

# Where are the Fish?

**Background:** Review Chapters 4: *Fishing Techniques* and 5: *Fish Identification and Life History in Going Fishing*

**Standards:**

**Duration:** 45 minutes

**Materials:** Fish Cards (pgs 5-7), Habitat Worksheet (pg 4), hula hoops (or a method to delineate 3 separate areas)

**Objectives:** Students will learn how habitat preferences vary among fish species, and how knowledge of fish habitat preferences can improve fishing success.

**Preparation:**

Print two sets of Fish Cards on different colored paper. (If you have a large class, you may want to print two double sets of cards). Cut paper into individual Fish Cards.

Print enough lake habitat pages for the class. These can be shared by groups of several students.

**Warm up:**

Begin with a basic review of habitat – food, water, shelter & space. Ask students if all fish eat the same food or occupy the same space. You may use the Fish of Nebraska booklet to guide the discussion. Point out that Nebraska fish species have a wide variety of shapes, sizes, fins and mouths. These adaptations indicate different habitat preferences.

**Activity:**

- Divide class into two teams.
- Each team lines up single file on one side of a gym or field.
- On the opposite end, place three hula hoops or create three distinct areas that are clearly labeled ‘rocks and brush’, ‘deep pool’

and ‘aquatic vegetation’.

- Each team receives a separate set of Fish Cards that will sit on the floor at the front of their line.
- On a cue, the relay race begins. The first student picks up the top card and from the information on the card determines which habitat the fish will occupy. The student should make a decision without help from teammates.
- The student runs to the correct habitat, deposits the card and returns to the start of the line to tag the next student who does the same.
- The race continues until a team finishes.
- The winning team is determined by tallying points. The finishing team is awarded full points (12 points, one for each card (or 24 if playing with doubled sets) and the other teams points are subtracted by whatever remains in their pile.
- Then, as a class, the fish in each habitat are studied to determine if they were placed in the appropriate habitat. (Some fish will be suited to two of the three habitat choices. An answer key is provided on page 3.)

- Each card that was placed incorrectly results in a point loss for that team. Error checking allows for a team to win even if it doesn't finish first.
- If time allows, shuffle the cards and play best out of three rounds. This will allow for all students to take a turn and for students to encounter a variety of fish species.

### **Wrap up:**

As a class, look at the communities of fish that occupy similar habitats. Identify the species that occupy multiple habitats. Discuss how knowledge of these habitat preferences will influence how the students fish. Have each student select one of the fish species from the game and using the lake habitat worksheet, indicate where they would fish for that species.

## **Fish Habitat**

Bluegill – Aquatic Plants

Walleye – Deep Pool

Black Crappie – Aquatic Plants, Brush Piles

Northern Pike – Aquatic Plants, Brush Piles

Common Carp – Aquatic Plants

Black Bullhead – Aquatic Plants, Brush Piles

Smallmouth Bass - Aquatic Plants, Brush Piles

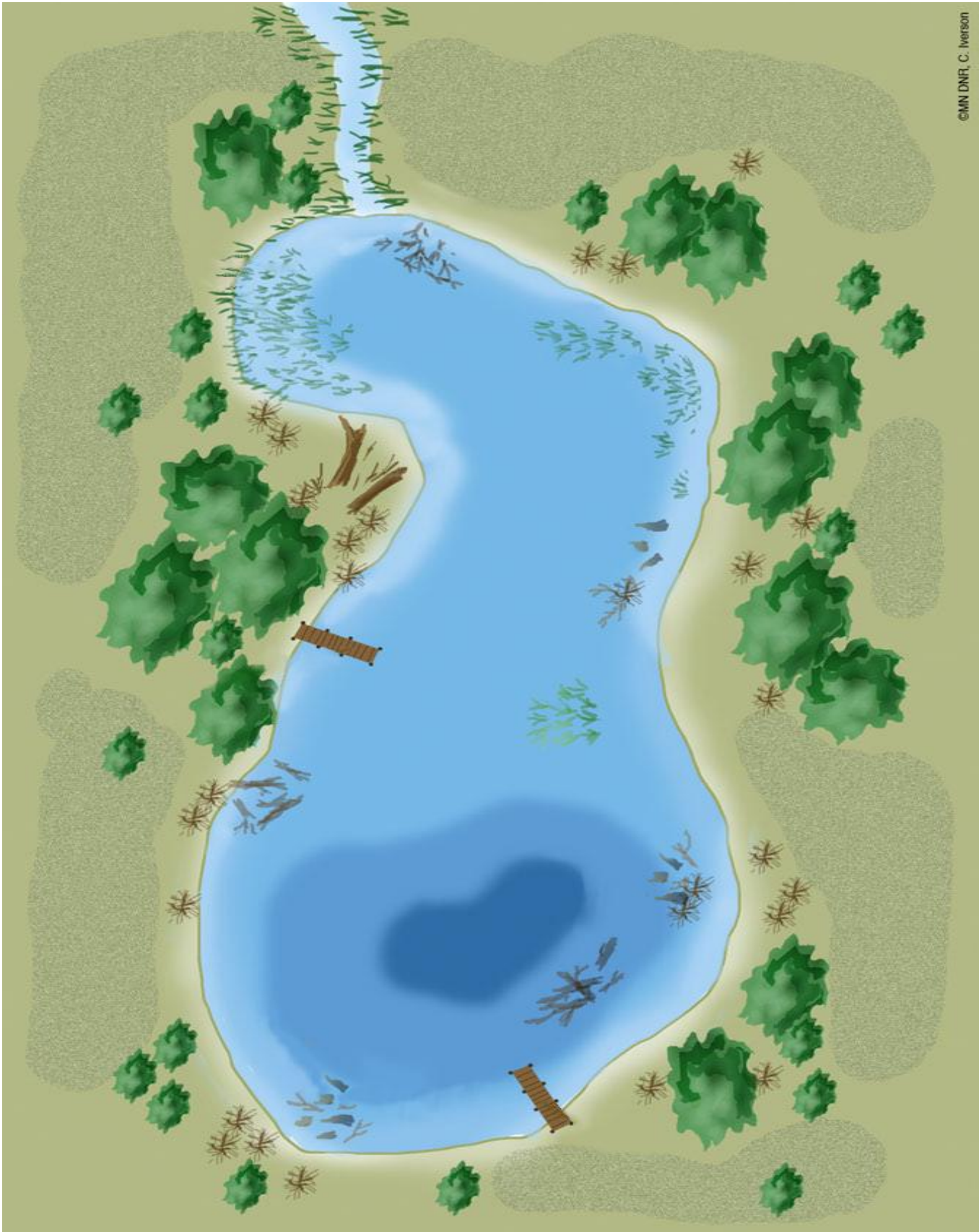
Largemouth Bass - Aquatic Plants, Brush Piles

Rainbow Trout – Deep Pool

Yellow Perch - Aquatic Plants

Channel Catfish – Deep Pool

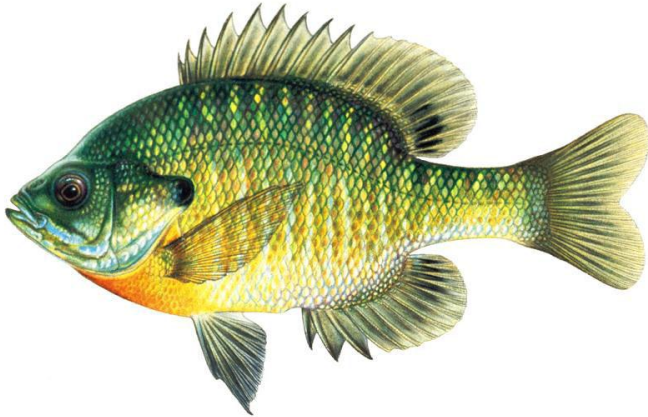
Freshwater Drum – Deep Pool



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**Bluegill**

*Lepomis macrochirus*



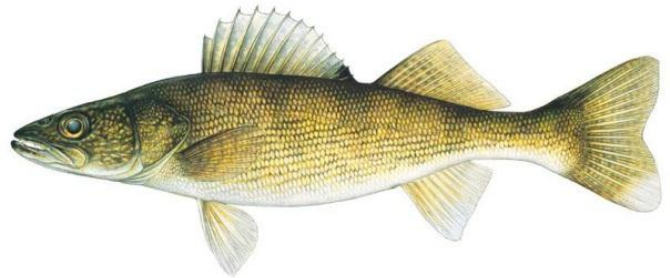
**Habitat:** in lakes and rivers, shallow water among aquatic plants

**Behavior:** stays in shade during the day; travels in loose schools

**Food:** aquatic insects, snails, zooplankton

**Walleye**

*Sander vitreum*



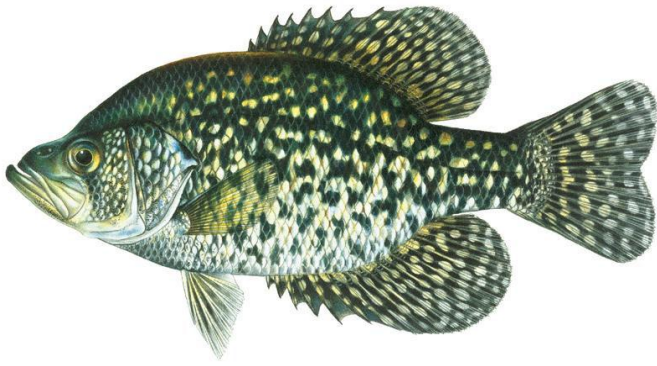
**Habitat:** lakes and rivers in deep water

**Behavior:** moves to shallower water on cloudy days or at night; travels in loose schools

**Food:** fish, crayfish

**Black Crappie**

*Poxomis nigromaculatus*



**Habitat:** lakes and rivers along aquatic plants and in the branches of fallen trees submerged woody debris

**Behavior:** gathers in loose groups around cover

**Food:** small fish, aquatic insects

**Northern Pike**

*Esox Lucius*

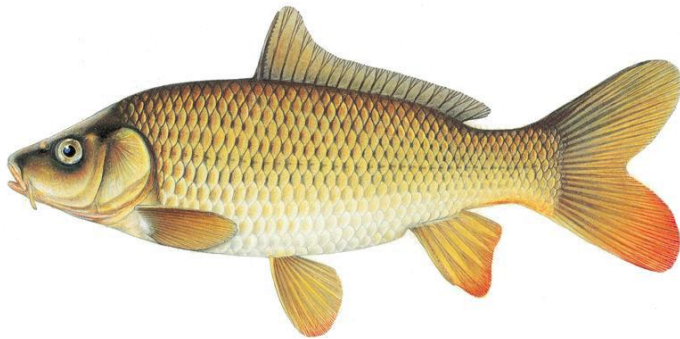


**Habitat:** lakes and rivers near aquatic plants

**Behavior:** hides from prey in brush or aquatic plants; very fast and aggressive when chasing prey fish

**Food:** smaller fish

**Common Carp**  
*Cyprinus carpio*



**Habitat:** lakes and rivers

**Behavior:** feeds on bottom among aquatic plants

**Food:** aquatic insects, crayfish, aquatic plants,

**Black Bullhead**  
*Ameiurus melas*

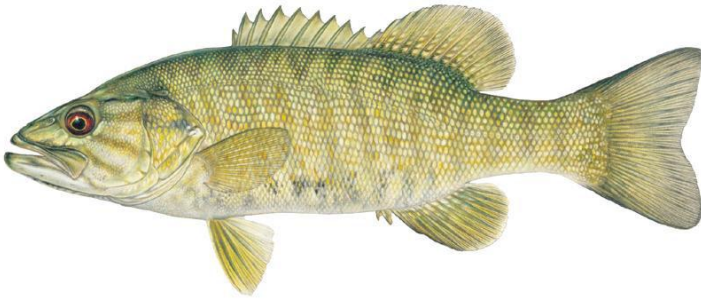


**Habitat:** lakes and rivers among aquatic plants or brush

**Behavior:** locates food using taste and smell; has tastebuds on barbels (whiskers) and on entire body

**Food:** fish, crayfish, aquatic plants and insects, frogs

**Smallmouth Bass**  
*Micropterus dolomieu*

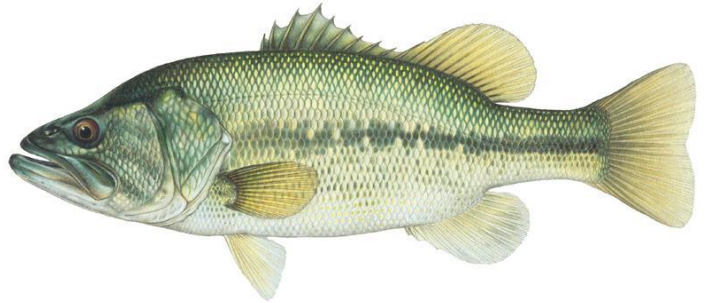


**Habitat:** lakes and rivers near rocks, brush and drop-offs

**Behavior:** ambush feeder; most active in morning and evening; highly territorial

**Food:** smaller fish, crayfish, leeches

**Largemouth Bass**  
*Micropterus salmoides*



**Habitat:** lakes and rivers in brush and aquatic plants

**Behavior:** ambushes prey from a hiding spot in brush or plants; highly territorial

**Food:** smaller fish, crayfish, frogs



**Rainbow Trout**  
*Oncorhynchus mykiss*

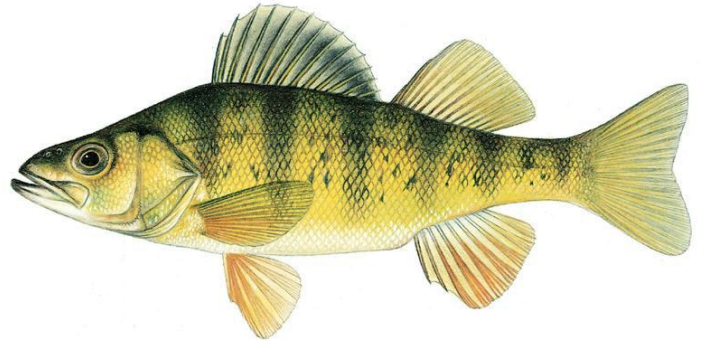


**Habitat:** Cold water streams with deep pools and undercut banks

**Behavior:** rests in pools and undercut banks; feeds on organisms swept downstream

**Food:** small fish and aquatic invertebrates

**Yellow Perch**  
*Perca flavescens*

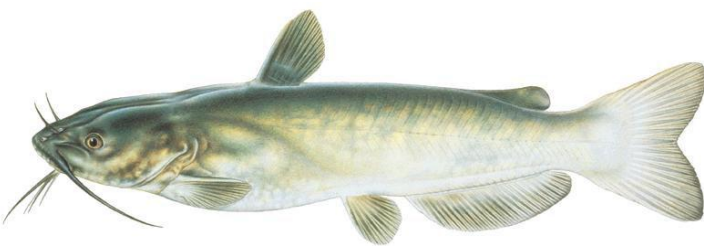


**Habitat:** lakes and rivers near rocks and aquatic plants

**Behavior:** Swims in large schools

**Food:** small fish, crayfish, zooplankton, aquatic invertebrates

**Channel Catfish**  
*Ictalurus punctatus*

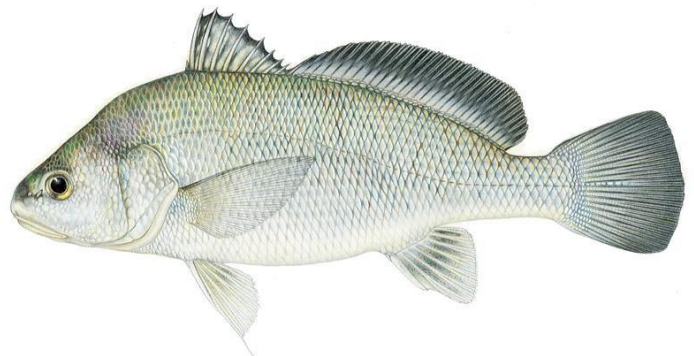


**Habitat:** lakes and rivers in undercut banks, pools, or among cover such as fallen trees or submerged woody debris

**Behavior:** locates food using taste and smell; has tastebuds on barbels (whiskers) and on entire body

**Food:** fish, crayfish, aquatic plants and insects, frogs

**Freshwater Drum**  
*Aplodinotus grunniens*



**Habitat:** lakes and rivers

**Behavior:** Stays near bottom and in pools; makes croaking or booming sound using its swim bladder

**Food:** aquatic invertebrates

