

# Creature Cards

Over 60 illustrated information cards featuring Great Lakes plants and animals



**Name:** Species' common and scientific names are provided.  
\*: Indicates that this card can be used in the activities Tangled Web and Web of Life.

**who?**  
*description*

A description of the species that includes type, physical characteristics and species status (endangered, invasive, etc.)

**Scale:** A scale conveys the relative size of the species. A darkened column indicates the species place in the size range. The sizes for each column are as follows:

- #1: less than .6 cm / .25 in
- #2: .6 cm / .25 in – 6.3 cm / 2.5 in
- #3: 6.6 cm / 2.6 in - 30 cm / 12 in
- #4: 31 cm / 12.1 in - 61 cm / 24 in
- #5: 63.5 cm / 25 in - 122 cm / 48 in
- #6: 123 cm / 48.5 in - 183 cm / 72 in
- #7: more than 183 cm / 72 in



**where?**  
*environment*

An explanation of the species' general environment and specific habitat

**what?**  
*characteristics*

Facts about the species role in the food web, reproduction and other distinguishing habits

**Interesting Fact** ★

*Characteristics that make this plant or animal unique*

## Creature Card Definitions

**Carnivore:** a flesh-eating animal

**Colony:** a population of plants or animals in a particular place that belong to one species

**Consumer:** a plant or animal that preys on other living things or eating particles of organic matter

**Crustacean:** any of a large class of mostly water-dwelling arthropods (as shrimps, wood lice, water fleas, and barnacles) having an exoskeleton of chitin

**Decomposer:** an organism that lives on and breaks down dead organisms

**Detritus:** particles of decaying organic material

**Diurnal:** active in the daytime

**Endangered species:** a species in immediate danger of extinction

**Flock:** a group of birds or mammals assembled together

**Forage fish:** fish that primarily eat phytoplankton and zooplankton (especially diporeia); they are prey for larger predators such as lake trout and whitefish; they include smaller fish such as herring, alewives, chubs, and smelt.

**Herbivore:** an animal that eats only plants

**Introduced species:** a plant or animal that is intentionally brought into an ecosystem by human beings either to diversify or to control a population within that ecosystem

**Invasive species:** a plant or animal that enters an ecosystem to which it is not native and competes with one or more species for food, shelter, and/or reproductive opportunities.

**Larva:** a young wingless, often wormlike, form (grub or caterpillar) that hatches from the egg of many insects

**Migrate:** to pass from one region or climate to another usually on a regular schedule for feeding or breeding

## Creature Card Definitions

**Mollusk:** any of the category (phylum: mollusca) of invertebrate animals (as snails, clams, and mussels) with a soft body lacking segments and usually enclosed in a shell

**Nocturnal:** active in the night

**Omnivore:** feeds on both animal and plant matter

**Phytoplankton:** very small, freely floating plant that drifts with water currents

**Plankton:** small water organisms that exist in a drifting, floating state; is the base of freshwater ecosystems, provides food for larger animals and indirectly for humans, whose fisheries depend on phytoplankton and zooplankton

**Predator:** an animal that lives by killing and eating other animals

**Prey:** an animal hunted or killed by another animal for food

**School:** group of fish that swim together; generally of the same species for protection, feeding and other reasons

**Sepals:** petal-like leaves of flowering plants that lie under and protect the petals, often green in color or share the same coloring as the petals

**Solitary:** growing or living alone; not forming part of a group or cluster

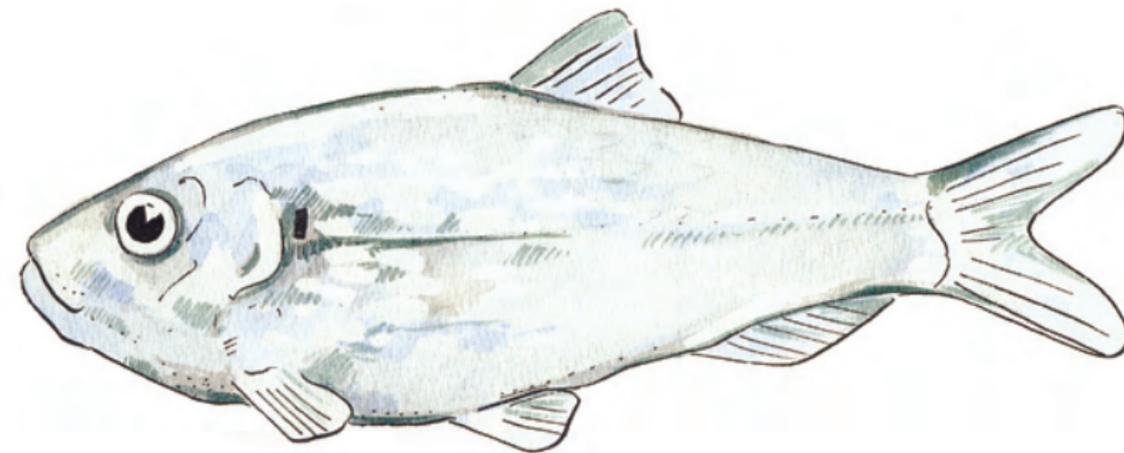
**Spawn:** to produce or deposit eggs

**Species of concern:** a plant or animal that may become threatened

**Threatened species:** a plant or animal needing special action to protect it from becoming endangered

**Toxin:** a substance produced by a living organism that is very poisonous

**Zooplankton:** very small floating or swimming animals that drift with water currents



# Alewife\*

Scientific Name:

*Alosa pseudoharengus*

## who? description

**Type:** fish

**Length:** 15 cm / 6 in

**Weight:** 113 g / .25 lbs

**Coloring:** silver with blue or blue green luster on back

⚠ **Invasive Species**

## where? environment

**Habitat:** lakes and oceans

**Origin:** Atlantic Ocean

## what? characteristics

**Feeding:**

➤ **Who eats me?**

lake trout, salmon

Ⓒ **What do I eat?**

phytoplankton,  
zooplankton and small  
crustaceans

**Role:** consumer, omnivore

**Reproduction:** lay eggs in  
summer in water, near the  
shore

**Grouping:** swim in schools

**Activity:** year-round



## Interesting Fact ★

*Alewives are usually a salt-water fish, but they spawn in freshwater. After laying their eggs, many die and wash up along the lake shoreline in the spring and summer.*

**Size:**





## Bald Eagle\*

Scientific Name:

*Haliaeetus leucocephalus*

### who? description

**Type:** bird

**Length:** 76-94 cm / 30-37 in

**Weight:** 7 kg / 15 lbs

**Coloring:** dark brown body, white head and tail

**Body Features:** yellow eyes, beak, and feet

### where? environment

**Habitat:** forested backdune, lakeshore and seacoast, nests in trees (especially conifers) or on cliffs near water; nests are 182 cm / 6 ft wide and 91 cm / 3 ft high

### what? characteristics

**Feeding:**

➤ **Who eats me?**

scavengers eat dead eagles

☪ **What do I eat?**

dead or wounded fish, aquatic birds, and mammals

**Role:** consumer, carnivore

**Reproduction:** 2 eggs in spring

**Grouping:** solitary or in pairs, live in groups in winter

**Activity:** diurnal

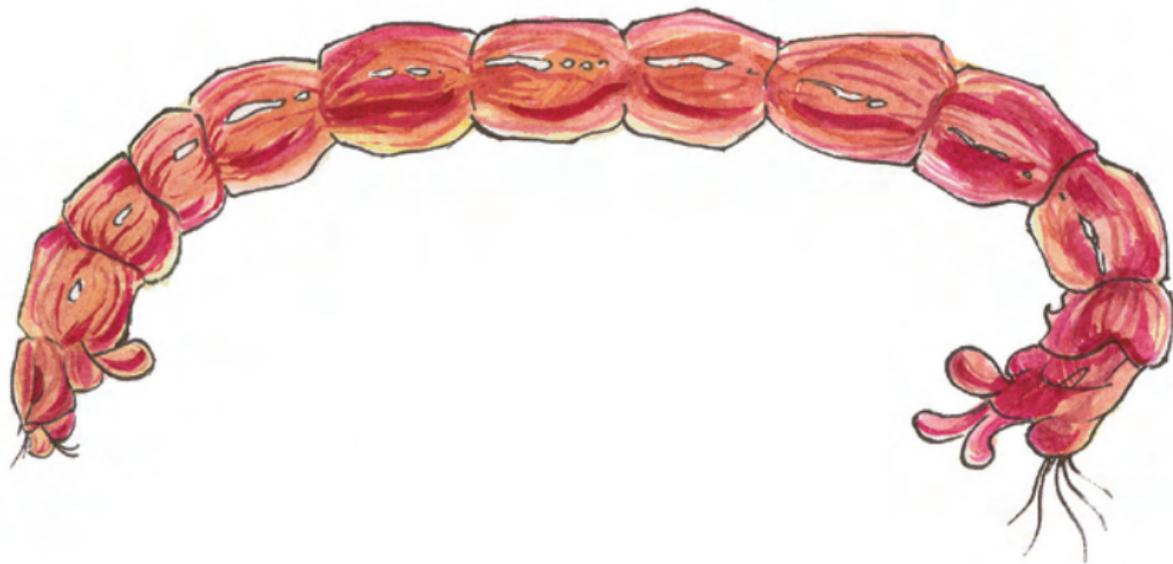


### Interesting Fact ★

Bald eagles can see 3 or 4 times as far as humans and eat one pound of fish in four minutes. They have a 182 cm / 6 ft wingspan!

**Size:**





# Bloodworm\*

Scientific Name:  
Family: Chronomidae

## who? description

**Type:** insect (in larval stage)

**Length:** 2.5-3.8 cm / 1-1.5 in

**Coloring:** red

**Body Features:** distinct head, segmented abdomen, prolegs (leg-like projections), and gills

## where? environment

**Habitat:** muddy, bottom areas of ponds, lakes and rivers; the worms build tubes of mud around themselves that are attached to objects in the water

## what? characteristics

**Feeding:**

↳ **Who eats me?**

fish, aquatic insects

↳ **What do I eat?**

phytoplankton, detritus

**Role:** consumer, omnivore

**Reproduction:** lay eggs as adults

**Grouping:** often found in groups

**Activity:** mainly nocturnal

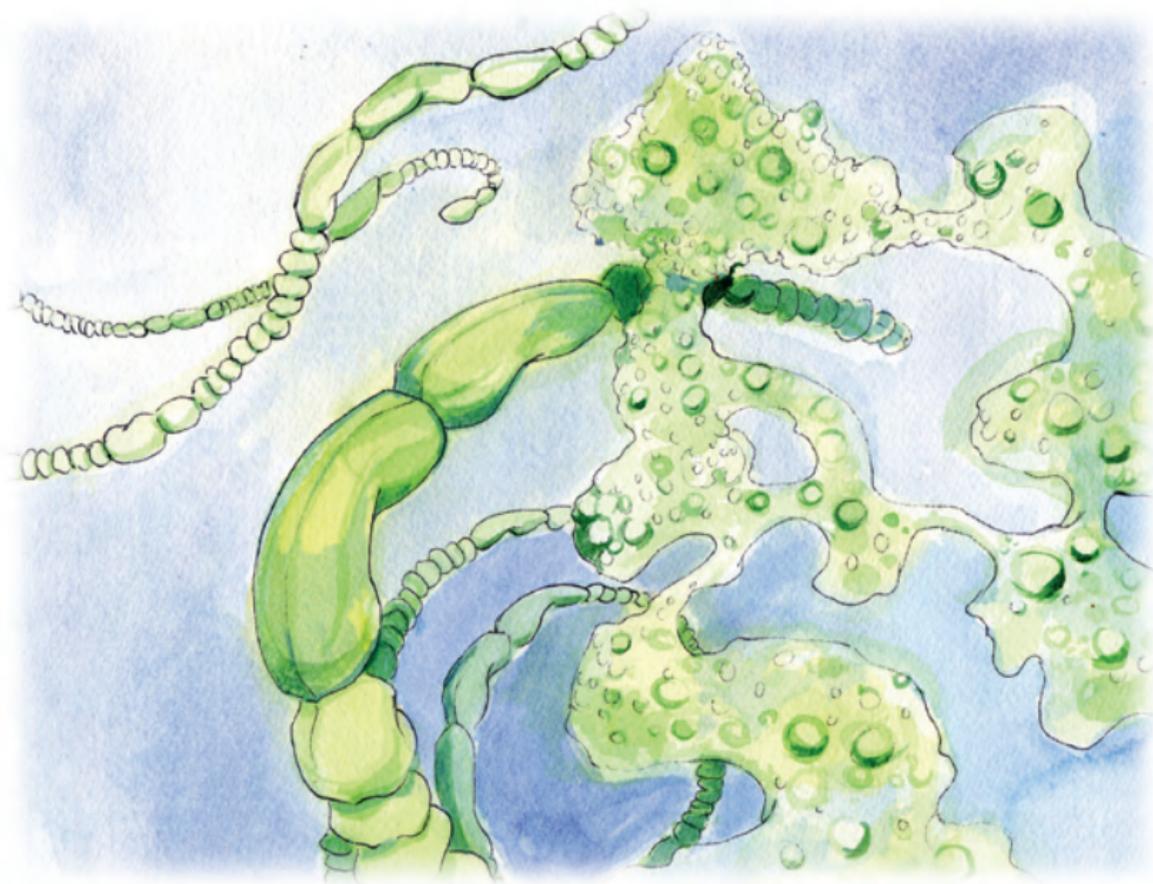


## Interesting Fact ★

A bloodworm is in the larval stage of its lifecycle. When it becomes an adult, it turns into a midge, an insect that looks like a mosquito. Freshwater bloodworms and humans both have hemoglobin which allows red blood cells to carry oxygen.

**Size:**





## Blue-Green Algae (cyanobacteria)\*

Scientific Name:  
Anabaena, Microcystis

### who? description

**Type:** bacteria

**Size:** microscopic

**Color:** some, but not all are blue-green; can be yellow-green, green, grey-green, grey-black, and even red

**Other:** microcystis colonies look like tiny grey-green clumps



ANABAENA



MICROCYSTIS

**Size:**



### where? environment

**Sunlight:** varies - direct and dim sunlight

**Habitat:** water; attach to surface of rocks, stones and plants in water, or on the bottom sediment of lakes

### what? characteristics

**Feeding:**

↳ **Who eats me?**

daphnia, copepod

↳ **What do I use to make food?**

sunlight

**Role:** producer

**Reproduction:** can grow individually as single cells or in colonies; when algae reproduces quickly it is called a "bloom"



### Interesting Fact ★

Blue-green algae movements can be seen under a microscope as they glide, rotate and jerk. Their fossils have been identified as over three billion years old!



## Canada Goose\*

Scientific Name:  
*Branta canadensis*

### who? description

**Type:** bird

**Length:** 63.5-114 cm / 25-45 in

**Weight:** 1-8 kg / 2-17 lbs

**Coloring:** black head and neck, white cheek patches, mottled grey-brown body

**Body Features:** brown webbed feet

### where? environment

**Habitat:** interdunal pond, freshwater lakes, wetlands, ponds; builds a nest on the ground, near water

### what? characteristics

**Feeding:**

➤ **Who eats me?**

coyotes eat geese; eggs are eaten by fox, raccoons and coyotes

Ⓒ **What do I eat?**

Plants and insects

**Role:** consumer, omnivore

**Reproduction:** lays 5-7 eggs

**Grouping:** pairs and flocks

**Activity:** diurnal, migrate south in the winter

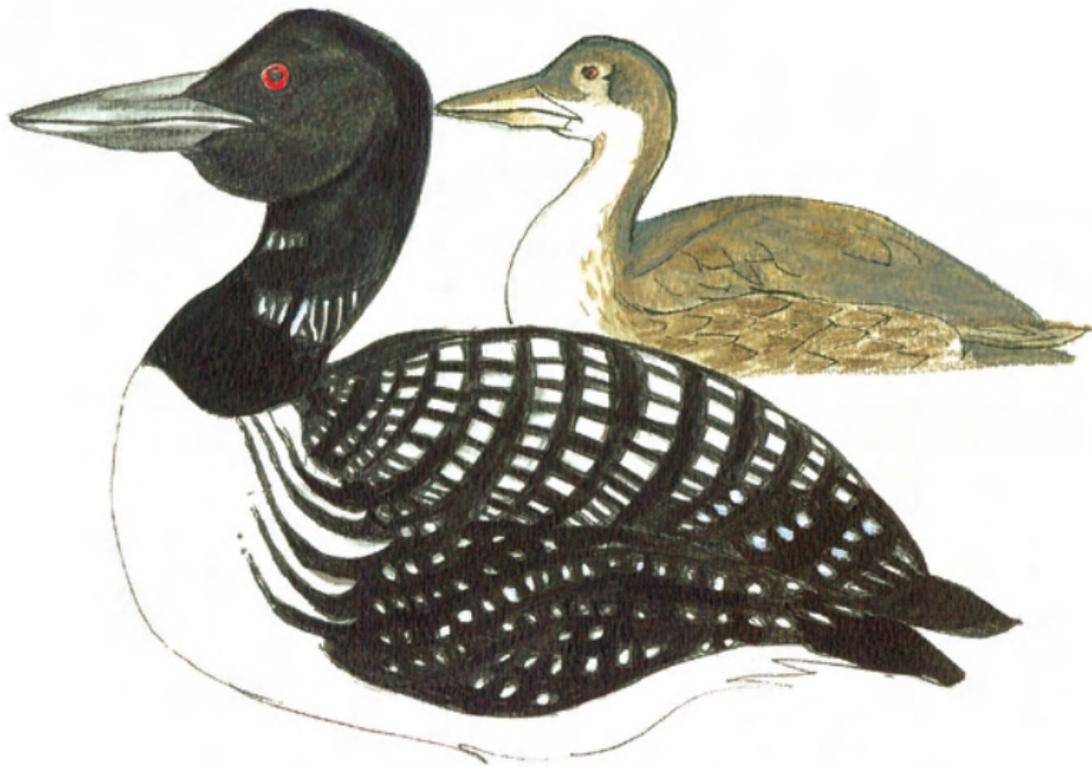


### Interesting Fact ★

Canada geese fly in a "V" formation during migration. They use their large, strong wings as weapons when protecting their young.

**Size:**





# Common Loon \*

Scientific Name:  
*Gavia immer*

## who? description

**Type:** bird  
**Length:** 91 cm / 3 ft  
**Weight:** 3-6 kg / 6-13 lbs  
**Coloring:** black and white checkered body, black head, white belly and underwing, white collar  
**Body Features:** large webbed feet



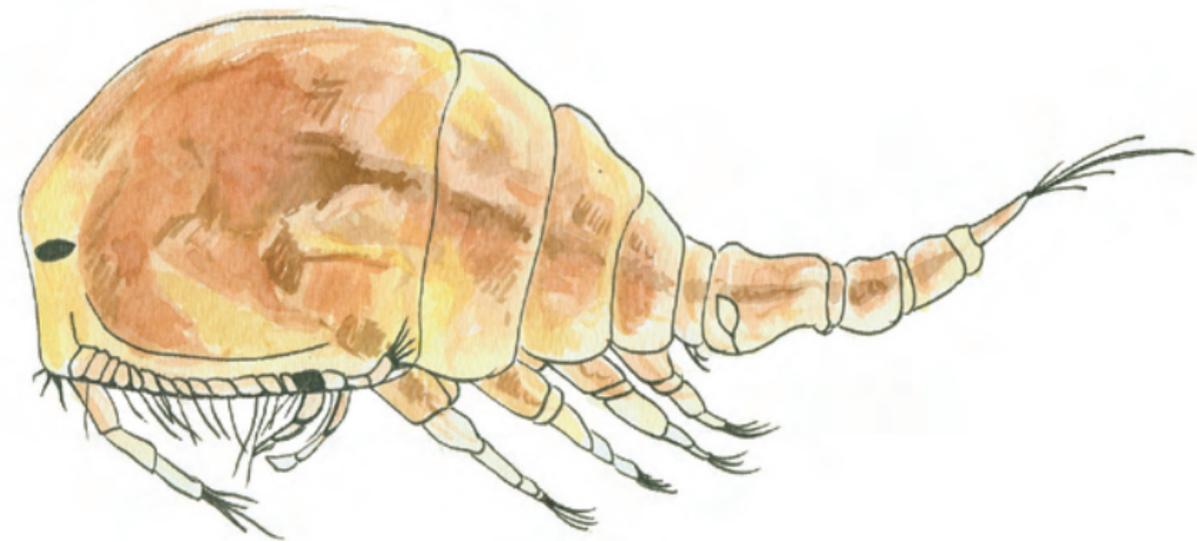
## where? environment

**Habitat:** freshwater lakes, sleep on deep water areas away from land; nest on small islands

**Interesting Fact** ★  
 Many bones of the loon's body are solid, rather than hollow like those of other birds. These heavy bones help loons dive for food.

## what? characteristics

**Feeding:**  
 ➤ **Who eats me?** large fish, snapping turtles, gulls, eagles, crows  
 ➤ **What do I eat?** fish, crayfish, frogs, snails, salamanders, leeches  
**Role:** consumer, carnivore  
**Reproduction:** 2 eggs in summer  
**Grouping:** pairs  
**Activity:** diurnal



## Copepod (cyclops)\*

Scientific Name:  
*Cyclops strenuus*

### who? description

**Type:** zooplankton, crustacean

**Length:** 2-3 mm / .08-.1 in

**Coloring:** clear, tan

**Body Features:** single eyespot  
and curved body

### where? environment

**Habitat:** quiet waters of ponds,  
lakes, and rivers

### what? characteristics

**Feeding:**

➤ **Who eats me?**

insects and small fish

Ⓒ **What do I eat?**

algae, bacteria, dead plant  
and animal matter

**Role:** consumer, omnivore

**Reproduction:** females carry  
twin egg sacs



### Interesting Fact ★

*Copepods are difficult for  
scientists to catch to study  
because they dart so quickly!  
It is sometimes called a  
cyclops because the single  
eyespot reminds people of  
the one-eyed monster in  
Greek mythology.*

**Size:**





# Daphnia\*

Scientific Name:  
*Daphnia pulex*

## who? description

**Type:** zooplankton, crustacean

**Length:** less than 3 mm / .1 in

**Coloring:** clear body tissue shows organs inside

**Body Features:** 5 pairs of legs used to capture food, large antennae are pushed downward for swimming

## where? environment

**Habitat:** near the surface of lakes, ponds, and quiet streams

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
fish

Ⓒ **What do I eat?**  
phytoplankton

**Role:** consumer, herbivore

**Reproduction:** lays eggs in lake bottom sand, young hatch in spring

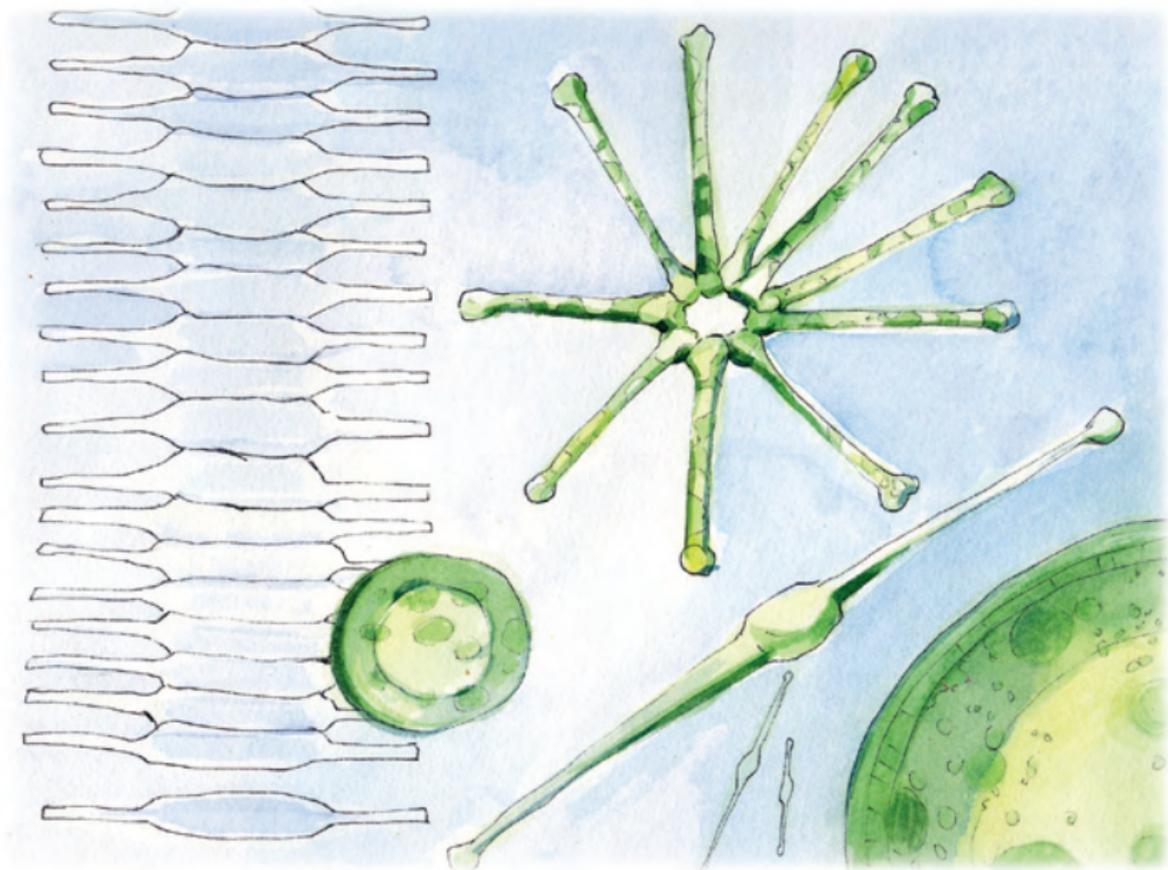


## Interesting Fact ★

Dozens of daphnia can fit on a single fingernail.

**Size:**



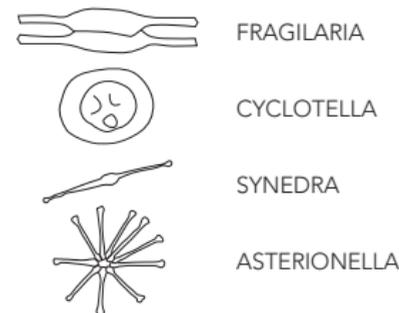


# Diatoms\*

Scientific Name:  
*Asterionella, Cyclotella, Fragilaria, Synedra*

## who? description

**Type:** phytoplankton  
**Height:** microscopic – less than 1 mm / .04 in  
**Color:** golden brown  
**Other:** no leaves or flowers; single-celled organism



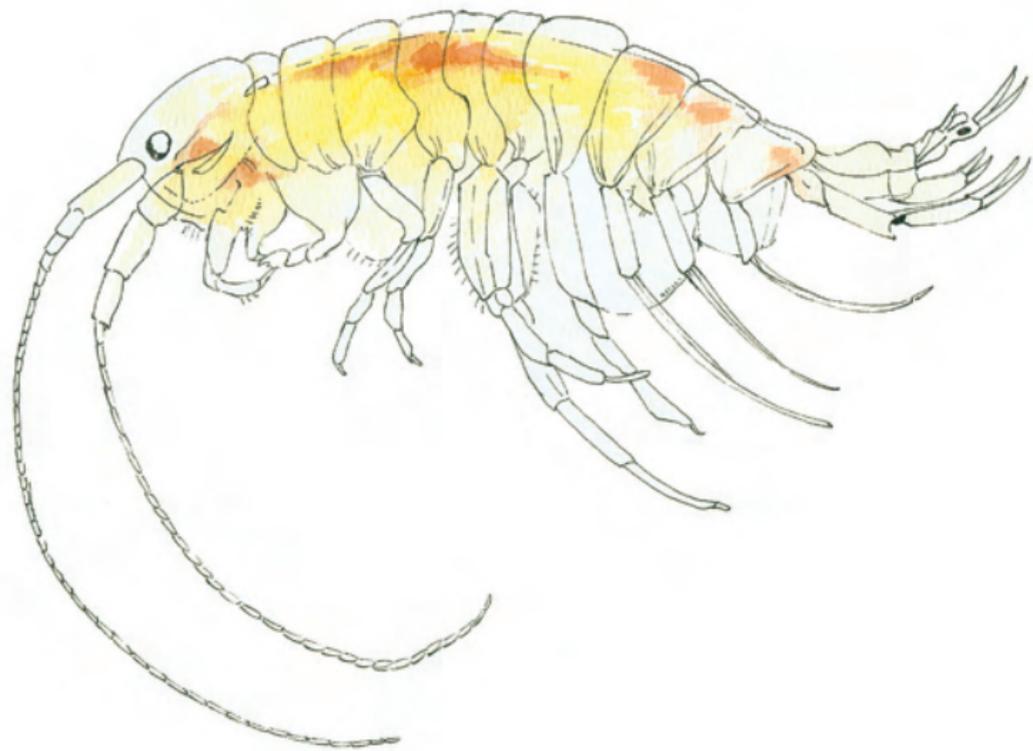
## where? environment

**Sunlight:** direct sunlight  
**Habitat:** freshwater lakes and pond, and on the surface of oceans

## what? characteristics

**Feeding:**  
 ☞ **Who eats me?**  
 zooplankton, water fleas, copepods, snails, mollusks, fish  
 ☞ **What do I use to make food?**  
 sunlight  
**Role:** producer  
**Reproduction:** divide in half (cell division)

**Interesting Fact** ★  
 More than 8000 kinds of diatoms exist. They are a major food source for fish. Diatoms have a shell or cell wall that has a pattern that lets scientists know what type of diatom it is.



# Diporeia\*

Scientific Name:  
*Diporeia hoyi*

## who? description

**Type:** crustacean  
**Length:** 1.27 cm / .5 in  
**Weight:** .1 oz / 2.8 g  
**Coloring:** clear, yellow  
**Body Features:** 5 pairs of legs

## where? environment

**Habitat:** freshwater lakes, spends time in the water column, lives in mud on lake bottom

## what? characteristics

**Feeding:**  
↳ **Who eats me?**  
whitefish, chub, sculpin  
↳ **What do I eat?**  
algae and bacteria  
**Role:** consumer, herbivore  
**Reproduction:** lay eggs  
**Grouping:** colonies  
**Activity:** nocturnal



## Interesting Fact ★

*Diporeia is a very important food source for forage fish. Even though they are small, they are high in fat and calories when eaten by fish.*

Size:





## Dragonfly (blue darner)\*

Scientific Name:  
*Aeschna constricta*

### who? description

**Type:** insect

**Length:** 5-8 cm / 2-3 in wing-span

**Coloring:** primarily blue and green

**Body Features:** four wings operate independently

### where? environment

**Habitat:** interdunal pond, in and around wetlands; under-water for first stage of life

### what? characteristics

**Feeding:**

➤ **Who eats me?**  
fish

Ⓒ **What do I eat?**  
mosquitoes, midges and other small, flying insects

**Role:** consumer, carnivore

**Reproduction:** lay eggs in water; first stage of life under-water; adult stage on land and in flight

**Grouping:** solitary

**Activity:** diurnal



### Interesting Fact ★

Dragonflies are a living fossil; they have not changed for over 300 million years. They can hover, fly backwards, loop, and speed up to 56 km / 35 mi per hour.

**Size:**





## Eurasian Milfoil\*

Scientific Name:  
*Myriophyllum spicatum*

### who? description

**Type:** plant

**Height:** up to 91 cm / 3 ft

**Leaves:** 1.5-4 cm / .6-1.5 in long, have a feather-like outline, in groups of 4; stem is leafless towards the base, but branches out, the top often turns red

**Flowers:** lower ones are female, upper ones are male

☒ **Invasive Species**

**Size:**



### where? environment

**Sunlight:** moderate

**Habitat:** lives in water from 1-3 m / 3-9 ft deep

### ! Interesting Fact ★

*Eurasian milfoil is an invasive species brought to North America from Europe in the 1940's. It competes with native plants and can impair water quality.*

### what? habits

**Feeding:**

➤ **Who eats me?**  
water birds

☺ **What do I use to make food?**  
sunlight

**Role:** producer

**Reproduction:** stems release fragments that develop roots, new stems and leaves, then sink and grow from the bottom; can also be pollinated



## Fingernail Clam\*

Scientific Name:  
Sphaeriidae

### who? description

**Type:** mollusk

**Length:** 1.3 cm / .5 in

**Coloring:** cream, orange, white

**Body Features:** fine rows of concentric, raised lines

### where? environment

**Habitat:** sandy bottom of freshwater lakes and streams

### what? characteristics

**Feeding:**

➤ **Who eats me?**  
bottom feeding fish

Ⓒ **What do I eat?**  
plankton, bacteria

**Role:** consumer, omnivore

**Reproduction:** young emerge from parents in adult form

**Activity:** year-round

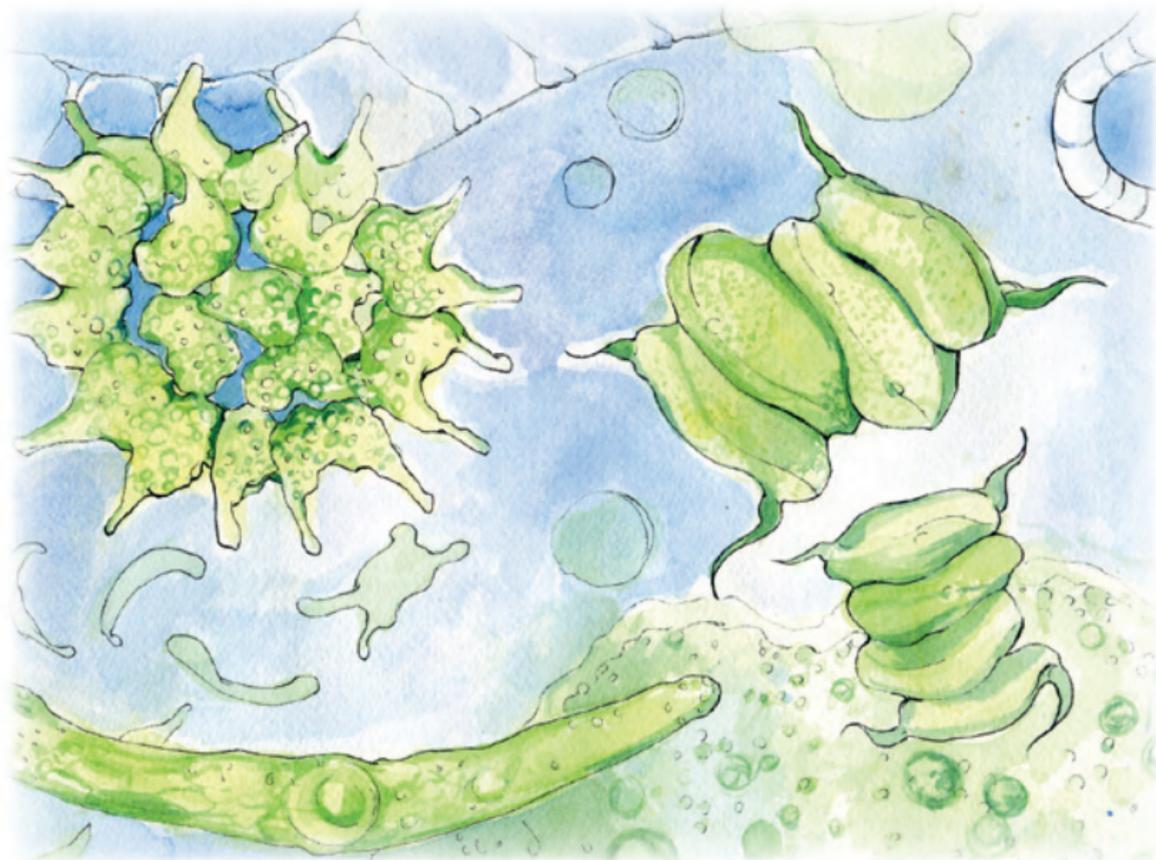


### Interesting Fact ★

Fingernail clams do not have eyes, a nose, or antennae, but they do have a foot they push out of the shell to help them to move.

**Size:**





# Green Algae\*

Scientific Name:

*Closterium, Pediastrum, Scenedesmus, Tetraspora, Ulothrix*

## who? description

**Type:** phytoplankton

**Size:** microscopic - 1000 could fit on the head of a pin



SCENEDESMUS



PEDIASTRUM



ULOTHRIX



CLOSTERIUM



TETRASPORA

**Size:**



## where? environment

**Sunlight:** direct sunlight

**Habitat:** mostly freshwater, found in all 5 Great Lakes

## what? characteristics

**Feeding:**

↳ **Who eats me?**

water fleas, copepods, snails, mollusks, fish

↳ **What do I use to make food?**

sunlight

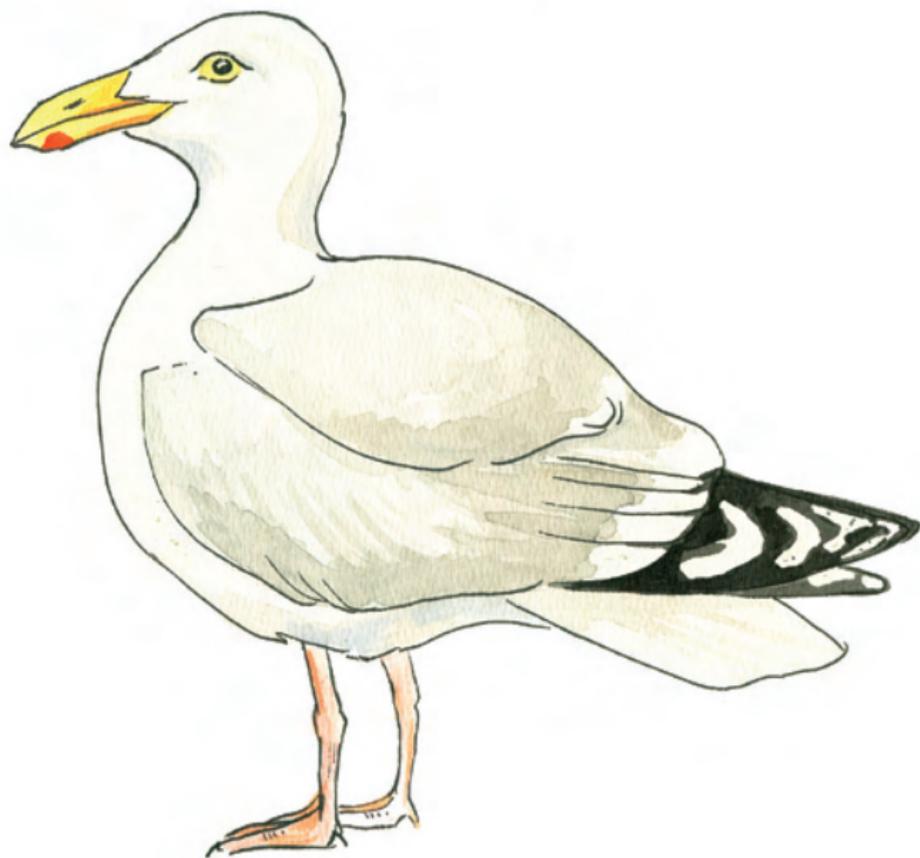
**Role:** producer

**Reproduction:** can grow individually as single cells or in colonies; some have spores; when algae reproduce quickly, this is called a "bloom"



## Interesting Fact ★

Algae is the base of the lake food web. It produces more oxygen than all of the plants on Earth combined. Of the more than 7,000 types of green algae in the world, cladophora is one type found in clumps along Great Lakes beaches.



## Herring Gull\*

Scientific Name:  
*Larus argentatus*

### who? description

**Type:** bird

**Length:** up to 61 cm / 24 in

**Weight:** 1.1 kg / 2.5 lb average

**Coloring:** white, grey wing backs, yellow bill with red spot

**Body Features:** pink legs

**Note:** The ring-billed gull is also commonly found in the Great Lakes region. It has a black line around its beak and has similar characteristics to the herring gull.

**Size:**



### where? environment

**Habitat:** beach, lakeshore and seacoast, grass nests on flat ground

### Interesting Fact ★

*Herring gulls will travel up to 40 miles from home for food.*

### what? characteristics

**Feeding:**

➤ **Who eats me?**  
other gulls, eagles eat young

Ⓒ **What do I eat?**  
clams, small fish, small mammals, garbage, birds, dead animals

**Role:** consumer, omnivore, scavenger

**Reproduction:** 3 eggs in spring

**Grouping:** colonies

**Activity:** diurnal



# Human\*

Scientific Name:  
*Homo sapien*

## who? description

**Type:** mammal  
**Length:** adults average 152-182 cm / 5-6 ft  
**Weight:** adults average 50-91 kg / 110-200 lbs  
**Coloring:** skin shades range including, white, pink, beige, tan, light-dark brown  
**Body Features:** 2 arms, 2 legs, 10 digits on hands and feet  
**Note:** rely on sense organs (eyes, ears, mouth, nose) and opposable thumb



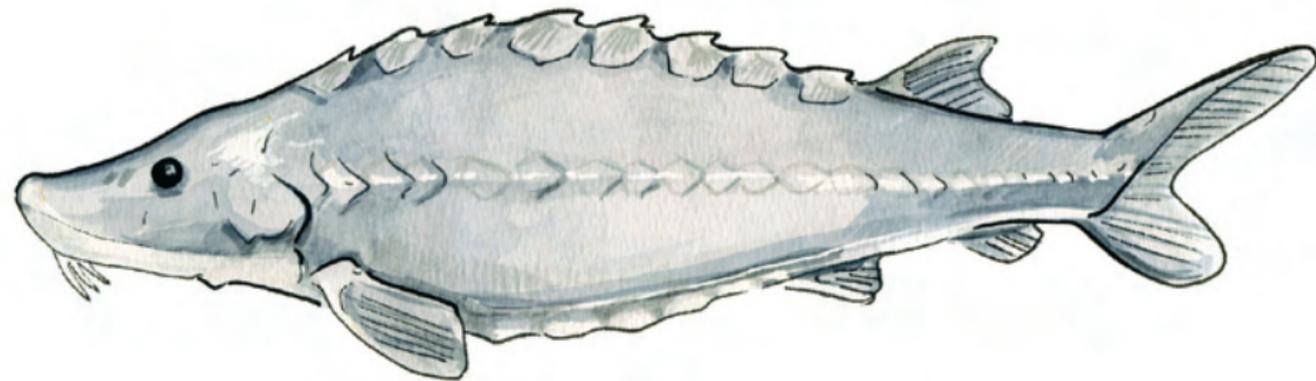
## where? environment

**Habitat:** homes in a variety of ecosystems, rural-urban; homes vary in shape, size, and material depending on culture and location

**Interesting Fact** ★  
*Humans do not have natural predators and are able to live in many different types of environments.*

## what? characteristics

**Feeding:**  
➤ **Who eats me?**  
not a primary food source for animals, but may be eaten by large carnivores  
Ⓒ **What do I eat?**  
depends on culture - various vegetables, fruits, nuts, fish (including lake trout and yellow perch), cows, pigs, chickens  
**Role:** consumer, omnivore  
**Reproduction:** live young which is generally raised by both parents



# Lake Sturgeon\*

Scientific Name:

*Acipenser fulvescens*

## who? description

**Type:** fish

**Length:** 91-183 cm / 3-6 ft

**Weight:** 4-91 kg / 10-200 lbs

**Coloring:** olive brown to grey, white belly

**Body Features:** long, pointed snout with four barbels, or feelers, under the front of the snout

⚠ **Endangered in Illinois, Indiana, and Michigan**

**Size:**



## where? environment

**Habitat:** freshwater lakes, lives on lake bottom

## Interesting Fact ★

The female sturgeon takes 20 years to mature and can live for 100 years. The sturgeon uses its barbels to find food on the lake bottom.

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
humans and other fish eat eggs

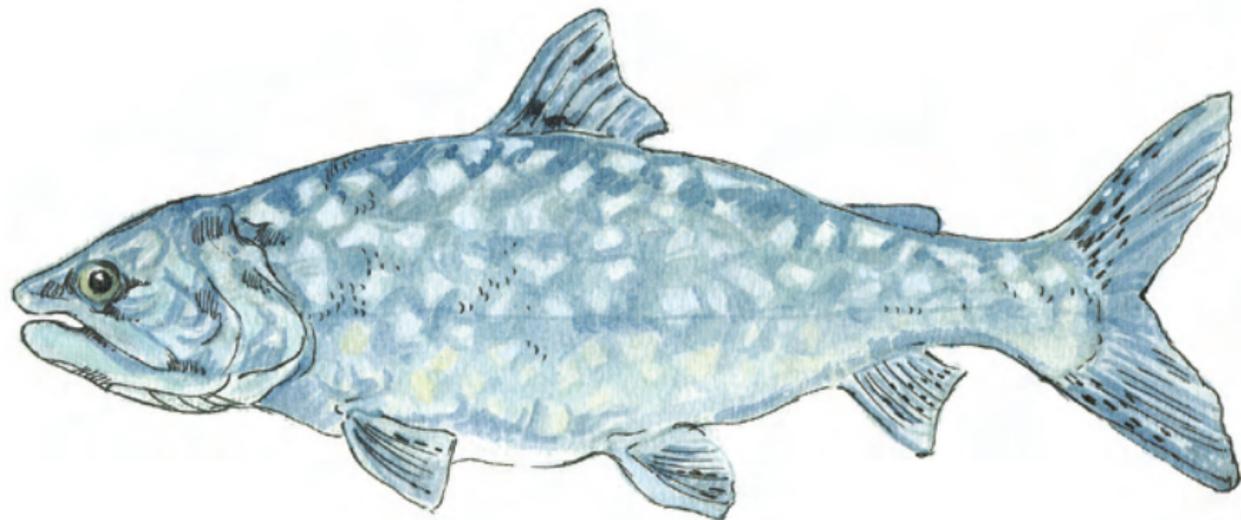
⌚ **What do I eat?**  
crustaceans, mollusks, insects

**Role:** consumer, omnivore

**Reproduction:** eggs; spawns every 4-6 years in swift water

**Grouping:** solitary

**Activity:** diurnal



# Lake Trout\*

Scientific Name:

*Salvelinus namaycush*

## who? description

**Type:** fish

**Length:** 43-69 cm / 17-27 in

**Weight:** 1344-4032 g / 3-9 lbs

**Coloring:** light spots on dark background, color can vary greatly from fish to fish

## where? environment

**Habitat:** freshwater lakes, in cold, clear, deep water

## what? characteristics

**Feeding:**

➤ **Who eats me?**

sea lamprey, humans

Ⓒ **What do I eat?**

chub, sculpin, smelt, alewives

**Role:** consumer, carnivore

**Reproduction:** female lays up to 15,000 eggs; spawns in shallow areas

**Activity:** year-round

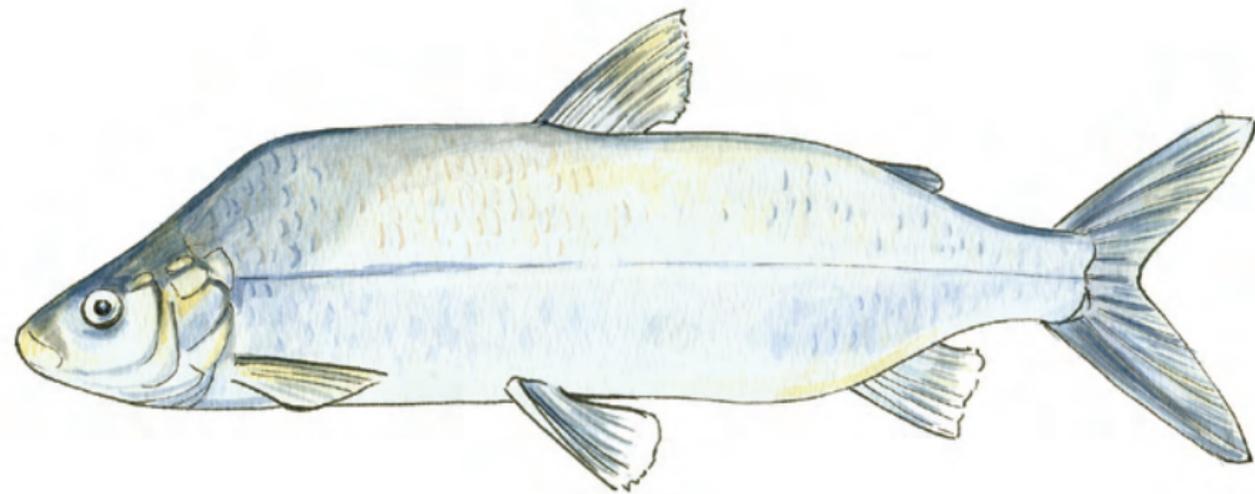


## Interesting Fact ★

Lake trout are a popular food for humans and the invasive sea lamprey. This has caused overfishing and reduced fish population. The United States and Canada worked together to reduce lamprey numbers. Namaycush is a Native American word that means "dweller of the deep."

**Size:**





# Lake Whitefish\*

Scientific Name:

*Coregonus clupeaformis*

## who? description

**Type:** fish

**Length:** 43-56 cm / 17-22 in

**Coloring:** silver sides, greenish brown back

**Body Features:** two clear fins on the back and a blunt nose

## where? environment

**Habitat:** found in all five Great Lakes; prefer deep waters of up to 61 m / 200 ft, deeper in hot weather

## what? characteristics

**Feeding:**

➤ **Who eats me?**

lake trout, walleye, pike, humans; eggs eaten by other fish

➤ **What do I eat?**

diporeia, insects, freshwater shrimp, small fish, fish eggs

**Role:** consumer, carnivore

**Reproduction:** eggs laid in early winter in shallow sandy or rocky water 7 m / 25 ft deep; young hatch in spring

**Grouping:** swims in schools

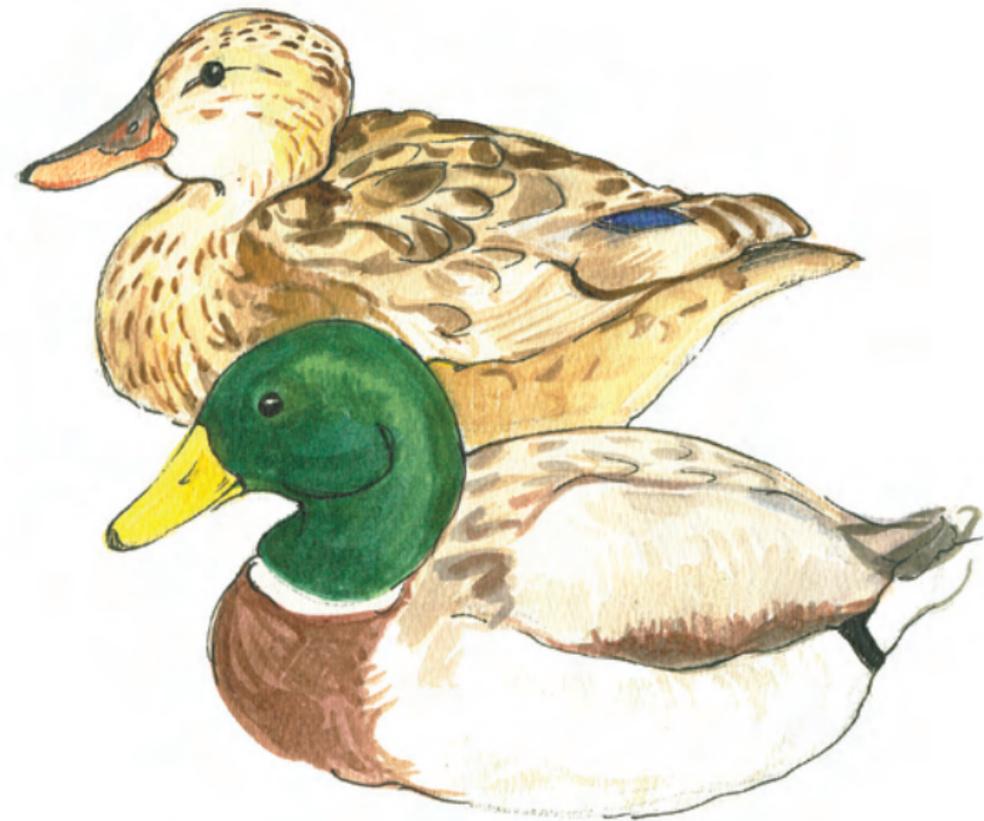


## Interesting Fact ★

The whitefish population seems to be making a comeback after years of over-fishing and bad environmental conditions had reduced their population.

**Size:**





## Mallard Duck\*

Scientific Name:  
*Anas platyrhynchos*

### who? description

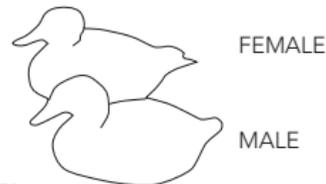
**Type:** bird

**Length:** 50-60 cm / 19-23 in

**Weight:** 1.24 kg / 3 lbs

**Coloring:** male-green head, white neck ring, brown breast, yellow bill; female-all brown/white mottled, greenish bill, white patch around wing

**Body Features:** orange webbed feet



**Size:**



### where? environment

**Habitat:** interdunal pond, freshwater lakes, ponds, swamps, grass nest on the ground

### what? characteristics

**Feeding:**

➤ **Who eats me?**

muskellunge, humans, coyotes, snapping turtle

Ⓒ **What do I eat?**

emergent weeds, small invertebrates, larval insects, grains

**Role:** consumer, omnivore

**Reproduction:** 8-12 eggs in spring

**Grouping:** pairs or flocks

**Activity:** diurnal



### Interesting Fact ★

The mallard is the most commonly recognized wild duck in the world.



# Muskellunge\*

Scientific Name:  
*Esox masquinongy*

## who? description

**Type:** fish

**Length:** up to 152 cm / 5 ft

**Weight:** 18-31 kg / 40-70 lbs

**Coloring:** silver green to light brown with dark bars, cream belly with small brown spots

**Body Features:** long head and snout, and a large mouth

## where? environment

**Habitat:** freshwater lakes, near weed beds and shore

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
humans

Ⓒ **What do I eat?**  
other fish, ducklings, frogs, rodents

**Role:** consumer, carnivore

**Reproduction:** lay eggs in shallow water

**Grouping:** solitary

**Activity:** most active in warm weather

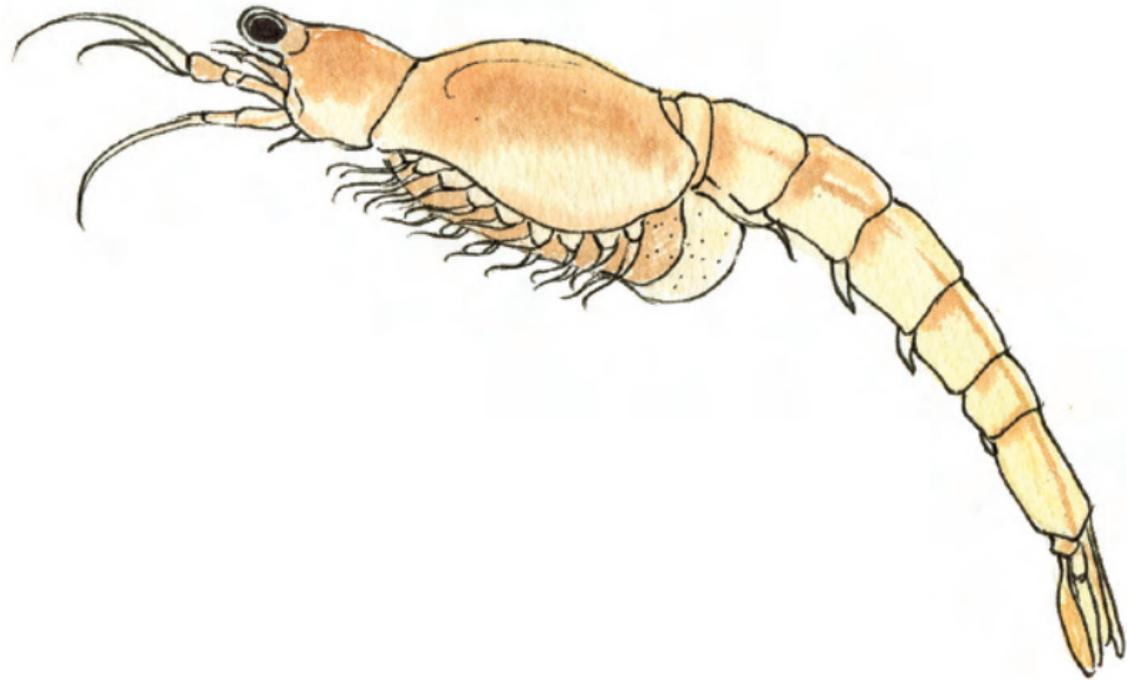


## Interesting Fact ★

Muskies were often caught by fishermen as prize fish, but now fishing of muskies is regulated to protect the population.

**Size:**





# Opossum Shrimp\*

Scientific Name:  
*Mysis relicta*

## who? description

**Type:** crustacean

**Length:** 2-3 cm / .8-1 in

**Coloring:** clear, beige

**Body Features:** 10 pairs of  
jointed legs

## where? environment

**Habitat:** freshwater lakes, deep  
cold water

## what? characteristics

**Feeding:**

↳ **Who eats me?**

lake trout, alewife

↳ **What do I eat?**

Phytoplankton, zooplankton,  
copepods, detritus

**Role:** consumer, omnivore

**Reproduction:** female carries  
eggs in a pouch

**Activity:** diurnal movement  
and nocturnal feeding

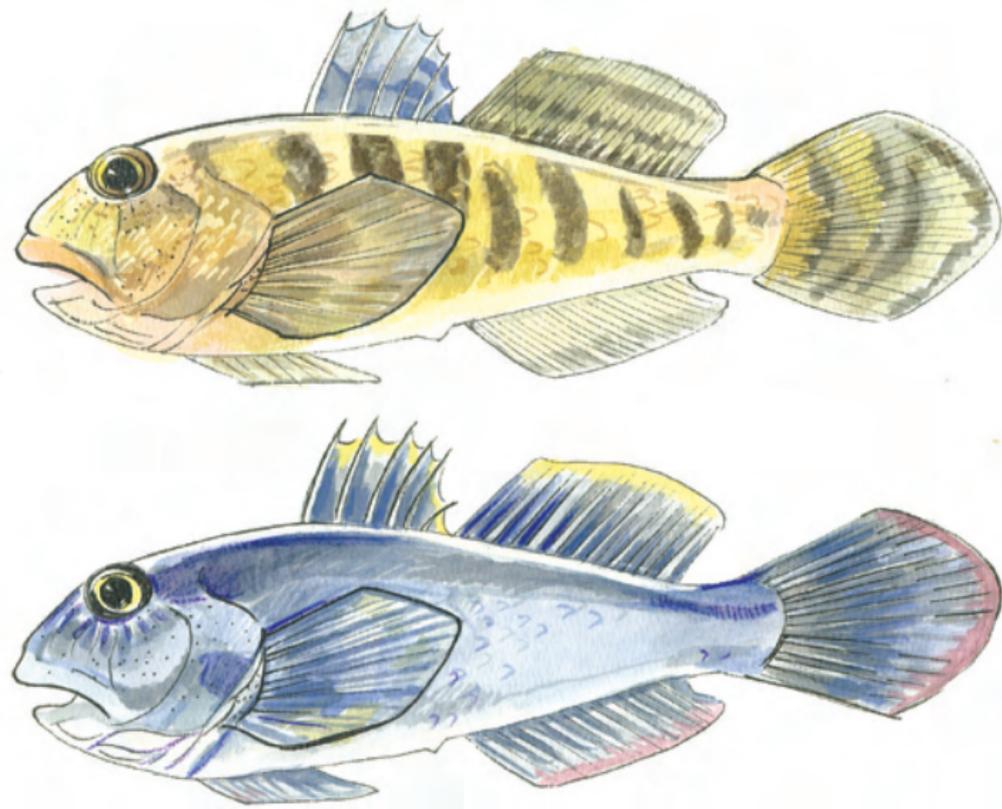


## Interesting Fact ★

*Opossum shrimp look like a  
miniature crayfish. They are  
not actually shrimp.*

**Size:**





# Round Goby\*

Scientific Name:

*Neogobius melanostomus*

## who? description

**Type:** fish

**Length:** under 18 cm / 7 in

**Coloring:** slate gray or black body with black or brown spots

**Body Features:** raised, frog-like eyes; have thick lips, front fin has a black spot, body is covered with fine scales

## ⌘ Invasive Species

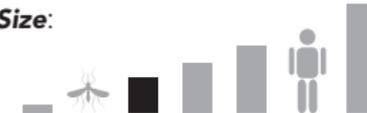


MALE



FEMALE

**Size:**



## where? environment

**Habitat:** lake bottom, found in all the Great Lakes and some nearby lakes

**Origin:** Black and Caspian Sea regions of Eurasia

## what? characteristics

**Feeding:**

➤ **Who eats me?**

bass, pike, walleye

Ⓒ **What do I eat?**

small fish, zebra mussels, and fish eggs

**Role:** consumer, carnivore

**Reproduction:** spawns up to five times per mating season; builds nests in rocky areas for eggs

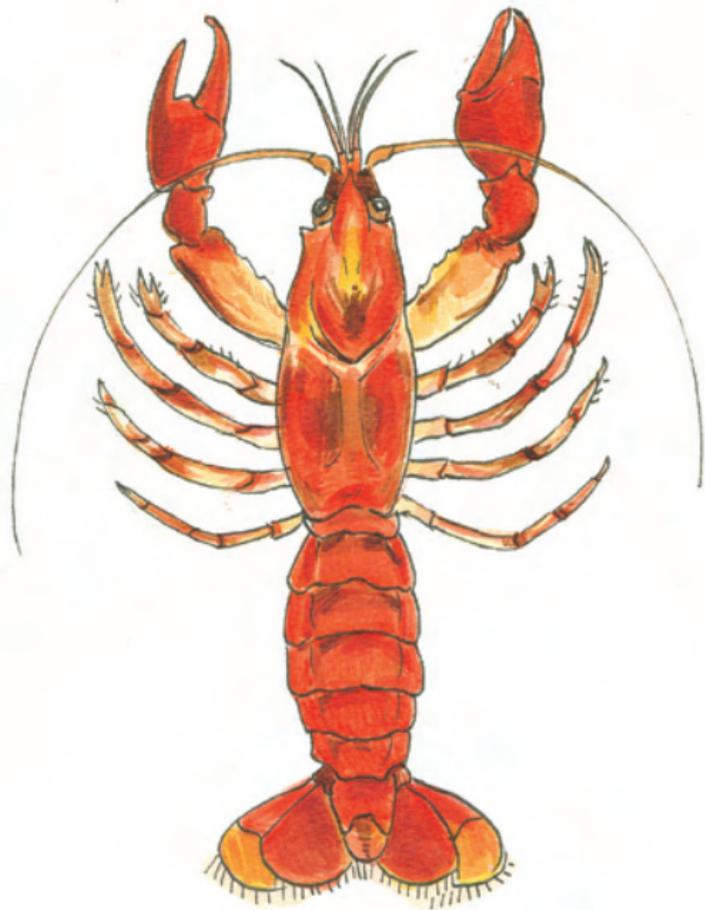
**Grouping:** found in dense populations

**Activity:** diurnal



## Interesting Fact ★

The round goby has a very active sensory system which allows it to find prey and also avoid becoming prey. They have become too numerous to bring under control.



## Rusty Crayfish\*

Scientific Name:  
*Orconectes rusticus*

### who? description

**Type:** crustacean

**Height:** 8-10 cm / 3-4 in

**Coloring:** red / brown color

**Body Features:** large claws and rusty colored spots on each side of the main body section

⚠ **Invasive Species**

### where? environment

**Habitat:** lakes, ponds, and streams in areas where there is debris on the bottom

**Origin:** Ohio River basin

### what? characteristics

**Feeding:**

➤ **Who eats me?**  
predator fish, birds, raccoons

Ⓒ **What do I eat?**  
aquatic plants and insects,  
fish eggs and small fish

**Role:** consumer, omnivore and scavenger

**Reproduction:** eggs are usually laid in the spring by the female

**Grouping:** young crayfish stay with their mother for several weeks. After, they tend to live independently

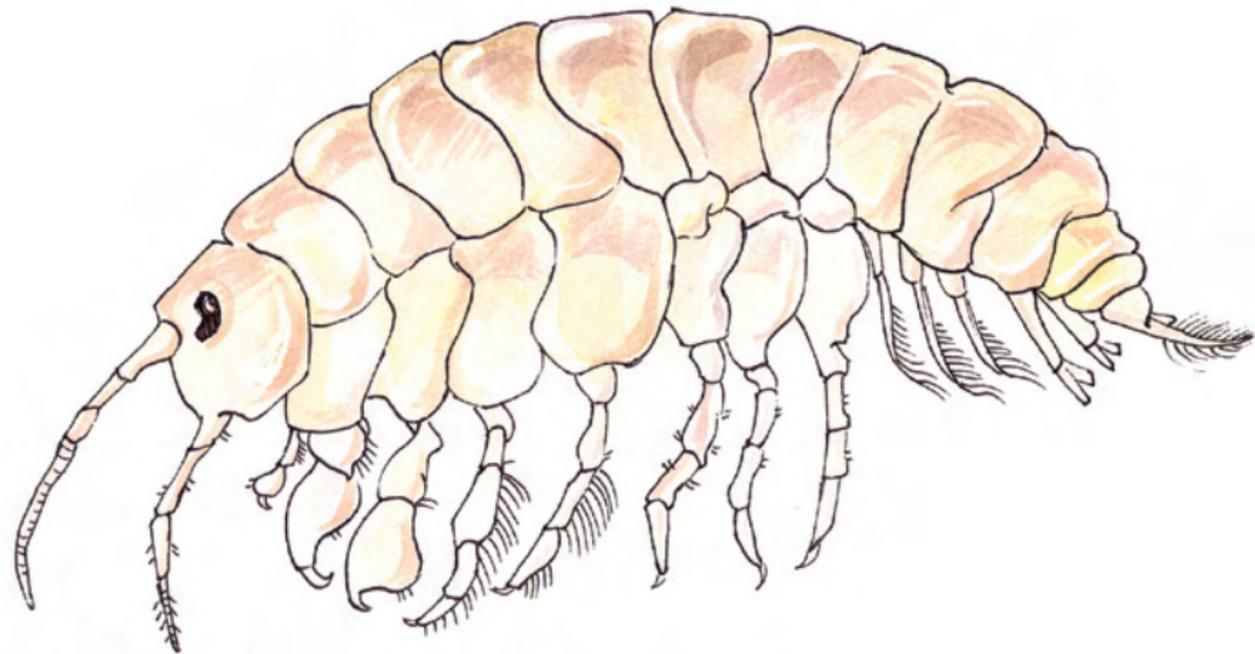
**Activity:** nocturnal

### ! Interesting Fact ★

*Rusty crayfish are an invasive species that have been spread when used for bait by fishermen. They have also been spread by science classes who have released them after being classroom pets.*

**Size:**





# Scud\*

Scientific Name:  
Gammarus

## who? description

**Type:** crustacean

**Length:** 2.54 cm / 1 in

**Coloring:** most are gray and tan; some are shades of green, blue, orange, and purple

**Body Features:** shrimp-like with an arched, flat body; two pair of antennae and nineteen paired legs

## where? environment

**Habitat:** shallow water in lakes, ponds, and slow moving rivers with abundant vegetation and debris on the bottom

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
insects, amphibians, shore birds and fish like sculpin, smelt and chub

Ⓒ **What do I eat?**  
algae, dead plants and animals

**Role:** consumer, omnivore

**Reproduction:** reproduces after 5-8 years

**Grouping:** colonies

**Activity:** mainly nocturnal

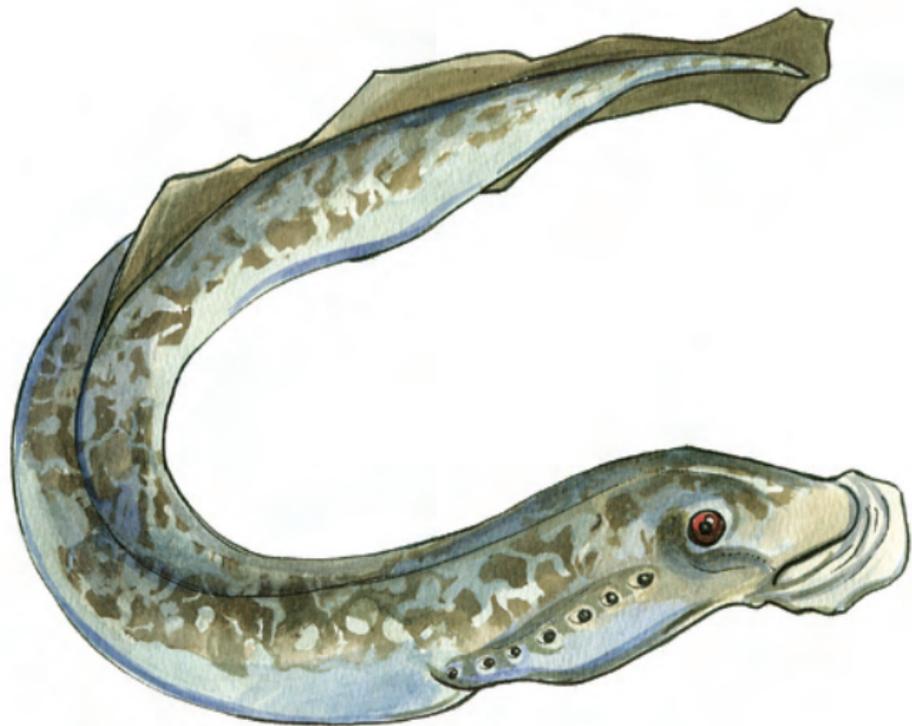


## Interesting Fact ★

Scud populations may be declining because of competition with the zebra mussel for phytoplankton.

**Size:**





## Sea Lamprey\*

Scientific Name:

*Petromyzon marinus*

### who? description

**Type:** fish

**Length:** 30-50 cm / 12-20 in

**Weight:** 226-363 g / .5-.8 lbs

**Coloring:** grey-blue, metallic purple, and silver

**Body Features:** long, slender body, mouth with sharp teeth enables it to suck out the fluid and tissue of fish, especially the lake trout

⌘ **Invasive Species**

**Size:**



### where? environment

**Habitat:** freshwater lakes and oceans

**Origin:** Atlantic Ocean - Europe and North America



### Interesting Fact ★

Sea lampreys naturally live in saltwater, but came into the Great Lakes through canals. There are efforts to control the lamprey population because they do not have natural predators in the Great Lakes.

### what? characteristics

**Feeding:**

➤ **Who eats me?**  
none in Great Lakes

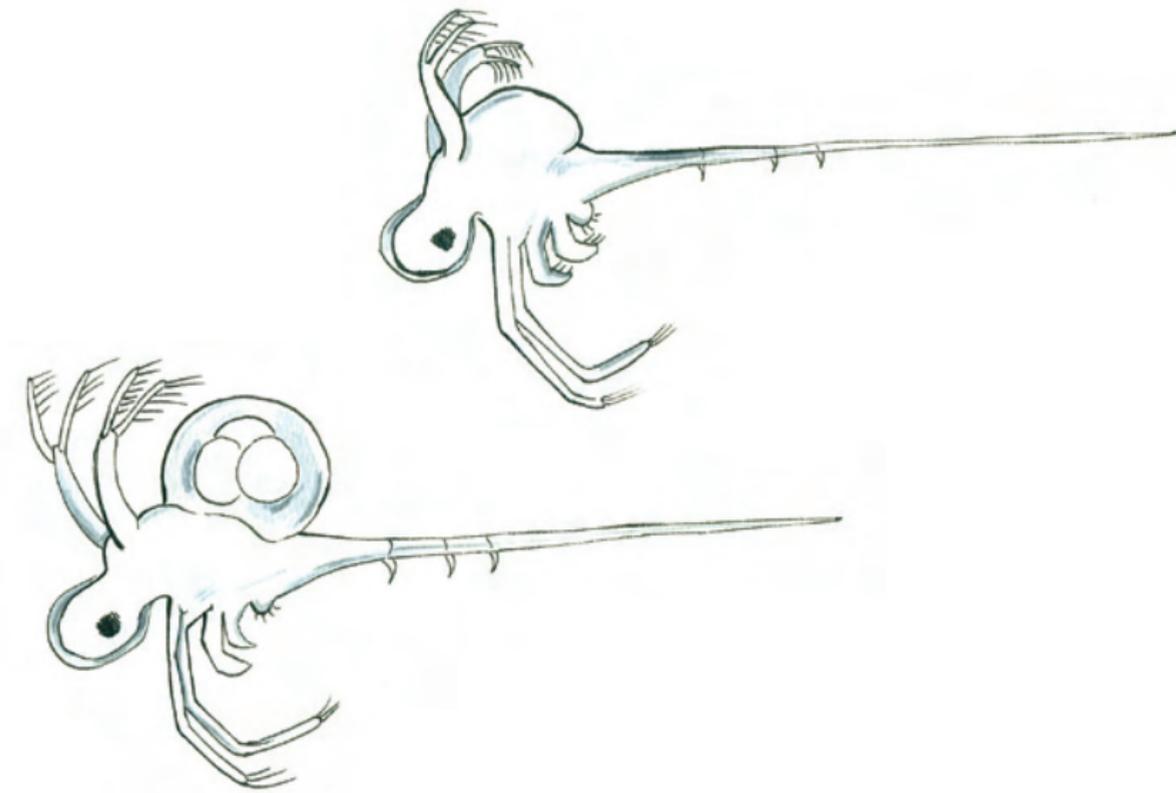
Ⓒ **What do I eat?**  
fish, including lake trout

**Role:** consumer, carnivore

**Reproduction:** lay eggs

**Grouping:** solitary

**Activity:** year-round



# Spiny Water Flea\*

Scientific Name:

*Bythotrephes cederstroemi*

## who? description

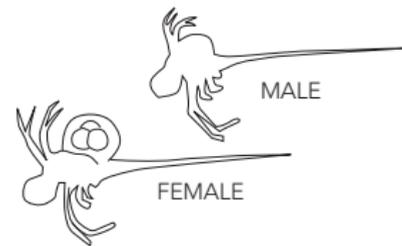
**Type:** zooplankton, crustacean

**Length:** less than 1.3 cm / .5 in

**Coloring:** clear

**Body Features:** crustacean with long, sharp, barbed tail spine

### ⚡ Invasive Species



**Size:**



## where? environment

**Habitat:** throughout the Great Lakes and some inland lakes

**Origin:** Eurasia

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
some large fish

Ⓒ **What do I eat?**  
plankton

**Role:** consumer, omnivore

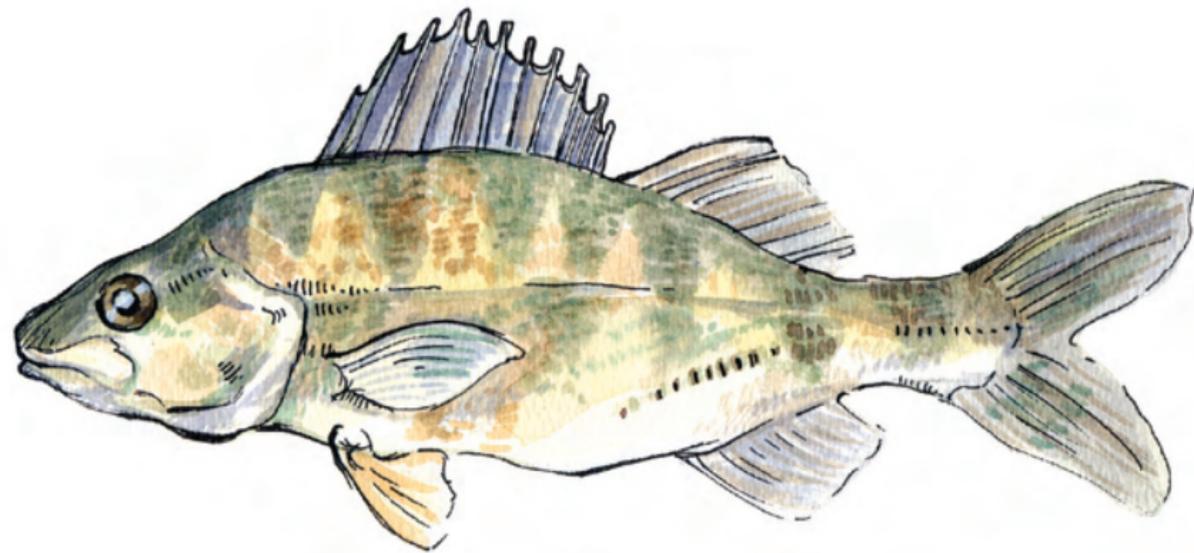
**Reproduction:** reproduce rapidly; during warm summer temperatures each female produces 10 offspring every 2 wks

**Grouping:** form clusters with each other



### Interesting Fact ★

This creature is not a flea, but a crustacean. Only some larger fish can eat it because the sharp tail spine is hard for smaller fish to swallow. It competes with fish for plankton.



# Walleye\*

Scientific Name:  
*Stizostedion vitreum*

## who? description

**Type:** fish

**Length:** 33-63 cm / 13-25 in

**Weight:** .4-2 kg / 1-5 lbs

**Coloring:** brown to yellow

**Body Features:** The young usually have dark blotches across their backs and down their sides

## where? environment

**Habitat:** freshwater lakes, lives in deep water, near the bottom of the lake in weeds or rocks

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
humans, muskellunge, largemouth bass

Ⓒ **What do I eat?**  
yellow perch, aquatic insects, crayfish

**Role:** consumer, carnivore

**Reproduction:** occurs in spring/early summer, females release up to 612,000 eggs

**Grouping:** loose but distinct schools

**Activity:** feeds at dusk

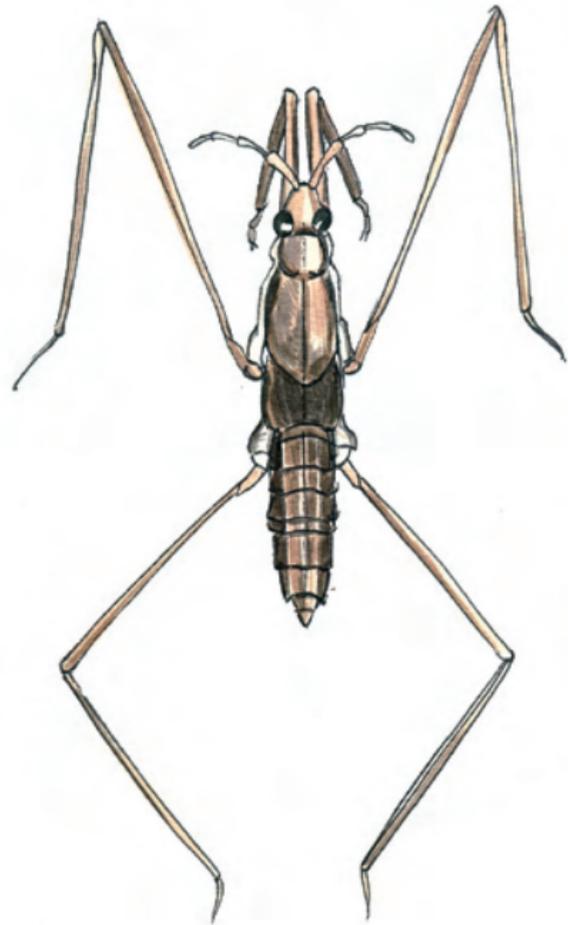


## Interesting Fact ★

Walleyes have large, marble-like eyes that help them see well in dim light.

**Size:**





## Water Strider\*

Scientific Name:  
*Gerris remigis*

### who? description

**Type:** insect

**Length:** 1.2 cm / .5 in

**Coloring:** dark brown to black

**Body Features:** long legs, two legs can fold under front of body

### where? environment

**Habitat:** interdunal pond, freshwater lakes and wetlands, live under leaves, spend time on surface of water

### what? characteristics

**Feeding:**

➤ **Who eats me?**

birds, fish, dragonflies

☾ **What do I eat?**

Insects from water and land, plants

**Role:** consumer, omnivore

**Reproduction:** lay eggs at water's edge



### Interesting Fact ★

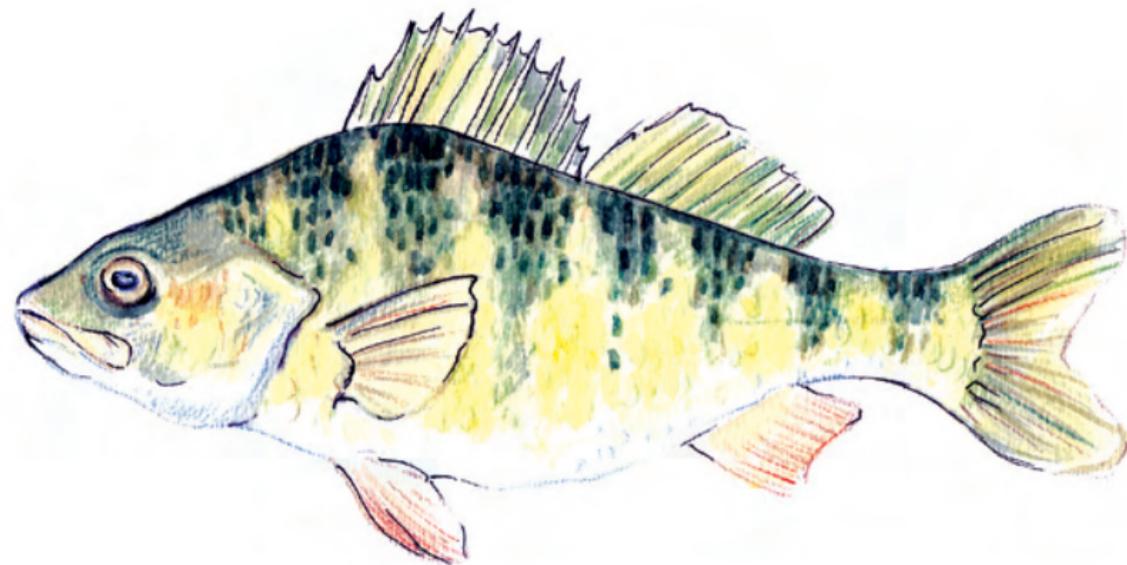
*Water striders communicate with each other through ripples on the surface of the water.*

**Size:**



# Yellow Perch\*

Scientific Name:  
*Perca flavescens*



## who? description

**Type:** fish

**Length:** 15-25 cm / 6-10 in

**Weight:** 168-448 g / 6-16 oz

**Coloring:** back is bright to olive green or golden brown, sides are yellow-green; grey to milk-white belly

## where? environment

**Habitat:** lake bottom, less than 30 feet depth, feeds near the shore and rests on the bottom

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
alewife (feed on larva), humans

Ⓒ **What do I eat?**  
minnows, insect larvae, plankton, worms

**Role:** consumer, carnivore

**Reproduction:** lay eggs April-May

**Grouping:** swims in schools

**Activity:** diurnal, year-round



## Interesting Fact ★

Yellow perch are a popular food for humans, but have been overfished and the population has decreased. They lay their eggs in long, jelly-like ribbons.

**Size:**





## Zebra Mussel\*

Scientific Name:

*Dreissena polymorpha*

### who? description

**Type:** mollusk

**Length:** up to 5 cm / .75 in

**Coloring:** tan and blackish stripes (like a zebra)

**Body Features:** two connected shells hold a small mussel between them, they attach to hard surfaces with byssal threads

⌘ **Invasive Species**

**Size:**



### where? environment

**Habitat:** freshwater; depths of 2-7 m / 6-23 ft

**Origin:** Eastern Europe and Western Russia; Caspian and Black Sea

### ! Interesting Fact ★

Zebra mussels in some parts of the Great Lake region have been outnumbered by the quagga mussel, a close relative of theirs. Zebra mussels are in all Great Lakes and some inland lakes.

### what? characteristics

**Feeding:**

➤ **Who eats me?**

round goby

Ⓒ **What do I eat?**

algae

**Role:** consumer, omnivore

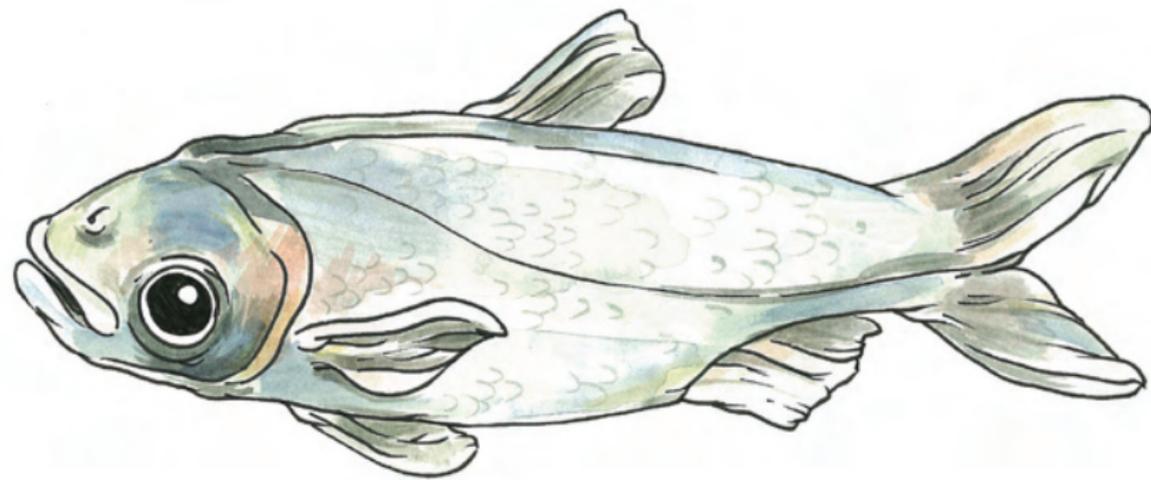
**Reproduction:** eggs expelled by females and fertilized outside of the body by males in spring / summer

**Grouping:** singly or in colonies

# Bighead Carp\*

Scientific Name:

*Hypophthalmichthys nobilis*



## who? description

**Type:** fish

**Length:** 76 – 102 cm / 30-40 in  
(as big as 4 ft)

**Weight:** up to 50 kg / 110 lbs

**Coloring:** silvery white abdomen, black dorsal and upper lateral sections, black spots on the side of their bodies, fins are a shade of grey

⚠ **Invasive Species**

**Size:**



## where? environment

**Habitat:** lakes, rivers and reservoirs

**Origin:** China



## Interesting Fact ★

*Bighead carp eat up to 20% of their body weight per day. Carp are currently in waterways connected to the Great Lakes and humans are trying to ensure that the fish do not establish a permanent presence in this ecosystem.*

## what? characteristics

**Feeding:**

➤ **Who eats me?**  
humans

Ⓒ **What do I eat?**  
zooplankton, algae

**Role:** consumer, omnivore

**Reproduction:** lay semi-buoyant eggs in warm, current-driven water during the summer

**Grouping:** travel alone or in small groups

**Activity:** more active in warmer waters



# Hydrilla\*

Scientific Name:  
*Hydrilla verticillata*

## who? description

**Type:** plant

**Height:** up to 8 m / 25 ft

**Leaves:** green with red ribbing, saw-toothed, four to eight around the stem

**Flowers:** transparent or white (female) or green (male), with three petals and three sepals

### ☒ Invasive Species



MALE



FEMALE

**Size:**



## where? environment

**Sunlight:** require less than 1% of full sunlight or less

**Habitat:** any partially submerged body of water with a salinity level of less than 7%

**Origin:** Africa



### Interesting Fact ★

*Hydrilla, not yet in the Great Lakes, is anticipated to "invade" the system due to its presence in nearby aquatic ecosystems. It is made up of nearly 95% water, which allows for rapid growth.*

## what? characteristics

**Feeding:**

☛ **Who eats me?**

coots and other bird species

☛ **What do I use to make food?**

oxygen and sunlight

**Role:** producer

**Reproduction:** re-growth of stem fragments and by auxiliary buds (tubers) that can each produce up to 6,000 new plants in 4 years

**Other:** male and female flowers produced separately on a single plant



# Quagga Mussel\*

Scientific Name:

*Dreissena rostriformis bugensis*

## who? description

**Type:** mollusk

**Length:** 28 mm / 1+ in

**Coloring:** tan and blackish pattern to all black depending on location

**Body Features:** a connecting tissue holds the two shell halves together, often with the animal inbetween, this tissue helps connect to hard surfaces and other mussels

⚠ **Invasive Species**

**Size:**



## where? environment

**Habitat:** freshwater

**Origin:** Eastern Europe

## ! Interesting Fact ★

The quagga mussel can live at any depth as long as oxygen is present, while the zebra mussel, a relative, can only survive at depths less than 12 meters.

## what? characteristics

**Feeding:**

➤ **Who eats me?**

ducks, crayfish and lake whitefish, gobies, sculpins

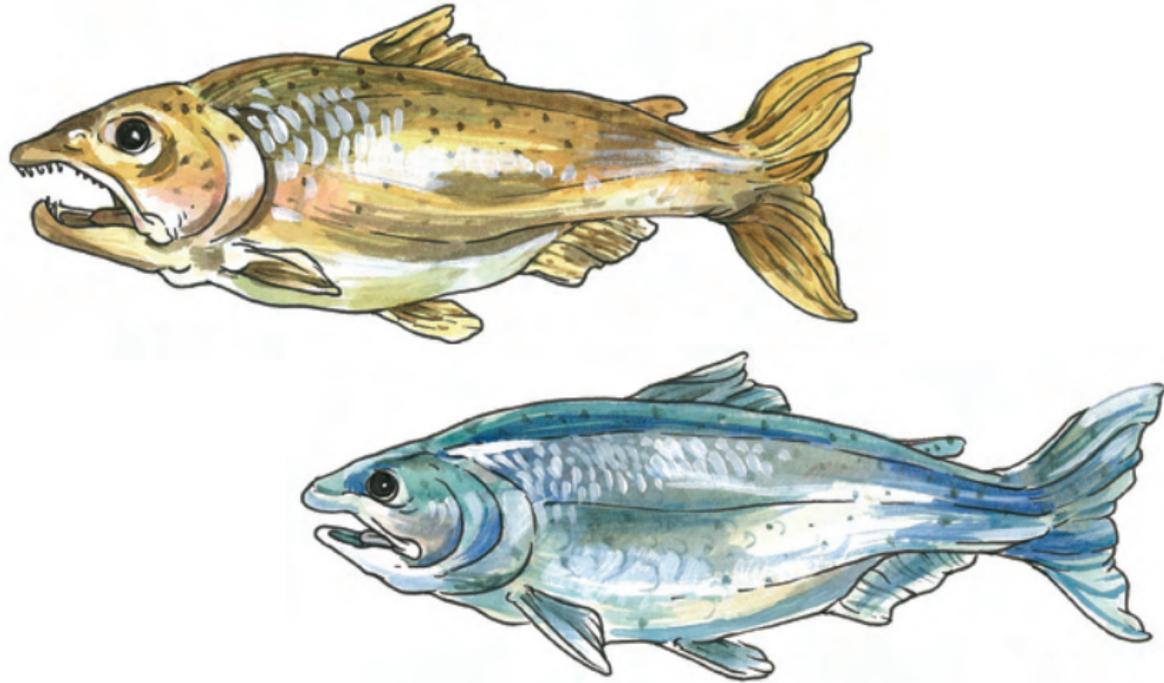
Ⓒ **What do I eat?**

phytoplankton, diatoms

**Role:** consumer, omnivore

**Reproduction:** up to one million eggs per year expelled by females and fertilized outside of the body by males in spring / summer

**Grouping:** singly or in colonies



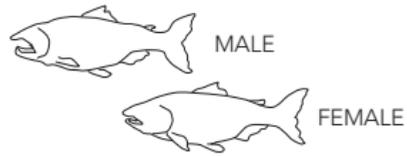
# Chinook Salmon\*

Scientific Name:  
*Oncorhynchus tshawytscha*

## who? description

**Type:** fish  
**Length:** 50 – 90 cm / 20-35 in  
**Weight:** 6.8 – 13.6 kg / 15-30 lbs  
**Coloring:** green/blue-green on back, silver sides and white/silver underneath; reddish color during spawning

### ☞ **Introduced Species**



## where? environment

**Habitat:** lakes, rivers, oceans and estuaries  
**Origin:** Pacific Ocean – from Asia to North America and the Arctic

**Interesting Fact** ★  
 Chinook Salmon were introduced into Lake Michigan on purpose, to control alewife populations and to be part of the sport fishing economy.

## what? characteristics

**Feeding:**  
 ☞ **Who eats me?**  
 humans and sea lamprey  
 ☞ **What do I eat?**  
 alewives, smelt, bloaters  
**Role:** consumer  
**Reproduction:** spawn eggs once in a lifetime in freshwater during summer/fall in a nest called a redd, usually located on a rocky bottom  
**Grouping:** solitary