lay eggs on pond plants or on the backs of male giant water bugs. The female can lay up to 100 eggs at a time, which are carried by some male giant water bugs for 10 or more days. The giant water bug lives for 1 or more years.

Diet

Giant water bugs eat small fish, tadpoles, snails, insects, and other invertebrates. The giant water bug is a great hunter, attacking and eating animals 3 times larger than itself, such as frogs and very young ducks.

Behavior

Giant water bugs do not have gills so they must come to the surface to get air. They breathe through the tip of their abdomen. Giant water bugs leave the water and fly about. They fly to areas where there are large lights. They catch their prey with their large, powerful legs, and then inject them with a toxin, or chemical, to kill them. These bugs swim very fast, so it's hard to see one in the water. When captured by a predator they often "play dead" and give off a fluid.

Predators

Although giant water bugs are predators, they are eaten by fish, larger insects, and spiders. Even humans are predators to this insect.

Interesting Facts

- Giant water bugs lay underneath things.
- Giant water bugs are attracted to light.
- The giant water bug is cooked in China and considered to be a delicacy, or fine meal.

Leech

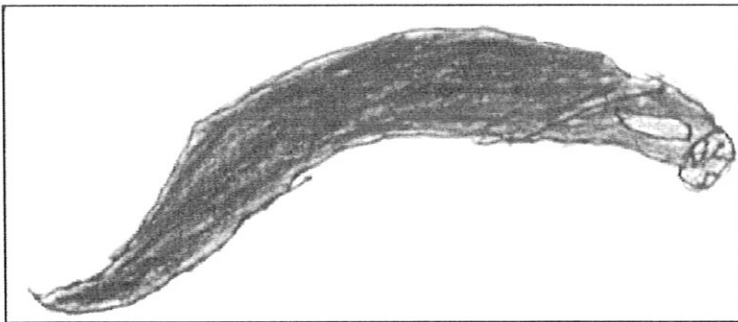
Erobdella octoculata

Description

The leech is a black, flat, segmented worm with well-developed jaws. The leech is a blood-sucking animal. Leeches are graceful swimmers. Leeches' bodies have 34 segments, or parts.

Habitat

A leech's habitat is calm, shallow, warm, fresh water in which the bottom is covered with debris, or rocks, gravel, and sand. The leech burrows into the mud at the bottom of the water.



Life Cycle/Life Span

The leech starts its life as an egg, then it becomes a cocoon, and then it becomes an adult. The leech can live for over a decade (10 years).

Diet

Leeches are carnivorous. They eat worms, snails, frogs, insect larvae, turtles, and crustaceans. They sometimes feed on blood of vertebrates such as amphibians, reptiles, fish, and mammals, including humans.

Behavior

The leech sucks vertebrates' blood using mucus and suction. The leech moves by "looping" and attaching the mouth sucker and the tail sucker to the surface of an object.

Predators

Leeches predators are crayfish and other blood-sucking leeches. Other predators include fish and aquatic insects.

Interesting Facts

- Some species, or kinds, of leeches will nurture their young, providing food, transport, and protection, which is unusual behavior in an invertebrate.
- Leeches attach themselves to a host, or organism, and remain there until they become full, at which point they fall off to digest.

Mayfly

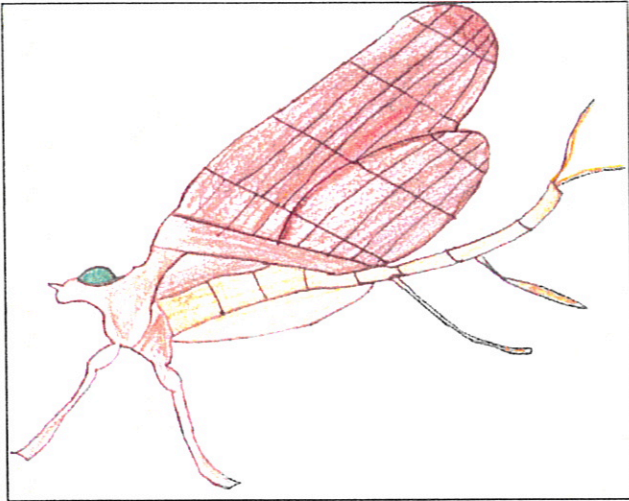
Hexagenia limbata

Description

Adult mayflies are pale yellow with brownish stripes and a very reddish-brown thorax. Mayflies have wings and are capable of flying. Mayflies have 3 tails. They grow up to ¼ inch to 1 inch.

Habitat

Mayflies mostly live in 3 different places: freshwater ponds, rivers, and in flowers on land as adults.



Life Cycle/Life Span

The lifecycle of the mayfly is egg, nymph, and adult. Female mayflies lay eggs on the water's surface. These eggs sink to the bottom and hatch into nymphs after a few days or months. When mature, nymphs swim to the surface or climb up plant stems or rocks where they break their nymph skin, wait for their wings to dry, and fly off. The shortest life span of a mayfly is 1 to 2 hours. The longest life span of a mayfly is 14 days.

Diet

Most mayfly nymphs are herbivores feeding on

algae and removing plant material from the rocks.

Behavior

In most species the female lays her eggs a few at a time by dipping her abdomen into the water's surface. She can lay between 500 to 8,000 eggs. Once the mayfly has reached the adult stage they do not eat anything, nor do they crawl or walk. All they do is fly and mate. Female mayflies will fall to the water and float after mating. Dead mayflies will pile up and give off a really bad fish-like smell. Mayflies are attracted to bright lights and may be seen flying around them at night.

Predators

The predators of a mayfly are fish, dragonfly nymphs, and birds.

Interesting Facts

- When a mayfly first hatches it is less than 1 millimeter long.
- People who live where mayflies swarm usually end up with seasonal hay fever and serious asthma.
- **By Lake Erie mayflies have caused traffic accidents since large swarms are crushed by cars and cause the roads to be slippery.**

Minnow

Pimephales notatus

Description

Most species of minnows are dully colored, olive to brown on the upper body and silvery-white on the lower body with a dark stripe; however, some are red, yellow, or green. The females are lighter in color than the males. Minnows have very soft fins. Unlike humans, minnows' teeth are in their throat. Minnows have super hearing. They grow to be over 3 inches long.

Habitat

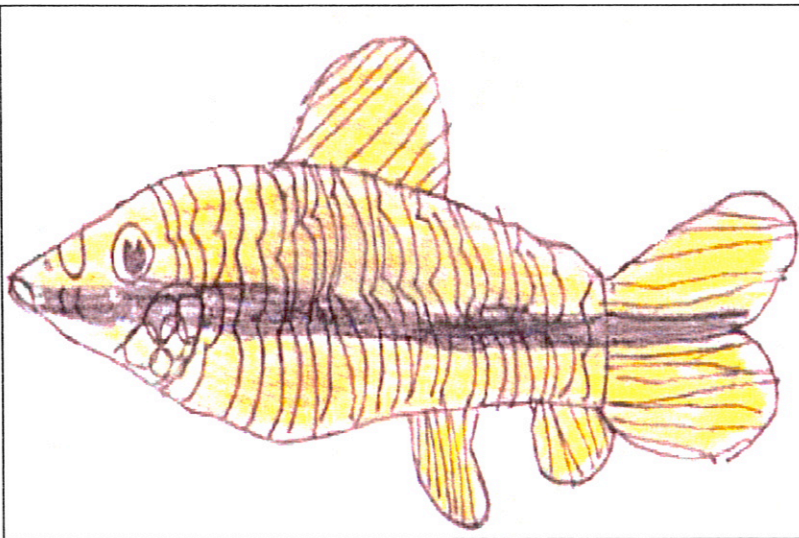
Minnows live in sluggish waters, ponds, or great lakes. Some minnows live in India, Columbia, and Colorado. Fathead minnows live in the pools of small creeks and are sometimes found in larger streams, ponds, and lakes. They stay near the shore or close to pondweeds.

Life Cycle/ Life Span

The minnow begins its life as an egg. Then, it becomes a larva, and next, a young fish. It later, grows into an adult minnow. Females lay up to 10,000 eggs. Males protect eggs from being eaten by other predators and minnows themselves. Eggs hatch in 4 to 10 days depending on water temperature. The minnow can live up to 2 years.

Diet

Adult minnows are omnivorous eating insects, algae, plankton, and mosquito larva.



Behavior

Male minnows will show female minnows where their eggs should be laid. The male circles around the female. Male minnows are very territorial. This means that they watch or guard their eggs very carefully. The males can be seen fanning the eggs with their fins. Minnows will hide from their predators in pond plants. They will also swim lower in the water when they spot a predator. Minnows live in groups called schools.

Predators

Predators to the minnow are larger fish such as the pike, largemouth bass, bluegill, and channel catfish.

Interesting Facts

- There are more than 2,000 species, or kinds, of minnows around the world.
- The fathead minnow got its name because of the shape of the male's head at certain times of the year.

Mosquito

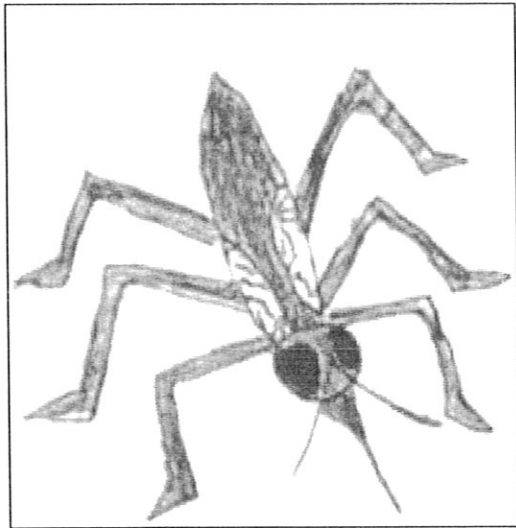
Culex quinque fasciatus

Description

Mosquitoes have hairy bodies. They are insects with six, long legs. They have compound eyes, which are eyes made up of many smaller eyes. They have blind spots on their eyes. Mosquitoes can carry a virus called HIV. Mosquitoes grow to about ¼ inch to ½ inch.

Habitat

Mosquitoes live in wetlands such as marshes and ponds. Tropical mosquitoes live in forests, jungles, and wooded areas. Some live in freezing, unheard of places such as the Arctic Circle. Their favorite habitats are marshes, ponds, and swamps. Mosquitoes live in hot and humid areas.



Life Cycle/Life Span

First, comes the egg stage in a mosquitoes' life cycle. Then, comes the wriggler stage. Then, the pupa stage, and finally, the adult mosquito. The male mosquitoes live up to 10 days. The female mosquitoes live up to 40 days.

Diet

Mosquitoes will drink blood. They feed on blood from humans, deer, cow, chickens, and other animals. Male mosquitoes eat fruit.

Behavior

Female mosquitoes bite. Salt marsh mosquitoes can migrate from 75 to 100 miles. Mosquitoes can see their prey from 30 feet away. A mosquito can smell their prey from 20 to 35 meters away. A mosquito can fly 1 to 1 ½ miles per hour.

Predators

Predators to the mosquito would be animals such as newts, dragonflies, and frogs.

Interesting Facts

- Mosquitoes' wings can beat 500 times a second.
- When there's a full moon, mosquitoes' bites increase 500 times more.
- The mosquito population is about 2,700.
- Mosquitoes have trouble telling a person apart from another object.

Muskrat

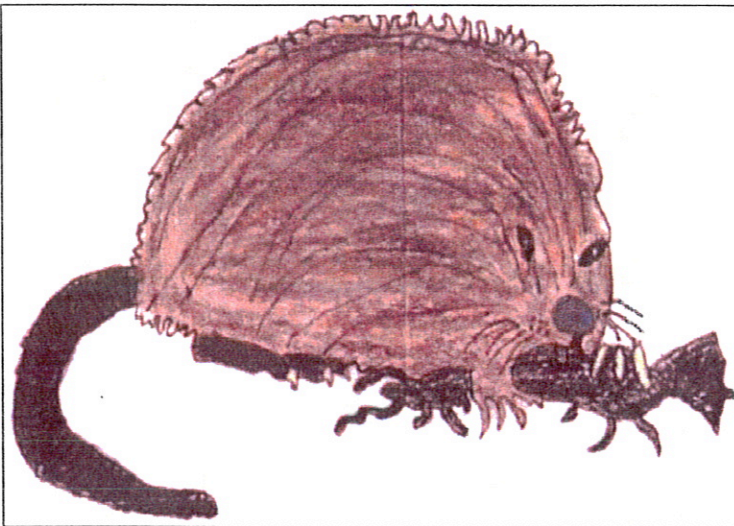
Ondatra zibethicus

Description

The muskrat has thick, brown fur and a skinny, scaly tail. A muskrat swims in the water to look for food. Muskrats are 10 to 14 inches long.

Habitat

The muskrat is found in North America. They live in wetlands, marshes, bogs, rivers, and streams. Muskrats like to live near water areas. A muskrat's home is called a lodge. They make their home out of branches, mud, cattails, and other plants.



Life Cycle/ Life Span

Muskrat babies are born with a year's time. They are called "kits". A mother may have from 2 to 4 litters of 2 to 4 babies each year, that's anywhere from 4 to 16 babies in one year. At birth, muskrats are as heavy as an egg and as long as a crayon. The baby muskrats crawl around and grow fur a week after being born. At 2 weeks, they've doubled in size and opened their eyes. At 3 weeks, they explore the world. They leave home after 6 weeks. The average lifespan of a muskrat is 3 to 4 years.

Diet

Muskrats eat cattail roots, clams, crayfish, frogs, fish, and dead animals. They will eat almost anything. They eat a lot; therefore, they're big-boned.

Behavior

Muskrats build their own homes by the water. They can swim underwater for 15 minutes. Muskrats have glands under their tails that give off musk to warn other muskrats to leave their territory alone.

Predators

The kingfisher, mink, foxes, coyotes, and lynx are all the muskrat's enemies.

Interesting Facts

- Muskrats love to swim near a pond.
- Muskrats can stay underwater for 15 minutes because their nostrils allow them to inhale oxygen from their exhaled breaths.
- Muskrats will sometimes kill their babies when there isn't enough food.
- So many babies are needed because of the great number of predators that feed on muskrats.

Pond Mussel

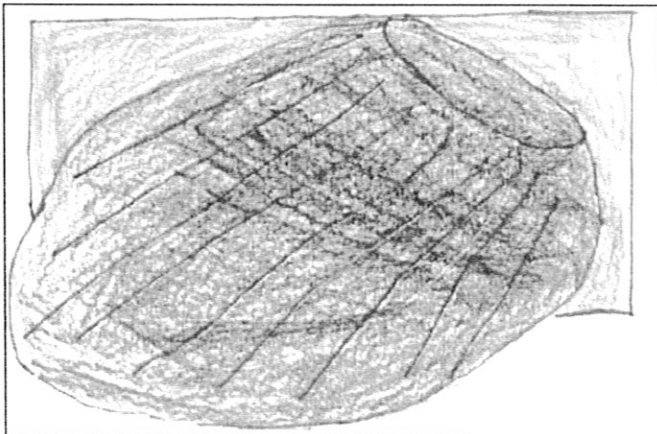
Ligumia subrostrata

Description

Freshwater mussels live in shells. They are sometimes called two-shelled, or bivalves. The shells pretend they are a house and they protect the mussel. The mussel itself is soft, mushy, and wet. As the mussel grows, the shell grows with it so it doesn't have to find a new home. Mussels can either have smooth or bumpy shells. Pond mussels can grow to be between 3 and 6 inches wide.

Habitat

Mussels live in places like small creeks or ponds. Freshwater mussels that have smooth shells live in muddy or sandy areas of streams, lakes, and ponds. The smooth shell makes it easier for the mussel to move through the mud or sand. Freshwater mussels that have bumpy shells live in gravel found at the bottom of fast moving streams. The bumps help the mussel stay still in the gravel.



Life Cycle/ Life Span

Freshwater mussels go through their larva stage, living on the fins, gills, and bodies of fish. Freshwater mussels normally live 3 to 5 years. An Eastern Pearshell Mussel lives more than 100 years.

Diet

Freshwater mussels eat small pieces of dead leaves called detritus, microorganisms, viruses, bacteria, and algae.

Behavior

Mussels feed and breathe by sucking in water, which has food, eating the food, and then getting rid of the water through tubes or filters called siphons. Mussels live in groups, attaching themselves to rocks using little threads. Mussels move slowly because of their muscular foot.

Predators

Freshwater mussels really don't have any predators that is why they have been known to clog water pipes and cause problems in ecosystems. At times a raccoon, river otter, or muskrat may be seen eating a mussel.

Interesting Facts

- Mussels can be eaten.
- Mussels have teeth around the outside of their shells.

Newt

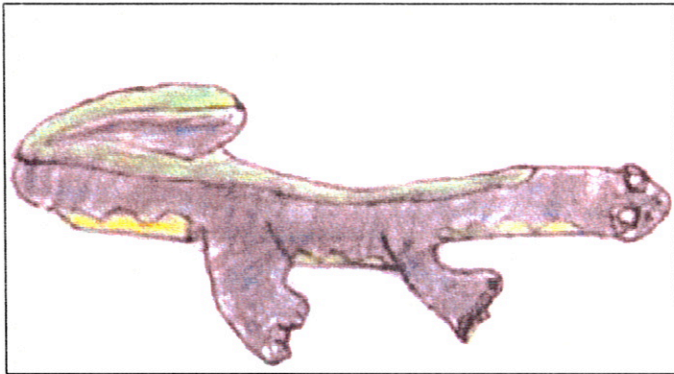
Triturus vulgaris

Description

Newts are brightly colored salamanders. Newts have four feet. They have five toes on each of their front and back feet. Newts are a green to brownish color on the top of their body, and yellow with dark spots on their belly. Many newts have red spots along their sides. Newts grow to be 3 to 4 inches.

Habitat

Newts can be found in North America, Europe, and Asia. They live in moist, wooded areas. Like all amphibians, newts spend their lives near water because they must return to the water to lay their eggs.



Life Cycle/ Life Span

Newt eggs are laid in the water. When they hatch, they breathe with gills and swim. As they get older, they have lungs for breathing air. Some newts leave the water at this time and are known as red eft. They are red-orange, but over 2 to 3 years, they turn green. Some newts do not go onto the land, but stay in the water. The average lifespan of the newt is 6 years. Some can live up to 20 years.

Diet

Newts eat insects, worms, snails, and small fish.

Behavior

When newts are babies, they live in water. When they become adults, they swim quickly and come up to the surface of the water to breathe air. Newts are able to grow back limbs (arms or legs), eyes, hearts, upper and lower jaws, spinal cords, and intestines if they are injured. Newts give off toxins, or chemicals, to protect themselves from predators.

Predators

Predators to the newt are opossums, snakes, big fish, and owls.

Interesting Facts

- Witches in Macbeth used the eye of the newt in spells.
- There is a species of intelligent newts on an island.
- Some newts carry bacteria that makes people sick.

Painted Turtle

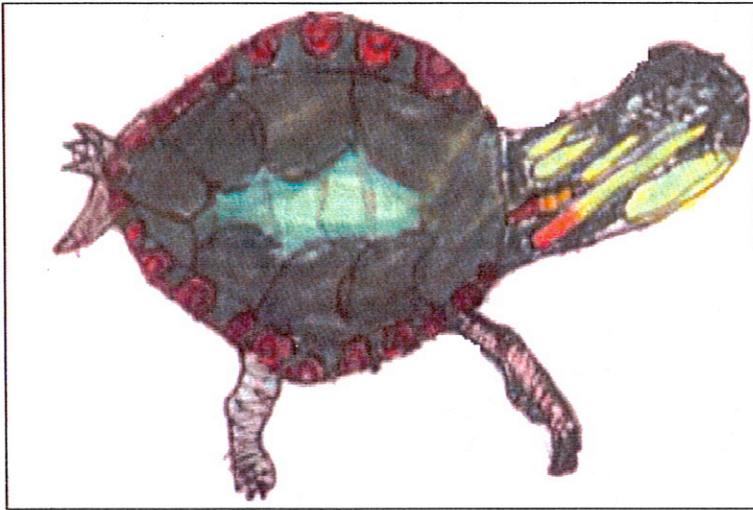
Chrysemys

Description

Painted turtles have red with yellow and green markings at the bottom of their shells. Their shells and bodies have a beautiful design, which is where they get their name. Adult painted turtles grow to be 3½ to 7 inches long.

Habitat

The painted turtle lives in North America. It is a water turtle that lives in ponds, lakes, marshes, and rivers that have soft, muddy bottoms.



Life Cycle/ Life Span

Female painted turtles lay 4 to 15 oval, soft-shelled eggs in a hole in the early summer. The young hatch, dig out of the hole, and live on their own right away. Painted turtles live for 20 to 30 years in the wild. However, in captivity, they can live for over 20 years.

Diet

Baby painted turtles are carnivorous. They eat crayfish, crickets, beetles, frogs, snails, insects, worms, leeches, and small fish. Adult painted turtles are omnivores. They eat duckweed, water lilies, algae, insects, tadpoles, and small fish.

Behavior

Painted turtles like to lie in the sun on rocks, fallen tree branches, or by the shore, but they spend most of their time in the water. They hibernate, or sleep, in mud during the winter. They can survive long winters because they can live for many months without breathing.

Predators

Enemies of painted turtles are seagulls, alligators, and people.

Interesting Facts

- The bottom of the painted turtle's shell has a pattern on it that looks like it was painted on.
- **Male painted turtles take longer to mature, or grow older, than female painted turtles.**

Red-Winged Blackbird

Agelaius phoeniceus

Description

Female and male red-winged blackbirds look very different. The adult male red-winged blackbird has black feathers with bright red and yellow patches on their wings. The adult female red-winged blackbird has brown and white feathers with streaks on their belly. Both have a sharp pointed beak. Red-winged blackbirds are usually 7.25 inches long.

Habitat

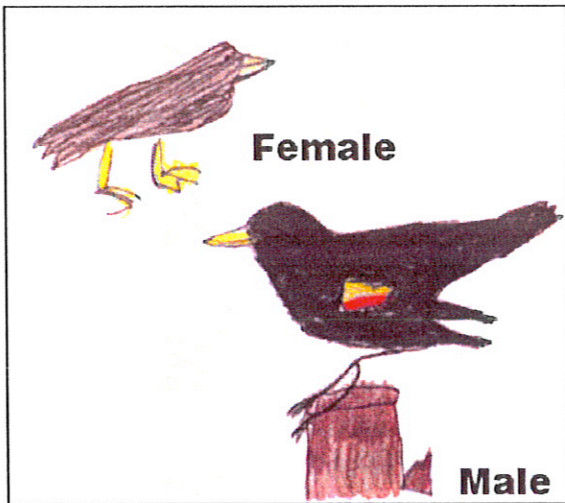
Red-winged blackbirds live in marsh habitats in the summer and open field habitats at other times of the year.

Life Cycle/ Life Span

The female red-winged blackbird sits on her eggs for 11 days, and then they hatch. The young birds grow into adult blackbirds. The average lifespan of the red-winged blackbird is a little over 2 years. The oldest bird lived for almost 16 years.

Diet

The red-winged blackbird feeds primarily on plant seeds, including weeds and waste grains. They also eat insects such as dragonflies, damselflies, other flies, beetles, butterflies, and moths, spiders, mollusks, blueberries, blackberries, and other small animals.



Behavior

Red-winged blackbirds sing a song that sounds like, "conk-a-ree". They often flock, or live, with other species of blackbirds. Some may travel 50 miles from the nest to find food.

Predators

Red-winged blackbirds often war with marsh wrens that share the same territories and food supply. Both species will eat each other's eggs. Other predators of blackbirds include raccoons, snakes, crows, owls, hawks, and red foxes.

Interesting Facts

- To break out of their egg the bird has a special egg tube at the end of its beak.
- Male red-winged blackbirds protect their territory, which may include up to 15 different females.
- Subspecies of red-winged blackbirds look very different because of the environments they live in.

Salamander

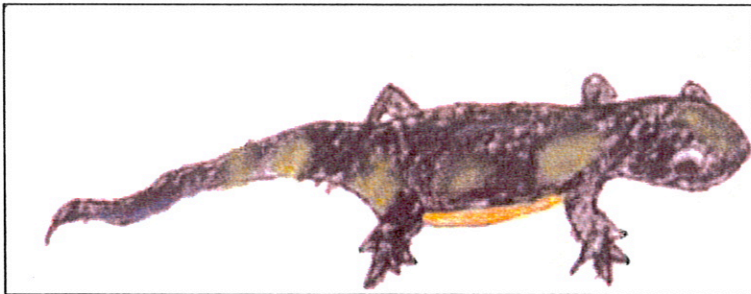
Ambystoma gracile

Description

Salamanders have slimy, damp, smooth skin, with no scales. Salamanders are cold-blooded organisms. Salamanders can be a dark brown or black color. They're kind of like lizards, but not exactly. The salamander's classification is the amphibian family. The size of a salamander is between 1-½ inches to 5 feet.

Habitat

Salamanders live in freshwater ponds and also on land.



Life Cycle/ Life Span

A salamander's life cycle starts with an egg. Next comes the new larva. Then comes the mature larva. Last comes the air-breathing adult. Salamanders can live up to 20 years.

Diet

A salamander consumes earthworms, slugs, spiders, and other insects. A large salamander feeds on small snakes, baby mice, and small frogs.

Behavior

When the salamander is looking for its food, it stalks it by moving slowly, and then grabs its prey with its jaw.

Predators

The salamander's predators are animals such as raccoons and opossums.

Interesting Facts

- The Pygmy salamander is measured as tiny as 1-½ inches from head to tail.
- The Giant salamander grows to be about 5 feet.
- In the 1500's an imaginary creature was created that was part salamander, part dragon.
- Salamanders are sensitive to pollution.

Pond Snail

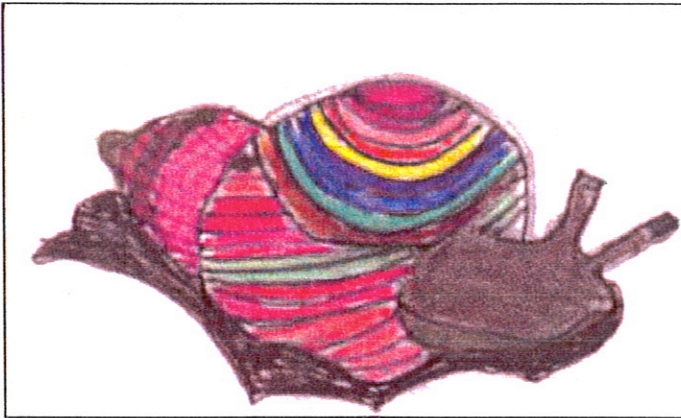
Austropeplea

Description

Pond snails have a nail-file tongue, a breathing hole, a foot that helps it move, eyes that are on the ends of their two, short, pointy, triangular tentacles, and their mobile home is their shell. Most pond snails are smaller than 2 centimeters. Some may grow to be 1 inch though.

Habitat

Pond snails live in shady, moist places like under logs, old boards, or in piles of dead leaves. They can be found in ponds, streams, lakes, and some slow moving rivers.



Life Cycle/ Life Span

Pond snails go through 3 stages in their life cycle. First they are an egg, then, they become a larva, and last, they grow into an adult snail. Pond snails can live for 5 to 7 years, or even 30 years.

Diet

Pond snails eat plants found in the water, flowers, fruit, roots, and vegetables.

Behavior

Pond snails are harmless. Adult pond snails breathe by floating to the surface and filling their 'lung' with air. Snails have male and female parts. On a slime thread, pond snails can crawl backside down from the surface of the water. Snails can be found sucking the rocks and gravel at the bottom of the pond. Snails have been known to reproduce at high levels, or have lots of babies and overcrowd an area.

Predators

Predators to the pond snail are lizards, beetles, crows, frogs, and a snail kite.

Interesting Facts

- Pond snails have both male and female parts.
- Snails are an endangered species.
- The coiling direction of a pond snail's shell is inherited, or passed down from another adult, parent snail.

Snapping Turtle

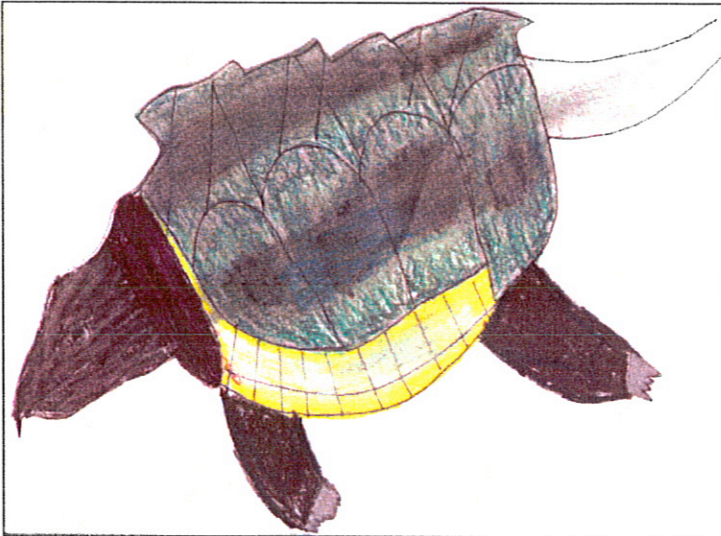
Chelydra serpentina

Description

Snapping turtles have different designs on their shells. The color of their shell may be brown, olive green, black, or tan. Their skin may be a gray, brown, yellow, tan, or black color. Some snapping turtles have long necks, a long tail, and webbed feet with five clawed toes. Male snapping turtles are larger than female snapping turtles. The snapping turtle has a hook on the end of its head. Snapping turtles can weigh up to 35 pounds. On the back of the female's leg is where she lays her eggs. Snapping turtles have no teeth. They grow to about 18 ½ inches long.

Habitat

Snapping turtles live in lakes, rivers, streams, canals, and marshes. They live in places that have fresh, slow-moving water and where there are lots of plants. Snapping turtles can be found in Canada, the United States, and in the Rocky Mountains.



Life Cycle/ Life Span

Female snapping turtles lay their eggs on land. The eggs hatch within 3 months. Once the eggs hatch, the hatchlings will hide and make their way to water. In the wild, snapping turtles can live for up to 40 years, captive turtles do not live as long.

Diet

Snapping turtles eat plants, tiny fish, and dead animals that they can find. They also eat other pond animals such as leeches, crayfish, earthworms, insects, frogs, toads, fiddler crabs, and snails. These animals are what they can capture.

Behavior

Snapping turtles are very aggressive. They are so fearless that they have been known to attack people. Snapping turtles are nocturnal animals. They bury themselves in the mud at the bottom of the water. They have no vocal cords so they can only make hissing or grunting sounds. Snapping turtles don't really bask in the sun on the rocks or on the shore. These turtles hibernate under logs or in a mud bank during the winter.

Predators

The enemies of snapping turtles are alligators, bears, coyotes, and humans. Hawks, herons, fish, snakes, alligators, and other turtles eat hatchlings, or baby snapping turtles.

Interesting Facts

- Turtles will strike anything that meets with them.
- Hatchlings, or baby snapping turtles, have an egg tooth to help them break out of their egg. This tooth falls off a few weeks after they hatch.
- Snapping turtles live where there are no enemies or predators to them.

Sunfish

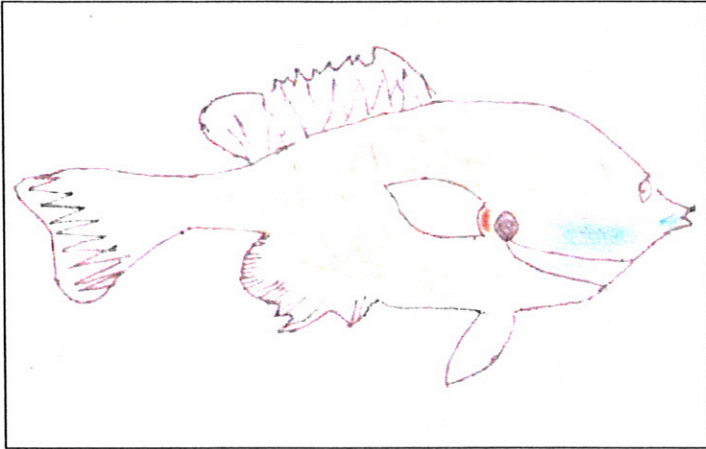
Lepomis macrochirus

Description

Sunfish can be green, blue, or brown colored. They are a small to medium-sized fish with a single bottom fin and two back fins. Their back fin usually has 10 spines. The sunfish can be between 4 and 12 inches long.

Habitat

Sunfish live in shallow, warm water. They will also live in areas with plants. Sunfish may also live in rocky, cool lakes, streams, and ponds.



Life Cycle/ Life Span

Sunfish begin spawning, or mating, when the water temperature reaches 70 degrees. Nests are created in shallow water where there is gravel. Fifty or more nests may be in one area, which is called a spawning bed. Males guard the nests until the eggs hatch and the young fish called fry, leave. Sunfish usually live for 5 years, but some live up to 13 years.

Diet

Young fish feed on plankton. Adult sunfish eat crayfish, small animals, insects, some

fish, and crustaceans.

Behavior

Male sunfish use their fins to build their nests. Female sunfish lay their eggs in bunches. Sunfish have been known to eat crayfish.

Predators

Predators to the sunfish include the large mouth bass, the kingfisher, and humans.

Interesting Facts

- There are 14 kinds of sunfish including the blue gill sunfish, the ocean sunfish, and the green sunfish.
- The largest bluegill sunfish was 4 pounds 12 ounces.
- Other common names for the bluegill sunfish are: Baldface, Blue Sunfish, Bluemouth Sunfish, Bream, Brim, Copperbelly, Copperhead, Coppernote Bream, Gill, Plumb Granny, Pumpkinseed, Pond Perch, Redbreasted Sunfish, Sunperch, and Yellowbelly.

Water Boatman

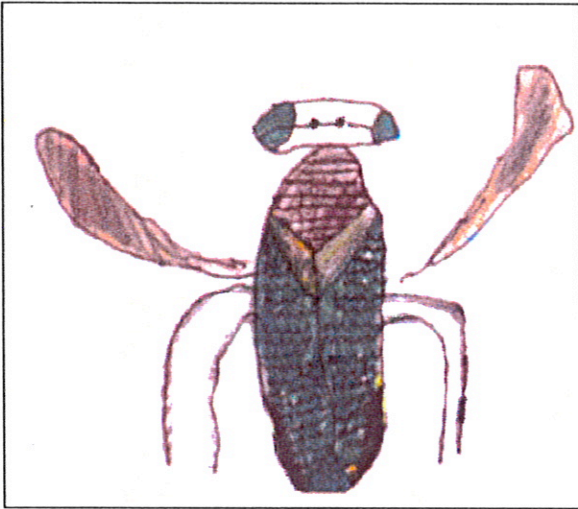
Sigara platensis

Description

The water boatman has a grayish, oval shaped body and a wide head with large eyes. The water boatman is a greenish, yellowish, brownish, and black color. Adults have short, flattened front legs, long, thin middle legs, and back legs with hairs that help them swim. It grows to about 0.13 to 0.5 inches long.

Habitat

The water boatman lives in fresh and salty water throughout the world. They also live in ponds or lakes. Water boatmen can also be found in birdbaths.



Life Cycle/ Life Span

Female water boatman attached their eggs to plant life. Their life cycle starts with an egg, they eggs hatch in 7 to 15 days and become nymphs, and then adult water boatmen. This cycle is 5 stages long and water boatmen have an incomplete metamorphosis, or change. Adults live up to 2 months.

Diet

Most water boatmen eat algae and small pond organisms. They also eat mosquito larvae. Also, called water bees, they can kill tadpoles and small fish as well.

Behavior

The water boatman does not have gills, they breathe air at the surface of the water. They carry an air bubble under their wings to get oxygen. The water boatman can swim fast, and like to hang out on plants. Males make a chirping sound to attract females. They do this by rubbing their legs against their head. The adults are very strong fliers.

Predators

Enemies of the water boatman are trout, newts, turtles, and birds such as hawks and ducks.

Interesting Facts

- Water boatmen are sometimes confused with backswimmers.
- Water boatmen eggs are used as food in Mexico and other parts of the world.
- There are over 100 species, or kinds, of water boatmen in North America.

Water Strider

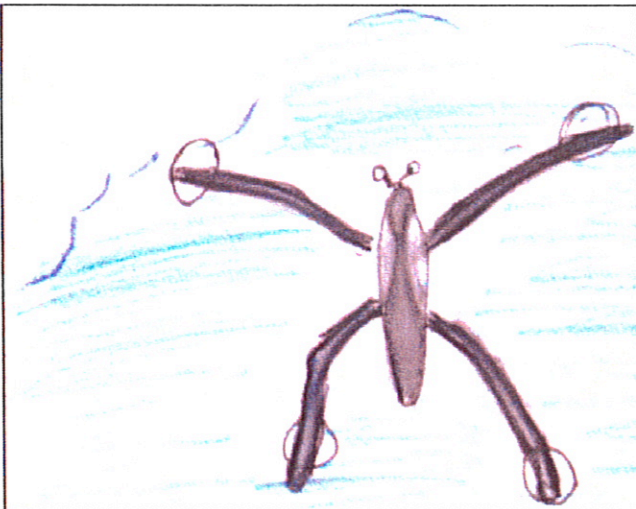
Gerris remigis

Description

Water striders are black or dull brown. A water strider has 6 legs on its body, the 2 front legs are short and the other 4 legs are long. The water strider has little hairs on its body and legs, which make it hard for this insect to get wet, allowing it to glide on water. It has a narrow body that only grows to about $\frac{1}{4}$ inch to $\frac{1}{2}$ inch.

Habitat

Water striders live in quiet waters in caves or protected ponds. If these habitats dry up, they live in the mud. They live in small streams or ditches too.



Life Cycle/ Life Span

The water strider lays rows of eggs throughout the spring and summer. The eggs are attached to floating objects in the water or just below the surface of the water. The water striders hatch from the eggs looking like small adults. They molt, or lose their skin, several times before becoming an adult. The lifespan of the water strider is not really known. However, some have been observed living for more than 1 year.

Diet

Water striders eat live or dead insects and other organisms that fall on the water.

Behavior

Water striders move in packs with other water striders. Water striders move around very quickly, never falling into the water or getting wet. Water striders use their front legs to catch their prey, their middle legs to push themselves in the water, and their back legs to steer themselves.

Predators

A lot of fish eat water striders. When a fish spots a water strider, the water strider runs.

Interesting Facts

- Water striders run quickly on water.
- Water striders float on the water and glide across it.
- Some water striders have wings and are able to fly.
- The water strider has short, front legs to help it grasp and eat its prey.

Whirligig Beetle

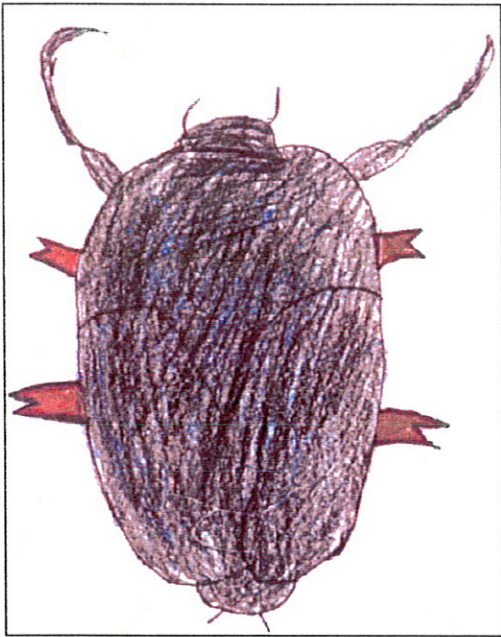
Dineutus australis

Description

The whirligig beetle has a hard, shiny black shell, 4 brown legs, 2 pinchers, 2 antennae, and eyes that are divided into 2 parts so they can see above and below the water. Whirligig beetles are yellowish brown on their sides and bottom. Their front legs are long and thin. The whirligig beetle is 1/8 to 1 3/8 inches long.

Habitat

Whirligig beetles live on the surface of ponds, lakes, and quiet streams.



Life Cycle/ Life Span

7 to 40 eggs are laid in the spring in small batches attached to underwater plant leaves. Larva hatches and in summer, climbs above water onto a plant. In a cocoon made of mud, the adult grows. Adults emerge, or come out, at the end of the summer and return to the water.

Diet

The larvae eat organisms found under the water. The adult beetle is a scavenger, which means it eats dead plants and insects that have fallen into the water.

Behavior

Whirligig beetles are the only beetles that can swim on the surface of the water. These beetles gather in large groups and swim in small, whirling circles. They use their back legs to catch prey. They use their antennae to know where their prey are. They can fly to a new home if they need to. These beetles can have a strong odor, or smell, when caught by a predator. They also give off a white goo, or slime, to escape being caught by a predator.

Predators

Predators to the whirligig beetle are fish such as bass and other insects.

Interesting Facts

- These beetles are able to beat their hind legs 60 times per second, which allows them to swim on top of the water.
- These beetles protect themselves by giving off a smell like apple seeds.
- Whirligig beetles can dive below the water's surface too.

Plant Life



Algae

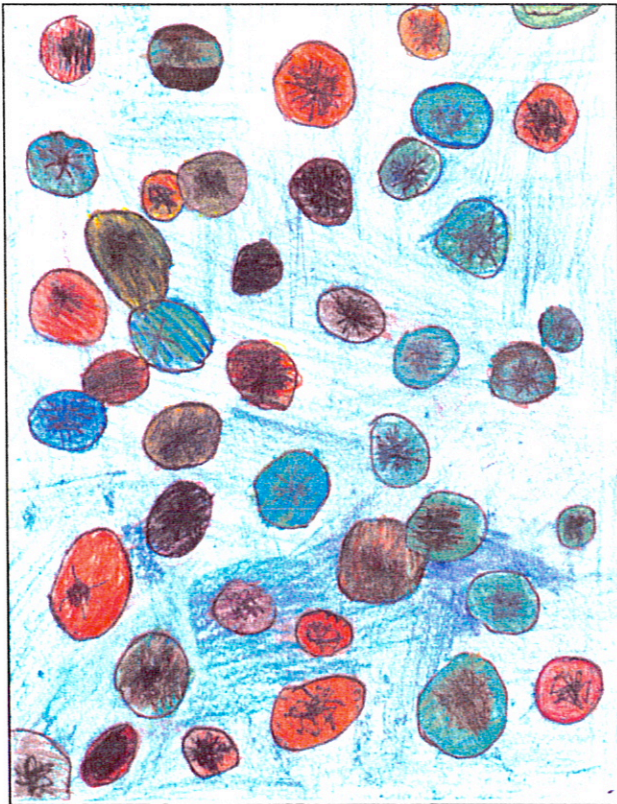
Cyanobacteria

Description

Algae are plants that can be seen through a microscope. Algae has chlorophyll. Algae can be green, red, blue, or brown. Pond algae is usually a light green color. It is so green that it makes the pond look like pea soup. There is also slime or smear algae, string algae, and yellow torn algae. There are some ponds that are completely covered with algae on their surface.

Habitat

Algae grows in freshwater in ponds and lakes. Algae lives in grass, beaches, and salt water. Algae forms groups called colonies. Each colony of algae has more than one hundred cells.



Diet

Algae is a plant so it makes its own food using sunlight. This is called photosynthesis.

Predators

Living things that eat algae are mussels, fish, snails, microorganisms, limpets, caddis fly larvae, mayfly nymphs, and tadpoles.

Interesting Facts

- Algae comes in different colors. There are brown, green film, and spot algae.
- Algae grows quickly and spreads across the whole top of the water.
- Algae may cause fish tank filters to clog. Water needs to be cleaned regularly when algae is living or growing in it.

Cattail

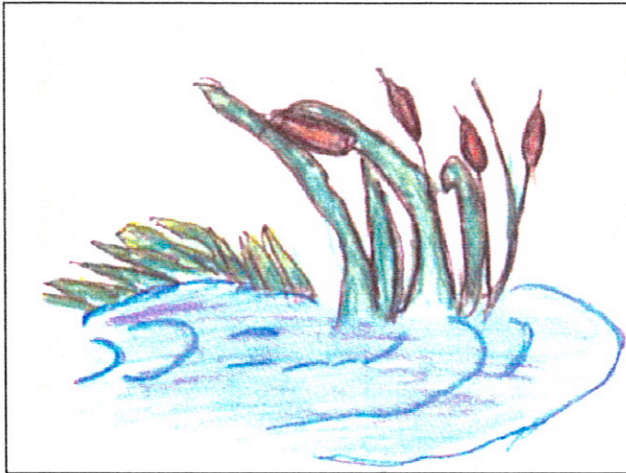
Typha latifolia

Description

Cattails are dark brown, thick, and furry. Cattails are oval shaped and fuzzy. They look like corn dogs on the end of a green or tan stem. Cattails grow on the top of stalks. The stalks of the cattail have sword-like, green pointed leaves. Cattails can grow to be 9 feet tall.

Habitat

Cattails grow in marshes, swamps, ditches, and still water. They can be found in fresh and salty water worldwide. Cattails grow in areas where there is tall grass. Finding them is a sure sign of water. There was one time where a man found cattails completely out of habitat, in a dry, sandy pine forest.



Diet

Cattails are plants. Therefore, they make their own food using the sun. This is called photosynthesis. Cattails store their own food during the fall, winter, and early spring. They also make seeds so new cattail plants can grow.

Flowering

Young shoots first appear in the spring. The young shoots have light green leaves that are pointed.

They look similar to other wetland plants. By late

spring, the leaves are nearly nine feet tall and a stalk begins to grow in between them. The new flower is hidden by these tall leaves. The cattail is a two-part flower- the male part is always on the top and is a white or yellow color and the brown female part, which makes the seeds, is always on the bottom. When the male flowers ripen, they produce golden pollen. The male part or top of the flower withers away, or falls off and disappears after the female part has been fertilized to make seeds. The brown female part, or bottom of the cattail stays connected to the rest of the plant until the seeds have matured and are scattered. The female parts turn white over the winter after the leaves die, and the cycle starts over.

Uses

The cattail's every part has uses. It's easy to pick or cut down, very tasty, and good for you. The American Indians found this plant and used it long ago. Settlers destroyed the habitats where cattails lived instead of using the cattails. Before the flower forms, the shoots can be peeled and eaten in salads. The jelly found between the young leaves was used by Native Americans to heal wounds, sores, and to soothe pain. Cattail leaves were used to make thatched roofs, baskets, dolls, and mats. Cattails improve water and soil quality.

Interesting Facts

- The cattail is one of the most important and common wild foods.
- Young cattail shoots look like other reeds found near the water.
- The plant is so old that it dates back to the time of the dinosaurs.
- **Archeologists have found cattail mats over 10,000 years old.**