



## **Fashion a Fish**

Adapted from Aquatic Guide-8 1987, 1992 Council for Environmental Education. Reprinted with permission from Project WILD, Project WILD Aquatic Education Activity Guide. The complete Activity Guide can be obtained by attending a Project WILD workshop. For more information, contact the national Project WILD office at 301-493-5447.

### **Objectives**

#### **Participating young people and adults will:**

- 1. be able to classify fish according to body shape and coloration.**
- 2. describe adaptations of fish to their environments,**
- 3. describe how adaptations can help fish survive in their habitat,**
- 4. interpret the importance of adaptations in animals.**

### **Youth Development Objectives**

#### **Participating young people will:**

- 1. Enhance communication, presentation, working and relating to with others skills**
- 2. Enhance ability to acquire, analyze and use information.**
- 3. Enhance enjoyment of fishing and other outdoor recreation.**

### **Roles for Teen and Junior Leaders**

- 1. Assist with gathering and organizing materials**
- 2. Provide assistance and support to youth**

### **Potential Parental Involvement**

- 1. See “Roles for Teen and Junior Leaders” above.**

**Best Time:** after introduction to fish eg. Fish Prints

**Best Location:** indoors

**Time Required:** at least 30 minutes

### **Equipment/Materials**

Five cards for each adaptation from the masters provided: mouth, body shape, coloration, reproduction (only the body shape and coloration cards are needed for younger children); large drawing paper for each group of three to four students; markers

### **Safety Considerations**

### **References**

Caduto, M. J., 1985, *Pond and Brook: a Guide to Nature in Freshwater Environments*, Prentice Hall, Englewood Cliffs NJ ISBN 0-87451-509-2

Schmidt, B, 1991, *Sportfishing and Aquatic Resources Handbook*, pp 43-44, 48-55, 72-73, Kendall Hunt

## Evaluation Activities/Suggestions

Publishing, Dubuque IA  
ISBN 0-8403-6599-3

Schmidt, B, 1997, *Advanced Sportfishing and Aquatic Resources Handbook*, pp 99-101,107-108, Kendall Hunt Publishing, Dubuque IA. ISBN 0-7872-3544-x

## Lesson Outline

### Presentation

### Application

1. Assign students to draw a picture of a kind of animal that has a special adaptation--for example, long necks on giraffes for reaching high tree leaves to eat.
2. Conduct a class discussion on the different drawings made and the value of different kinds of adaptations to animals. Ask students to identify different kinds of adaptations in humans.
3. Divide the class into groups of three to four students each.
4. Give each group one of the adaptation cards from each of the four categories: one for coloration, mouth, body shape and reproduction. Also give each group a copy of the "Adaptations and How They Help" hand-out.
5. Ask the students to "fashion a fish" from the characteristics of the cards in the set they receive. Each group should:
  - \$ create a fish that includes all four characteristics on their cards,
  - \$ name the fish, and
  - \$ draw in and describe the habitat to which their particular fish is adapted.
6. When all groups have finished, have one person from each group stand and tell the rest of the class about his/her group's fish, and how it is adapted for survival.

## **Summary Activity**

### **Lesson Narrative**

Aquatic animals are the product of countless adaptations over long periods of time. These adaptations, for the most part, are features that increase the animals' likelihood of surviving in their habitat.

When a habitat changes, either slowly or catastrophically, the species of animals with adaptations that allow them many options are the ones most likely to survive. Some species have adapted to such a narrow range of habitat conditions that they are extremely vulnerable to change. They are over-specialized and are usually more susceptible than other animals to death or extinction.

In this activity, the student designs a kind of fish. They choose the adaptations that their fish will have. Each choice they make would actually take countless years to develop. As these adaptations become part of the fish's design, the fish becomes better suited to the habitat in which it lives. Because of the variety of conditions within each habitat, many different fish can live together and flourish. Some adaptations of fish are shown in the table that follows.


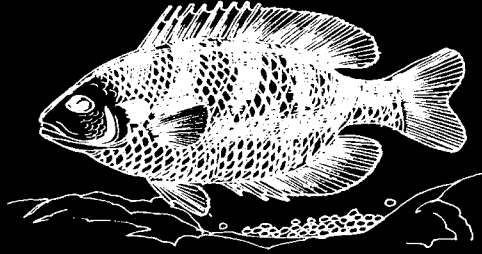
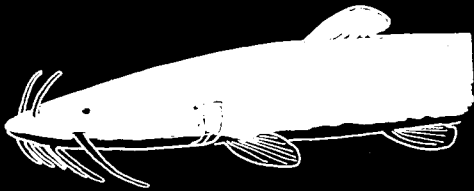
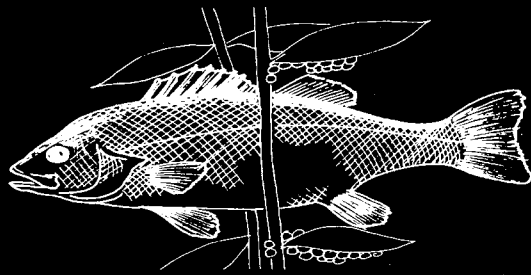
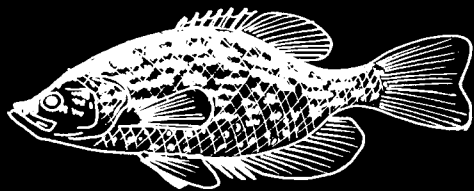
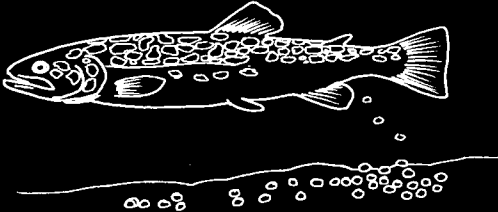
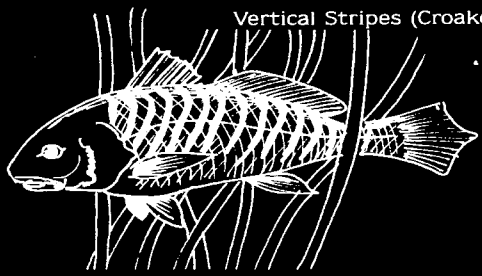
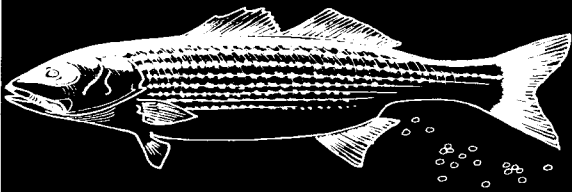
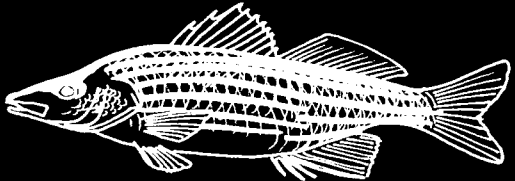
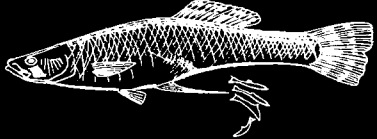
### **Exhibit or Sharing Suggestions**

Create displays of fish creations  
Write story about the fish created.


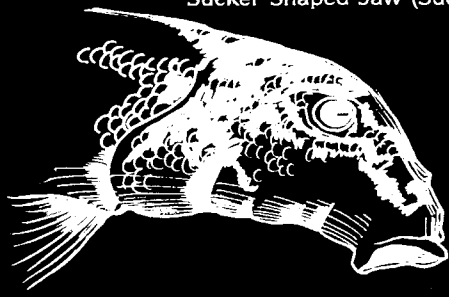
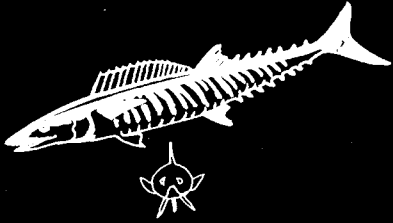

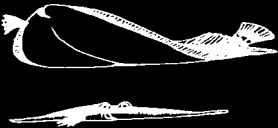
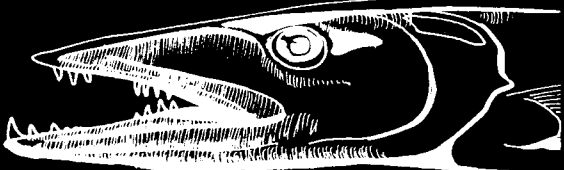
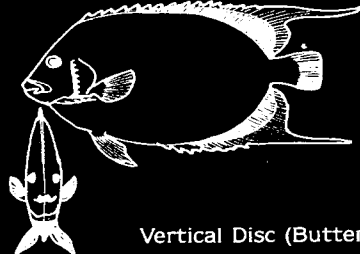

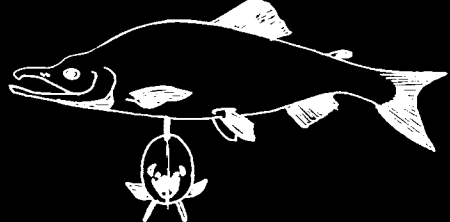
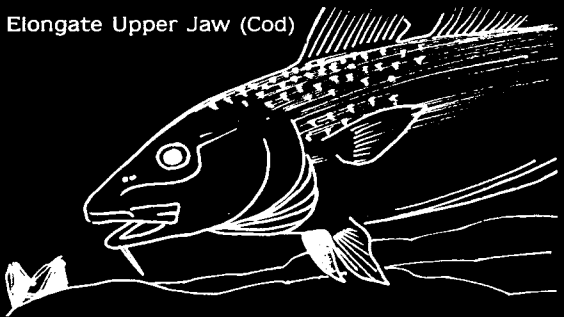
### **Community Service and AGiving Back@ Activities Extensions or Ways of Learning More**

### **Links to Other Programs**

Adaption Cards from Aquatic Project WILD

	<p>Light Colored Belly (Albacore)</p> <p>Coloration</p>	<p>Eggs Deposited in Nests (Blue Gill)</p>  <p>Reproduction</p>
	<p>Dark Upperside (Catfish)</p> <p>Coloration</p>	<p>Eggs Deposited on Vegetation (Yellow Perch)</p>  <p>Reproduction</p>
	<p>Mottled (Crappie)</p> <p>Coloration</p>	<p>Eggs Deposited on Bottom (Trout)</p>  <p>Reproduction</p>
	<p>Vertical Stripes (Croaker)</p> <p>Coloration</p>	<p>Free Floating Eggs (Striped Bass)</p>  <p>Reproduction</p>
	<p>Horizontal Stripes (Yellow Bass)</p> <p>Coloration</p>	<p>Live Birth (Gambusia)</p>  <p>Reproduction</p>

Adaption Cards from Aquatic Project WILD

<p>Shape</p>	 <p>Flat Bellied (Catfish)</p>	<p>Sucker Shaped Jaw (Sucker)</p>  <p>Mouth/Feeding</p>
<p>Shape</p>	<p>Torpedo Shape (Wahoo)</p> 	<p>Extremely Large Jaws (Grouper)</p>  <p>Mouth/Feeding</p>
<p>Shape</p>	<p>Horizontal Disc (Halibut)</p> 	<p>Elongate Lower Jaw (Barracuda)</p>  <p>Mouth/Feeding</p>
<p>Shape</p>	 <p>Vertical Disc (Butterfish)</p>	<p>Duckbill Jaws (Muskellunge)</p>  <p>Mouth/Feeding</p>
<p>Shape</p>	<p>Humpbacked (Sockeye)</p> 	<p>Elongate Upper Jaw (Cod)</p>  <p>Mouth/Feeding</p>