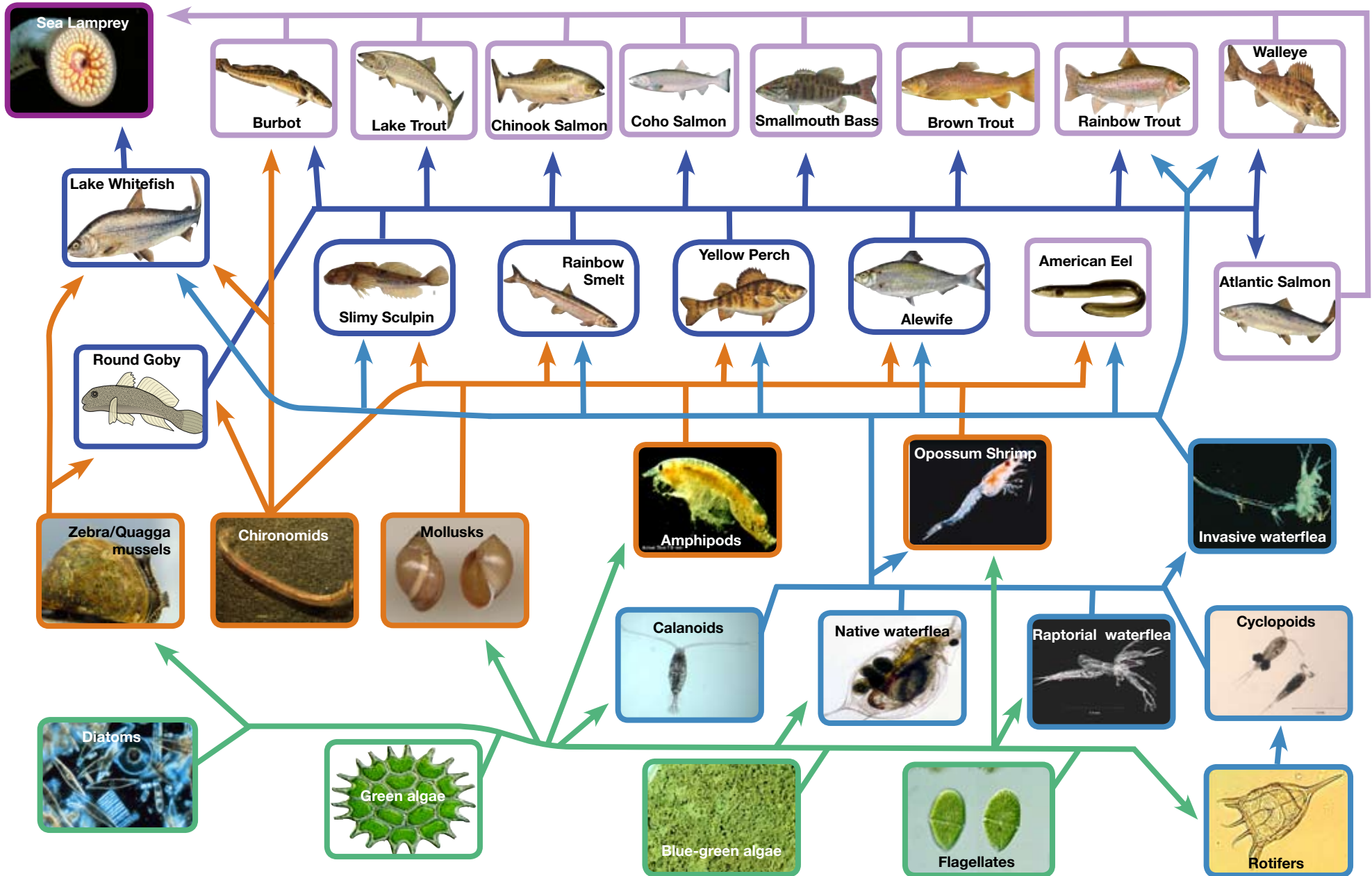




Lake Ontario Food Web



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Sea Lamprey



Sea lamprey (*Petromyzon marinus*). An aggressive, non-native parasite that fastens onto its prey and rasps out a hole with its rough tongue.

Piscivores (Fish Eaters)



Chinook salmon (*Oncorhynchus tshawytscha*). Pacific salmon species stocked as a trophy fish and to control alewife.



Coho salmon (*Oncorhynchus kisutch*). A Pacific species imported and stocked since 1966. Reproduce in many streams, but population sustained in hatcheries.



Atlantic salmon (*Salmo salar*). A valuable sport and commercial fish. More aggressive than other types of salmon and are likely to attack other fish.



American eel (*Anguilla rostrata*). The American eel is a catadromous fish; it lives most of its life in freshwater and migrates to the ocean to spawn.



Rainbow trout or Steelhead (*Oncorhynchus mykiss*). A lake strain of non-native rainbow trout, rarely found deeper than 35 feet. Supplemented by stocking.



Smallmouth bass (*Micropterus dolomieu*). Native coolwater species. Intolerant of pollution so is a good indicator of a healthy environment.



Brown trout (*Salmo trutta*). A European species introduced in the late 1880's. Mostly does well in slightly degraded habitats.



Lake trout (*Salvelinus namaycush*). Nearly eliminated by sea lampreys during the 1950s and 1960s. Stocking and lamprey control are resulting in its resurgence.



Walleye (*Stizostedion vitreum*). Carnivorous night feeders, eating fishes such as yellow perch and freshwater drum, insects, crayfish, snails, and mudpuppies.



Burbot (*Lota lota*). Elongated, cylindrical, freshwater codfish.

Forage Fish



Lake whitefish (*Coregonus clupeaformis*). Native found in cold waters. Bottom feeder—diets have shifted to include zebra and quagga mussels.



Yellow perch (*Perca flavescens*). Native that schools near shore, usually at depths less than 30 feet.



Slimy sculpin (*Cottus cognatus*). Native, nocturnal inhabitant of nearshore areas where it primarily eats invertebrates.



Rainbow Smelt (*Osmerus mordax*). Found in both coastal and offshore habitats. Light-sensitive, so prefer deeper, cooler waters during the warmer seasons.



Alewife (*Alosa pseudoharengus*). Atlantic species that invaded Lake Ontario in 1949 via the Welland canal.



Round goby (*Neogobius melanostomus*). Invasive, introduced into the Great Lakes via freighter ballast. Feeds on bivalves, including zebra mussels, crustaceans, insects, and small fishes.

122 species of fish, including at least 13 non-natives, make their homes in the waters of Lake Ontario. Seven species of native fish have been extirpated from Lake Ontario. This food web includes only the dominant species.

Macroinvertebrates



Chironomids/Oligochaetes. Larval insects and worms that live on the lake bottom. Feed on detritus. Species present are a good indicator of water quality.



Amphipods (*Diporeia*). The most common species of amphipod found in fish diets that began declining in the late 1990's.



Opossum shrimp (*Mysis relicta*). An omnivore that feeds on algae and small cladocerans. Migrates into the water column at night.



Mollusks. A mixture of native and non-native species of snails and clams are eaten by lake whitefish and other bottom feeding fish.



Zebra and quagga mussels (*Dreissena polymorpha* and *Dreissena bugensis*). Established in Lake Ontario in 1989 (zebra); 1990 (quagga). Filter-feeders that remove huge quantities of plankton.

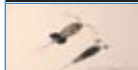
Zooplankton (Microscopic animals found in the water column)



Invasive Spiny waterfleas (*Bythotrephes longimanus*). Visual raptorial predator that can depress native waterflea populations.



Native Raptorial waterfleas (*Leptodora kindtii*). Slow moving and patchy distribution of small swarms at relatively low numbers.



Cyclopoid copepods (e.g., *Cyclops bicuspidatus*). Carnivorous copepods that feed on rotifers and other microzooplankton.



Native waterfleas (e.g., *Daphnia galeata*). Filter-feeding waterfleas that can be important for controlling phytoplankton.



Calanoid copepods (e.g., *Diatomus* spp.). Omnivores that feed on both phytoplankton and microzooplankton.



Rotifers. A diverse group of microzooplankton that, depending on species, feed on phytoplankton, detritus, or other microzooplankton.

Phytoplankton (Algae found in the water column)



Blue-green algae (aka Cyanobacteria). Often inedible and frequently toxic; blooms in late summer and can look like spilled paint on the water surface.



Green algae. Microscopic (single-celled) plants that form the main support of the summer food web. Also includes large nuisance species such as *Cladophora*.



Diatoms. Cold-loving microscopic (single celled) plants encased in silica shells that support the first wave of production in the spring.



Flagellates. Motile, single-celled plants or animals frequently found in high numbers. Most eat bacteria and so may help funnel bacterial products back into the food chain.