

OXLEY NATURE CENTER



AQUATIC LIFE



THIS GUIDE WILL INTRODUCE YOU TO SOME OF THE MEMBERS OF THE WATER COMMUNITIES AT OXLEY NATURE CENTER. EXPLORE THE MARSH, COAL CREEK, OR LAKE SHERRY AND FIND WHAT PLANTS AND ANIMALS INHABIT THESE WATERS. WHAT ADAPTATIONS HAVE BEEN EVOLVED BY EACH MEMBER TO LIVE SUCCESSFULLY IN THIS PARTICULAR ENVIRONMENT?

Text: Eileen Docekal
Artwork: David Eames

Revised by: Donna Chapman



TULSA PARKS

Free Swimming Life :

WATER FLEA



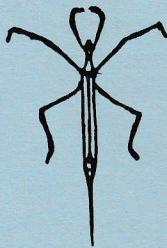
These tiny animals have their bodies compressed side to side, and a fringed, elongated second antennae to aid in swimming. Feed on detritus. They are important food for fish, insects, and wading birds.

DIVING BEETLE



Large, predaceous beetles that are long lived (about 5 years). They carry an air bubble at the tip of their abdomen for underwater respiration.

WATER SCORPION:



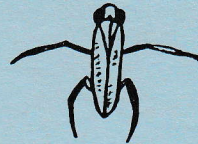
This brown, stick-like insect lurks in the mud or vegetation waiting to capture passing insects. Two long filaments at the abdomen interlock to form a respiratory tube for air intake at surface film.

BLOODWORM:



This small, red "worm" feeds on algae and detritus. The adults look like small mosquitoes but do not bite.

WATER BOATMAN:



Identified by oar-like arms that propel them through the water. Minute hairs on the ventral side capture air, creating a silver sheen called an air plastron. They feed on plant material.

WATER MITE:

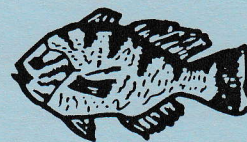


A small, bright red arachnid that is parasitic on insects and worms.

FISH:

There are five common types:

a. **Gar** - a large fish with a long "beak" armed with sharp teeth. Feeds on other fish captured by sudden dashes. Have a lung-like swim bladder that supplements oxygen intake when the supply is low (usually summer).



b. **Carp** - this relative of the goldfish has a single dorsal fin. Plows up the bottom when feeding on small plants and animals. This often causes heavy siltation

from which many plants and eggs of other fish die.

c. **Catfish** - scaleless fish with long barbels around their large mouths. Scavenges on the bottom and can live in low-oxygenated, muddy waters.

d. **Bluegill** - a small fish with 6-8 vertical dark-colored bars on the sides. This sunfish is often found in aquatic weeds feeding on insects.

e. **Mosquito Fish** - a small fish (1-4cm) that resembles a guppy. Lives near the top of the water and feeds on insect larvae.

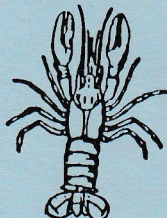
WATER SNAKE:



This non-poisonous snake is often confused with the cottonmouth. It is usually seen sunning on logs or branches over water. The body is dark with various cross patterns.

Bottom Dwellers:

CRAYFISH:



An omnivorous predator that is usually active at night. When alarmed will dart quickly backwards. Holes can be found with mud piled up on one side of opening. Sheds outside skeleton as size increases. Large claws in front aid in capturing prey.



FROGS AND TOADS:



Tadpoles are the immature or larval stage of frogs and toads. Their long, compressed tail is used for swimming. Spring is the best time for hearing the croaking of various frogs and toads. Two common ones are: a. **Chorus frogs** - sound like the noise made by running a fingernail along the teeth of a comb; b. **Leopard frogs** - sound like a low chuckle.

SNAIL:



Snails feed on algae and detritus. Gill snails seldom reside in polluted water, while lung snails can tolerate it. Tentacles are touch receptors. Eggs are found attached to objects in a clear, spherical jelly mass.

Aquatic Plants (Floating):

DUCKWEED:



This free-floating plant often forms a green blanket on the water surface. It reproduces by budding or fission. A favorite food of ducks, muskrats, and beavers.

Aquatic Plants (Emergent):

WATER DOCK:



The brown cluster at the branch bases identifies this upright water plant. The leaves are entire and flat or wavy on the margins. The seeds can be ground into a flour.

FLOATING PRIMROSE WILLOW:



Recognized by the yellow, 5-petal flowers and alternate leaves. The creeping/floating stems can be up to 10 feet long.

WATER PLANTAIN:



This tall perennial can be seen with its white flowers in July. The Indians dried and ate the submerged rhizomes.

CATTAIL:



A very tall plant on the edges of water. Has spike-topped stems as high as the leaves. Often used by red-winged blackbirds to nest in. A versatile edible plant, everything from the roots to the pollen can be prepared for eating.

Living in Vegetation



larva



adult

MAYFLY:

Recognized by gills on sides of abdomen, long, feathery, forked tail, (usually 2-forked), and legs with a single claw. Eats microscopic plant forms (diatoms). Adults do not eat and only live about one day to mate and lay eggs.



larva



adult

DRAGONFLY:

Voracious carnivores, these feed on insects and tadpoles. Swim by pulsating water out of the abdomen. Adults feed on insects caught in flight. Wings are held horizontally when at rest.



larva



adult

DAMSELFLY:

The small relative of the dragonfly, identified by 3-plate-like gills on tail. Preys on insects. They hold their wings parallel to their bodies at rest, and are slender. The dragonfly and damselfly belong to the oldest order of insects, Odonata (300 million years old).



larva



adult

STONEFLY:

Long antennae and a 2-forked tail identify this animal. Feeds on algae and plant debris. Larvae are important food for young fish. Not found in low-oxygenated water. Adults are shade-loving animals which do not feed.



larva



adult

CADDISFLY:

These underwater architects spin a silken tube onto which they embed sticks, stones, and other matter to form cases in which they live. Feeds on tiny plants and animals. Adults are primarily nocturnal.



larva

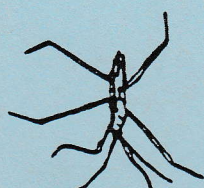


adult

MOSQUITO:

In order to breathe underwater (for up to 10 minutes at a time), larva project a respiratory tube and hang by hydrofuge hairs. They feed on algae and microorganisms. Recognized by the wiggling motion as they swim downwards. Only the adult females suck blood from their prey.

Found on Water's Surface

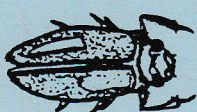


WATER STRIDER:

This pond skater has waxy hairs on the legs that are arranged to repel water and keep the insect afloat. Preys on small insects.



larva



adult

WHIRLIGIG BEETLE:

Has divided eyes to watch above and below the water's surface. Takes in a bubble of air at abdomen to breathe underwater. Eats insects found on surface film. Larvae are cannibalistic and prey upon bloodworms and insect nymphs by injecting poison into prey before eating.



WATER SPIDER:

Also called the Fish Spider, this predator is equipped with a large number of body hairs that help to distribute its weight on the water surface. The hairs also trap air, giving it a silvery appearance. Preys upon insects.