the following books: find in a dipper refer to about things you may for further information
Water Scorpion

Water scorpions grow to 75 mm long and have front legs that are modified for grabbing prey. They use the two long breathing tubes coming from the end of the abdomen to reach up to the surface and get air. They eat insects and small fish. During mating season, the water scorpions leave the water and fly in search of a mate. They will occasionally mistake a parking lot or a black car for a pond, land on it and quickly die from the heat.
while the hind pair of legs is used for steering, used for pushing the water strider forward, are much longer. The remaining two pairs of legs form legs. The remaining two pairs of legs insects which they grasp with their two shorter up to 30 mm in length. They feed on small glide on the surface of the water. They grow glide on the surface of the water. They grow, also called "pond skaters."

Water Striders

30 mm

Tadpole

75 mm

change into a frog or toad.

Some tadpoles live up to two years before they change. Tadpoles eat mostly dead plants. They can be found in shallow ponds and grow up to 75 mm long and are green brown or brown or green brown. They

The tadpole is a young toad or frog. They
Mosquito Fish

Mosquito fish are also called Gambusia. They grow up to 50mm long. The male is much smaller than the female. Gambusia feed on small animals that are at or near the surface. Because they eat large numbers of mosquito larvae, they have been used throughout Florida for mosquito control.

Smaller Giant Water Bug

The smaller giant water bug can grow up to 25 mm in length. They eat insects, tadpoles and small fish. Giant water bugs grab prey with large front legs and inject a poison into the animal with their proboscis. This poison turns the animal's insides into a jelly, which the female smaller giant water bug glues her eggs on to the back of the male. He will carry the eggs on his back until they hatch. Giant water bugs can bite. Do not touch them.
Backswimmers

16 mm

Backswimmer then on the water surface, which are much longer on the forelegs, which are much longer on the difference between the two is by looking at the water with crustaceans. One method of telling small fish. These insects are often confused and mistaken for other insects; crustaceans and other aquatic insects can be identified by their size and shape. Backswimmers hold a supply of air on the underside of their body and beneath the wings. Their range between 5-16 mm in length, adults much longer than their middle legs. Their hind legs are and paddle-shaped legs. Their hind legs are Backswimmers have a boat-shaped body.
Water Boatmen

Water Boatmen get up to 11 mm long. They are found in a variety of aquatic habitats including running water, still pools and ponds, brackish and intertidal areas. They have a boat-shaped back and long hind legs modified for swimming. When underwater, the insect is usually surrounded in a silvery bubble. Water boatmen will float on the surface unless they hold on to a submerged object. Their diet varies considerably depending upon the species. Some feed on plants, others on decaying matter and some are active predators of small animals. Water Boatmen can be distinguished from backswimmers by the short modified forelegs and the short modified beak.

Waterfleas

Waterfleas usually measure up to 3 mm and are flattened side to side. They swim by using their enlarged second pair of antennae. This accounts for their "jerky" movement as they move through the water. Their body is enclosed in a thin transparent shell. The females can lay eggs every two to three days and can lay up to 13 billion eggs in a 60 day period. They eat algae, microscopic animals and organic matter.
water’s surface. While the other pair looks below the eyes, one pair looks above the surface of the water. The feature of this beetle is that it has two pairs of wings, the name whirligig beetle. One very unique behavior gives swimming around wildly. When swimming on the surface of the water, they are usually not seen, but they can be found by their tails. The remaining two pairs of legs are short and do not extend out past the body. They extend out past the body by 10 mm. These are small whirligig beetles, blackish, oval, and 10 mm long.

**Whirligig Beetles**

![Whirligig Beetle Image]

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**Seed Shrimp**

![Seed Shrimp Image]
Predaceous Diving Beetle

Predaceous diving beetles are common in most lakes and ponds. The larvae, often called water tigers, and the adults eat insects and other small water animals. The larvae are elongated ranging from 3-25 mm in length, with slender legs and usually strongly tapered at the end. The adults are good fliers and are often attracted to lights.

Copepods

Copepods are also called "waterhoppers", referring to their jerky movement through the water. They are usually less than 3 mm in length and can be found in a variety of fresh water habitats. Their body is somewhat pear-shaped and tapers down to a forked tail. They have six pairs of legs, the first of which is modified for feeding. Copepods eat microscopic organisms and any kind of decayed matter. Females can often be found with two pouches of eggs hanging from her sides. A common copepod is the "Cyclops", named for the single large eye in the middle of its head.
surface and get a new bubble. This air supply runs out, they swim to the air bubble with them under the water. When the air bubble is gone, they breathe by carrying an air bubble in their lungs. Water scavenger beetles range in size from 1 to 40 mm. They breathe by carrying an air bubble in their lungs. Water scavenger beetles range in size. There are many different kinds of beetles. Some feed on animals and some feed on dead animals which live in the water. Some feed on plants. Some feed on submerged debris. Some feed on plants and are often resting on plants. They are usually found in shallow water and are often resting on plants. They have seven pairs of legs. The first two pairs are modified for grasping. The other five pairs are used for movement. Some feed on decaying plants and animals. Others feed on plants. When mature, scuds are also called side-swimmers. These scuds also called side-swimmers.
The larvae of water beetles are active swimmers. They range in size from 1 mm to 60 mm. They eat insects and small fish in the water. Beetle larvae use a breathing tube similar to the mosquito larva’s siphon to get air at the surface of the water.

Fairy shrimp are found in small ponds and temporary pools. They are seldom more than 25 mm long. Fairy shrimp swim on their back using 11 pairs of leaf-like swimming legs. Their body is divided into a head and trunk and does not possess a carapace or shell.
These are held out to the sides when they are at rest. They have four large wings which are often called mosquito hawks because they eat other small animals. As adults, demoiselles are aquatic insects and dragonfly nymphs feed on aquatic insects and lower jaw helps them catch their food. Their bodies are fairly wide. A long dragonfly nymphs grow up to 75 mm.

**Dragonfly Nymph**

75 mm

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Freshwater Shrimp

**Freshwater Shrimp**

35 mm

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These animals are related to the shrimp we eat. They are generally 25-35 mm long and their body is usually clear. They are found in shallow water, living among the plants. They feed on dead and decaying pieces of plants and eat bacteria.
**Damselfly Nymph**

Damselfly nymphs grow up to 25 mm long and are either green or brown. They are often found in ponds or streams crawling on plants in search of food. They feed on small animals which live in the water. The three structures sticking out from the tip of the abdomen are gills, which they use to breathe.

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**Crayfish**

Crayfish live in freshwater ponds, lakes, ditches and streams. Crayfish are related to crabs, lobster and shrimp. They grow up to 125 mm long and have ten legs. They usually eat plants. However, they will eat other animals. During the dry season they hide in tunnels which they dig into the mud. Their tunnels are easy to find because crayfish use mudballs to build "chimneys" around the entrance hole.
Mayfly Nymph

Insects

Adult

Nymph

25 mm

It is an insect that undergoes metamorphosis.
Fly Larvae

A large variety of fly larvae can be found in aquatic environments. Two commonly found are the rat-tailed maggot, also called drone fly larva, and the soldier fly larva. The rat-tailed maggot lives in debris found on the bottom and may extend 70 mm when fully extended. They have a single breathing tube which resembles a tail. The soldier fly grows up to 50 mm. It is stiff and covered with a thick skin. They often appear lifeless. A third commonly found group are the horse fly and deer fly larvae. These reach a length of 25 mm, are tapered at both ends and have a series of fleshy rings which encircle the body.

Midges

Midge larvae and pupa can be found in almost all aquatic habitats. Adult midges resemble mosquitoes however they do not bite. The larvae are usually rounded and range from 2-20 mm in length. They are found in a variety of colors, including green, red, yellow and white. Red midge larvae are called "bloodworms". Most midge larvae live on the bottom and some build tubes to live in. The midge pupae are variable. Some live within cylindrical cocoons, while others resemble the pupae of mosquitoes. There are over 2,000 species in North America and are considered to be one most widely adapted of all the aquatic insects.
The pupae never eat. Mosquito larvae and pupae constantly on pieces of dead plants and animals. The pupae feed back called trumpets, The larvae feed across and breathe through two tubes on their tube called a siphon. The pupae are up to 6 mm grow to about 15 mm long and breathe through anywher there is standing water. The larvae Mosquito larvae and pupa can live.