

4-H Baitcasting and Game Fish Identification

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School of Agriculture, Fisheries and Human Sciences
Cooperative Extension Program

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Revised 2016 by George Selden, Extension Specialist - Aquaculture/Fish Health, Department of Aquaculture and Fisheries, University of Arkansas at Pine Bluff. Original text by Eric Park, Ph.D., former Extension Fish Health Specialist, University of Arkansas at Pine Bluff.

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Purpose

Arkansas has more than 9,700 miles of streams and rivers and more than 300,000 ponds and lakes. This provides a great many opportunities to fish! In 2011, more than 555,000 people enjoyed fishing activities that generated nearly \$500 million for the Arkansas economy (USFWS, 2011).

Fishing is not only an activity that can be enjoyed for a lifetime but can also lead to a career. Whether as a biologist for the Arkansas Game and Fish Commission, a fisheries or aquaculture researcher, or a fishing guide, there are many opportunities available to turn an interest in fishing into lifetime employment.

The activities associated with the “4-H Baitcasting” contest are designed to generate excitement and interest in fishing and give participants an opportunity to display their casting skill. 4-H’ers will also have opportunities to ask questions and learn about educational and career opportunities in the fields of fisheries management and aquatic sciences.

The purpose of this activity is to create or foster an interest in fishing. This will be accomplished in two ways:

- By testing the participant’s ability to correctly identify some Arkansas game fish and some external anatomical parts.
 - ▷ Correctly identifying a fish is important in order to obey the law and avoid negative encounters with game wardens.
 - ▷ Fish external anatomy is essential for accurate fish identification for some species.
- By testing the participant’s skill at casting with a rod and reel, thus encouraging improved accuracy (and enjoyment through improved skill).
 - ▷ Placing a lure or bait where the target fish are likely to be leads to better fishing results. The ability to accurately cast is essential to accomplish this.

Educational Resources

- Fish identification:
 - ▷ *Beginners Fishing Guide*, Arkansas Game and Fish Commission (AGFC), <http://www.agfc.com/resources/publications/beginnersfishingguide.pdf>.
 - ▷ *Arkansas Sport Fish Identification Pocket Guide*, Arkansas Game and Fish Commission, is a free publication available from the AGFC by contacting them at 1-877-676-6963.
 - ▷ *Arkansas Fish*, also by the Arkansas Game and Fish Commission http://www.agfc.com/resources/Publications/ar_fish.pdf.
 - ▷ The website ***Take Me Fishing*** (<http://takemefishing.org/>) is an excellent resource for fishing tips and information on many fish species.

■ Fish anatomy:

- ▷ *Arkansas Sport Fish Identification Pocket Guide*, pages 2 and 3, Arkansas Game and Fish Commission, is a free publication available from the AGFC by contacting them at 1-877-676-6963.
- ▷ The level one 4-H sportfishing project activity guide, *Take the Bait*, pages 32 and 34.

■ Skill Contest - Baitcasting:

A three-eighths ounce practice plug will be used for the skill test portion of the event. For practice, a bolt (or similar object) of approximately three-eighths ounce can be attached to the line.

■ Baitcasting Target Design

Target Construction

Targets should be made out of standard ½-inch garden hose. Four pieces of hose are needed, and each should be fitted with a male and female adapter at each end, thus allowing each piece to connect to itself and form a circle. The lengths of hose required to make circles of 1', 2', 4' and 6' diameters are as follows:

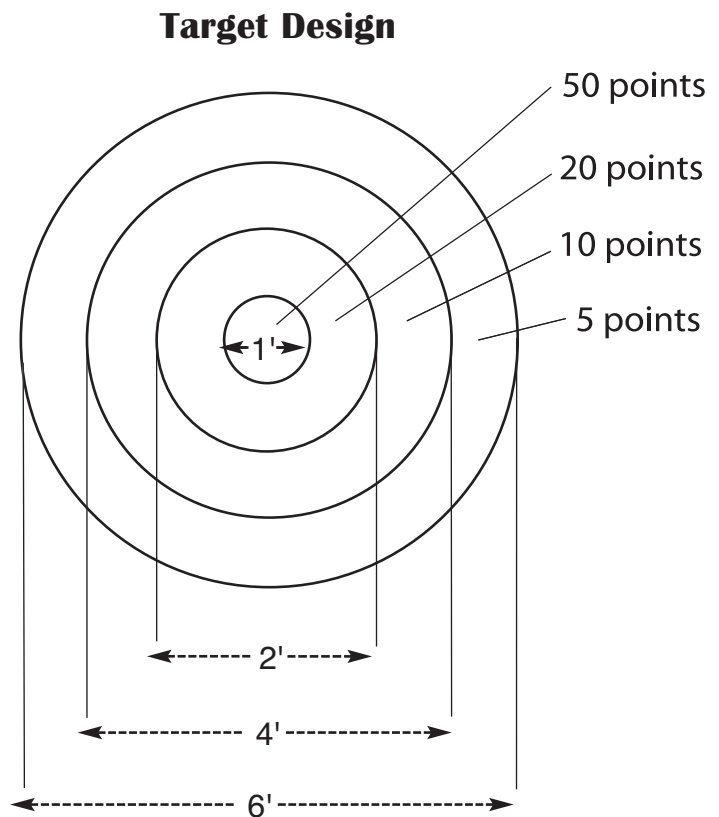
1' diameter circle = 3'2" hose length

2' diameter circle = 6'4" hose length

4' diameter circle = 12'8" hose length

6' diameter circle = 18'10" hose length

Other hose material such as hydraulic or fuel line hose would be acceptable, as long as the material can be formed into circles of the correct diameter.



Contest Rules

Fish Identification Knowledge

Contestants will be presented with pictures of some common Arkansas game fish. They will attempt to identify fish by matching a common name to a picture. Seniors will be presented with ten fish and juniors will be presented with five fish.

Fish pictures can be found in the free Arkansas Game and Fish Commission publication *Arkansas Sport Fish Identification Pocket Guide*. This guide can be obtained by calling the Arkansas Game and Fish Commission at 1-877-676-6963.

Five points will be awarded for each fish correctly identified. Seniors will be required to ID 10 fish (50 points possible). Juniors will be required to ID five fish (25 points possible).

Fish Anatomy Knowledge

Contestants will attempt to identify five parts of a fish worth five points each, for a total of 25 points. The five parts will be selected by the contest judge.

Fish anatomy pictures can be found on pages 4 and 5 in the free Arkansas Game and Fish Commission publication *Arkansas Sport Fish Identification Pocket Guide*. This guide can be obtained by calling the Arkansas Game and Fish Commission at 1-877-676-6963. Fish anatomy is also available in the 4-H publication *Take the Bait* on page 34.

Skill Testing – Baitcasting

Each participant is encouraged to furnish his/her own rod and reel with practice plug. The baitcasting contest should be conducted on level land. A three-eighths ounce practice plug will be used for the skill test portion of the event.

Station I Contestants will stand and cast to a target 35 feet away. This distance is measured from the outer ring to the casting line (see instructions for target construction on page 5). Each contestant will be allowed one practice cast followed by three casts that will be scored.

Station II Contestants will sit on a bucket, or other similar seat, approximately 24 inches high (to simulate sitting in a boat), and cast to a target 35 feet away. Again, the contestant will be allowed one practice cast followed by three casts that will be scored.

Scoring for each cast will be recorded from the point where the practice plug **first** makes contact with the ground.

Scoring will range from 50 points for a “bullseye” in the center ring to five points for the outer ring. A maximum of 150 points is possible from each station, for a combined total of 300 points. Target scores are illustrated on page 7.

4-H Baitcasting Score Sheet

Name _____ County _____

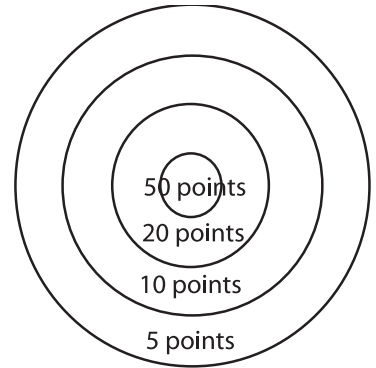
District: Ouachita Ozark Delta State Circle One: Junior Senior

Fish Identification (Max points possible: Senior-50, Junior-25)

Fish Anatomy (Max 25 points possible)

Skill Station: Standing (Max 50 points/cast = 150 points possible)

First cast _____
 Second cast _____
 Third cast _____
 Total Points _____



Skill Station: Sitting (Max 50 points/cast = 150 points possible)

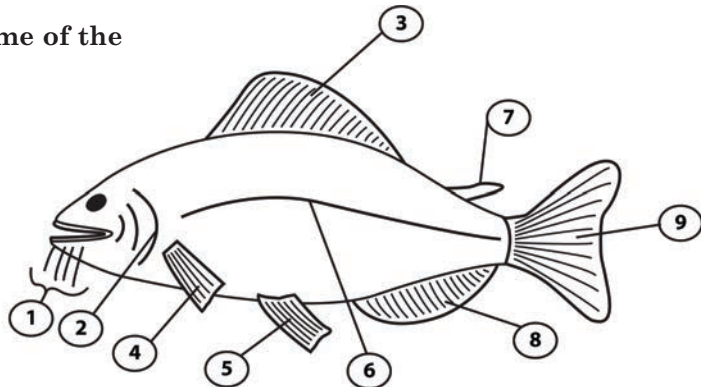
First cast _____
 Second cast _____
 Third cast _____
 Total Points _____

Grand Total _____

Fish Anatomy

(Five points/each = 25 total possible)

Fill in the appropriate letter for the name of the body part indicated by the number.



- | | | |
|---------------------------|-----------------|----------------|
| A. Operculum (gill cover) | D. Pectoral fin | G. Pelvic fin |
| B. Dorsal fin | E. Caudal fin | H. Adipose fin |
| C. Barbels | F. Lateral line | I. Anal fin |

Game Fish Identification

Common Fish Names

- A. Largemouth Bass
- B. Catfish
- C. Trout
- D. Smallmouth Buffalo

- E. Bluegill (or Bream)
- F. American Eel
- G. Crappie

- H. Striped Bass
- I. Paddlefish (or Spoonbill)
- J. Alligator Gar

5 points/each = 50 total points possible (Senior) or 25 total points possible (Junior)

Juniors are to ID fish #1-5. Seniors are to ID fish #1-10

1. ____



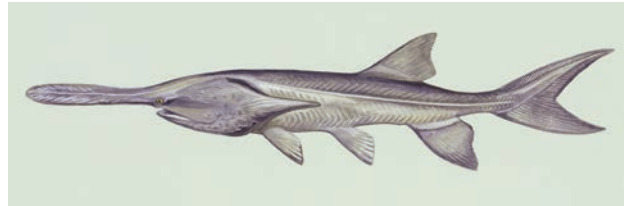
6. ____



2. ____



7. ____



3. ____



8. ____



4. ____



9. ____



5. ____



10. ____



All pictures courtesy of U.S. Fish and Wildlife Service, National Conservation Training Center – Publications and Training Materials, Creator Duane Raver.

■ Key

Fish Anatomy

- 1) C - Barbels
- 2) A - Operculum
- 3) B - Dorsal Fin
- 4) D - Pectoral Fin
- 5) G - Pelvic Fin
- 6) F - Lateral Line
- 7) H - Adipose Fin
- 8) I - Anal Fin
- 9) E - Caudal Fin

Game Fish Identification

- 1) Bream or Bluegill
- 2) Channel Catfish
- 3) Crappie
- 4) Largemouth Bass
- 5) Rainbow Trout
- 6) American Eel
- 7) Paddlefish
- 8) Alligator Gar
- 9) Smallmouth Buffalo
- 10) Striped Bass

WHAT IS 4-H WORK?

4-H work is that part of the program of the Cooperative Extension Service of the University of Arkansas which serves youth. Young people between the ages of 5 and 19 organize themselves into a 4-H club with their own officers, adult leaders, and local programs. The primary purpose of 4-H work is to develop in boys and girls leadership, initiative, citizenship, and character, and to teach them certain subject matter.



THE 4-H CLUB PLEDGE

I pledge:

my Head to clearer thinking,
my Heart to greater loyalty,
my Hands to larger service,
my Health to better living,
for my club, my community,
my country, and my world.

THE 4-H CLUB MOTTO

To Make the Best Better

THE 4-H CLUB EMBLEM

The 4-H emblem is a four-leaf clover with the letter "H" on each leaf.
The four "H's" stand for Head, Heart, Hands, and Health.

THE 4-H CLUB COLORS

GREEN: Nature's most common color is emblematic of springtime, life, and youth.

WHITE: Symbolizes purity and high ideals.

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