

COMMON NAME	CLASS	ORDER
<u>Dragonfly</u>	Insecta	Odonata
	<ul style="list-style-type: none"> -compound eyes overspread head -wings of adult held horizontally when at rest -female copulates with male in flight and spreads eggs over surface of pond -double-hinged lower lip shoots out to capture prey -nymph is an aquatic bottom dweller -some move through water using "jet propulsion" (water taken in through anal area is squirted out), others walk -when ready to change into an adult, the nymph climbs vegetation above waterline and skin splits down back 	
Food	<ul style="list-style-type: none"> -a voracious carnivore, it will eat mayfly, insect larva, small tadpoles and fish as a nymph -adults feed on mosquitoes and other flying insects which they catch in their legs which form a basket under their bodies 	
Eaten by	<ul style="list-style-type: none"> -larva eaten by amphibians, wading birds -large insects -adults eaten by birds, bats 	
<u>Caddisfly Larva</u>	Insecta	Trichoptera
	<ul style="list-style-type: none"> -adults mainly nocturnal, lay eggs on submerged vegetation -larva are wholly aquatic and often live in cases made of bits of vegetation or sand, particles -respire through gills and skin. Therefore, they keep water moving around themselves by undulating their bodies and waving abdominal hairs 	
Food	<ul style="list-style-type: none"> -mainly omnivores, eating diatoms, algae, small bits of plant material, small crustaceans, insects, and worms 	
Eaten by	<ul style="list-style-type: none"> -an important part of the diet for trout and other fish, also eaten by larva of predaceous diving beetle 	
<u>Leech</u>	Annelida	Hirudinia
	<ul style="list-style-type: none"> -dorso-centrally flattened, 35 body segments -anterior and posterior suckers -displays "inch worm" movement pattern, some swim in undulating fashion -many roll into ball when disturbed 	
Food	<ul style="list-style-type: none"> -snails, insect larva, crustaceans, worms, or are general scavengers *very few feed on warm blood* 	

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<u>Dobson Fly</u>	Insecta	Megaloptera
	<ul style="list-style-type: none"> -adults have stout mandibles -males mandibles are 3x length of head and used solely to hold female during mating. Females' mandibles are as long as head and sharply toothed - *Be Careful*! -eggs laid on vegetation, bridges, etc. over a stream or pond. -When larva hatch they fall into the water Larva-called <u>Hellgrammite</u> - mainly nocturnal, swims backwards as easily as forwards 	
Food	<ul style="list-style-type: none"> -EXTREMELY predaceous and cannibalistic for its 2-3 year larva stage Watch your fingers! -hunts on bottom 	
Eaten by	<ul style="list-style-type: none"> -are of great ecological importance as they are secondary consumers feeding upon small animals while serving as food for larger ones. Therefore "middle-men" in the food chain 	
<u>Mayfly</u>	Insecta	Ephemeroptera
	<ul style="list-style-type: none"> -gills along sides with marginal fringes to strain silt -three cerci -nymph stage lasts 1-4 years -sole purpose of adult phase is to reproduce -adults live several hours to several days, but do not eat, lay eggs in water 	
Food	<ul style="list-style-type: none"> -walk along bottom trash, debris, and silt eating diatoms, microscopic plant organisms, and tissue of higher plants 	
Eaten by	<ul style="list-style-type: none"> -dragonfly larva and adults, birds, caddisfly larva, snails, fish, beetles 	
<u>Damsefly</u>	Insecta	Odonata
	<ul style="list-style-type: none"> -more slender and delicately built than dragonfly, larva have 3 gills on tail -at rest wings adult's are parallel to body or tilted obliquely above body -double hinged lower lip shoots out to capture prey -eggs laid in submerged stems, logs, or mud 	
Food	<ul style="list-style-type: none"> -nymphs eat aquatic insects, crustaceans -adults mainly eat mosquitos and other flies captured "on the wing" 	

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<u>Mosquito</u>	Insecta	Culicidae
<ul style="list-style-type: none"> -newly hatched larvae feed for the first time -male mosquitoes (if at all) -eggs (if at all) -larva (larva) has thorax and moves like a fish, then float back to the surface (grubblers) -caudal breathing is projected through surface film -pupae (fig. 4) are active 		
Food	-feed on algae, microorganisms and bits of organic debris	
Eaten by	-most pond carnivores -the important to humans as carriers disease cannot be over-stressed (malaria, yellow fever, encephalitis, depending upon species and location)	
<u>Water Strider</u>	Insecta	Hemiptera
<ul style="list-style-type: none"> -live on surface film -gregarious (stays in groups) -eggs are laid just under water surface along vegetation or floating objects -last two pair of legs are 2 or 3 times as long as the body and spread far apart. -Tarsal claw is kept from breaking surface film tension and therefore only "dimples" surface 		
Food	-forelegs are raptorial for seizing any terrestrial insect which falls into water, or for catching small crustaceans and insects which ascend too close to water surface	
Eaten by	-fish and amphibians, as well as some carnivorous insects	
<u>Water Boatman</u> or <u>Corixidae</u>	Insecta	Hemiptera
<ul style="list-style-type: none"> -extremely common -hibernate in mud or debris of bottom -mouthparts are modified into a beak 		
Food	-the only bug which is not wholly predaceous, eats microscopic protista, mosquito larva, midge larva, green algae filaments, and plant debris which are brought to the mouth by broad scooplike front legs	
Eaten by	-fish and wading birds in large numbers -in Mexico they are raised, dried, and packaged for bird, fish and turtle food	

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<u>Springtail</u>	Insecta	Collembola
<ul style="list-style-type: none"> -a wingless insect less than 3mm long -lives on quiet waters' surface film, occasionally darting below surface -furcula on central side snaps in and out of collophore resulting in springing action -eggs laid in shore vegetation -no metamorphosis 		
Food	-decaying animal and vegetable material, occasionally living plant material	
Eaten by	-surface feeding animals	
<u>Phantom Midge</u> or <u>Chaoborus</u>	Diptera	Culicidae
<ul style="list-style-type: none"> -a non-biting relative of the mosquito. The adults probably do not feed at all as their sole purpose is to reproduce Larva-respire through body surface -hatch from eggs laid in water -are transparent -swim in short jerks, then drift 		
Food	-use prehensile antennae to catch small crustaceans such as Daphnia and insect larva	
Eaten by	-other pond insects, especially Damselfly nymphs and Dragonfly nymphs	
<u>Midge</u> or <u>Chironmid (Bloodworm)</u>	Insecta	Diptera
<ul style="list-style-type: none"> -adults swarm near lights and look like small mosquitoes, but do not suck blood -eggs laid on water surface, vegetation, or substratum -larva is white to red 2-30mm long, red colour due to oxygen carrying pigment called Erythrocrucorin 		
Food	-algae and other plants, organic detritus	
Eaten by	-insects, fish, and all aquatic carnivores. Therefore, of tremendous ecological importance	

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<u>Tubificoides</u> or <u>Sludger</u>	Arthropoda	Amphipoda
<ul style="list-style-type: none"> -red -pigment (hemoglobin) -a freshwater quiet water and in the bottom algae, diatoms miscellaneous organic substances -as it feeds it moves around in the water currents which oxygen (dissolved) is taken up by diffusion -can survive long periods of time 		
Food	eats dead algae, diatoms and other miscellaneous organic substances	
Eaten by	fish and predatory insects, amphibians	
<u>Water Mites</u>	Arachnid	Hydracarina
<ul style="list-style-type: none"> -four pair of legs, differ from spiders in that cephalothorax and abdomen are fused and unsegmented. This gives a globular shape -although spiracles are present, this truly aquatic order also breathes through body wall -an uncoordinated swimmer that sinks to the bottom if leg movement stops 		
Food	-carnivorous or parasitic on insects, worms, mosquitoes, fish gills	
Eaten by	-hydra, insects, fish	
<u>Fisher Spider</u>	Arachnid	Dolomedes
<ul style="list-style-type: none"> -four pair of long, six-segmented legs -not truly aquatic, but will run out on surface film of water and occasionally dives covered with a silvery coating of air trapped by hairs 		
Food	-mainly insectivore, but will capture small fish and tadpoles	
Eaten by	-birds, fish and frogs	

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<u>Cyclops</u>	Crustacea	Copepoda
<ul style="list-style-type: none"> -cylindrical in shape <2mm long -two large antennae used for swimming freely, also used to aid equilibrium and depth regulation -hind legs move backwards to produce a jerky motion -prominent single eye 		
Food	-organic debris, microorganisms, often parasitic on fish	
Eaten by	-fish, amphibians, insects, wading birds, also intermediary host of fish tapeworm which infest humans	
<u>Scud or Sideswimmer</u>	Crustacea	Amphipoda
<ul style="list-style-type: none"> -prefers clear, unpolluted water -no carapace, laterally compressed -"skitter" by flexing and extending entire body 		
Food	-omnivorous scavenger	
Eaten by	-fish, wading birds, amphibians and insects	
<u>Crayfish</u>	Crustacea	Decapoda
<ul style="list-style-type: none"> -decapoda = 10 legs -two pair of antennae, stalked eyes -head and thorax fused into a cephalothorax -breathe by means of gills beneath carapace (sometimes called "book lungs") -swim, walk, or climb slowly and with equal facility backwards, forwards, and sideways -move backwards rapidly by flicking their posterior -many species borrow in mud, the excavated earth being piled on surface to form a "chimney" -primarily nocturnal 		
Food	-omnivorous predator and scavenger	
Eaten by	-fish, wading birds, frogs, turtles, raccoons, mink, etc. -many algae and protozoa live on and under exoskeleton -host to lung fluke which is parasitic in humans and other carnivores	

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<u>Pouch Snail</u> <u>Orb Snail</u>	Mollusca	Gastropoda
	<ul style="list-style-type: none"> -have a single shell -respire using gills or "lungs" -creep about on vegetation and submerged surface using slime track excreted by their single foot -foot also contains portions of digestive tract, therefore, name of order: (gastro = intestine, pod = foot) 	
Food	-feed on algae, (filamentous and microscopic), dead plant and animal material	
Eaten by	-leeches, wading birds, ducks.	
<u>Fingernail Clam</u>	Mollusca	Pilicypoda
	<ul style="list-style-type: none"> -bivalve, the two valves are held together by an elastic ligament, hinge teeth and two large adductor muscles -move along bottom using a single foot which can protrude -uses two gills for breathing 	
Food	-microscopic plankton and organic debris	
Eaten by	-fish, raccoons, muskrats	
<u>Daphnia</u>	Crustacea	Cladocera
	<ul style="list-style-type: none"> -exoskeleton is a single folded piece gaping centrally, and not covering head -exoskeleton is transparent so it is possible to use a microscope to watch the heart beating -second antennae are long and used in rapid, jerking strokes to propel animal along an irregular course 	
Food	-algae, organic material in detritus, bacteria, protists.	
Eaten by	-hydra, insects, wading birds, fish	

