Note to the Sportfishing Project Helper

Imagine you were a project helper for one or more youth involved in completing Take the Bait; you know what a rewarding experience this important role is. As a helper you are in a perfect position to help youth grow and develop in positive ways as they learn about fishing and about themselves. You can nurture and cultivate their interest in sportfishing by guiding their planning, helping them complete the activities and recognizing them for a job well done.

Your Role

• Become familiar with the material in this activity guide and the Sportfishing Project Helper’s Guide.
• Support youth in their efforts to set goals and complete the activities.
• Date and initial the activities when the youth completes them.
• Help them know themselves, including their strengths and weaknesses.
• Incorporate the use of the experiential learning cycle in all learning experiences.

The Fishing for Adventure Sportfishing Series

This guide, Reel In the Fun, is the second in the series of three for youth that also includes Sportfishing 1, Take the Bait, and Sportfishing 3, Cast Into the Future. These three youth guides have been designed for grades 3–5, 6–8 and 9–12 respectively, but may be used by youth in any grade based on their fishing project skills, experience and interest.

Each activity is designed so the young person has an opportunity to learn by doing before being told or shown how. Your role as Helper is to “take a back seat” while the youth explores the activities and learns from the experiences, even when something doesn’t work the first time the way you might think that it should. You can help with the learning most effectively by listening as the young person considers the questions and draws conclusions. At times the activity may call for you to be a resource person for content or other ideas.

Parts of each activity support the experiential learning model endorsed by the 4-H Program.

• Each activity lists the project skill, the life skill to be practiced and a success indicator. The success indicator indicates what the youth will do to successfully complete the activity. In addition, in the Helper’s Guide you will find an evaluation piece for you to use to decide what the youth has learned from each activity.
• Baiting the Hook gives direction how to complete the activity.
• Casting Out – Youth share how they will use the project and life skill practiced in other parts of their lives.

Each activity may call for you to be a resource person for content or other ideas.

Supports youth in their efforts to set goals and complete the activities.

• Setting the Hook – Youth relate the experience to similar experiences in their own everyday experiences.

The Fishing for Adventure Sportfishing Series

• Casting Out – Youth share how they will use the project and life skill practiced in other parts of their lives.

Sportsfishing Helper’s Guide

This five-step model is used in each activity in this series. As you can see, the youth first attempt the activity. After the youth do as much as they can and answer the questions, you discuss the questions with them. What did they do? What was important about what they did? How does their accomplishment relate to their lives? And finally, how might they use the life and project skills practiced in the future? The more additional thought-provoking questions you ask and help them clarify and expand on their ideas, the richer the youths’ educational experiences will be.

• Setting the Hook – Youth relate the experience to similar experiences in their own everyday experiences.

This five-step model is used in each activity in this series.

1. Experience the activity; perform, do it.
2. Apply what was learned to a similar or different situation; practice.
3. Provide by discussing, looking at the experience; analyze, reflect.
4. Generalize to connect the experience to real-world examples.
5. Share results, reactions, observations publicly.

The Fishing for Adventure Sportfishing Series

The fourth publication in this series, the Sportfishing Helper’s Guide, provides additional learn-by-doing activities that can be adapted to 4-H sportfishing project groups, clubs or other groups. You’ll also find helpful hints about characteristics of youth, life skill development, teaching experientially, project meeting ideas and resources for organizing a community sportfishing program.

Acknowledgments

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Word Processing: Sue Teeters, MI.
Editors: Tom Zurcher, MI and Jennifer Geraci, CO.
Photographs: Kelly Nelson, CO and Tom Zurcher, MI.

Supports and Donors

American Sportfishing Association
Future Fisherman Foundation
Fly Logic, Inc.
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For more on sportfishing look for these other guides in this set.
If you are reading this you probably have completed Level 1 of the sportfishing curriculum. If this is your first year in the project, you might want to review the Level 1 manual *Take the Bait* to see if there are some skills you will need to practice to be able to successfully complete Level 2.

The activities are more challenging since you are now older, more experienced, more confident and more knowledgeable. You’ll expand your horizons, look beyond your personal interests, and explore how the issues of the environment and aquatic ecology affect fish habitat.

Here is some of what you will do:

- Tie fishing knots
- Practice different types of casting
- Make your own fishing tackle
- Study the different characteristics of fish
- Recognize the importance of water quality for fish habitat
- Understand why fishing regulations are important
- Prepare a fish meal for the family

Have fun and enjoy these activities as you learn more about sportfishing and develop your fishing skills. The door to the world of sportfishing is now open – come on through!

---

**Reel In the Fun
Project Guidelines**

Set your goals and record project highlights

- Do a minimum of six activities from the main chapter activities or Fishing Deeper optional activities each year and complete the *Reel in the Fun* program within three years
- Participate in a minimum of three of the learning experiences listed on the Planning Guide each year
- Practice and develop the life skills of relating to others, making decisions, learning to learn and communicating with others
- Increase your knowledge and skills in the sportfishing project

**Reel In the Fun
Achievement Program**

While you are having fun doing the activities, you will also be completing Level 2 of the sportfishing achievement program. The overall program consists of three levels. Be sure to record your goals, learning experiences and activities and you will be recognized for your good work.

**Your Project Helper**

You may have decided to have a different Project Helper for Level 2 than you had for Level 1. Perhaps your Level 1 helper moved away, was not able to volunteer as much time this year, or felt that you needed the support and challenge of a more knowledgeable person for Level 2. Regardless of who your project helper is, this person will be a very valuable resource as you participate in these activities. Your helper will assist you in planning, setting reasonable goals for yourself and guide you whenever you think you need a little extra help.

My Project Helper ___________________________
Phone # __________________________________
E-mail address _____________________________
### Fishing Experiences

List the date and place you went fishing and what you caught.

<table>
<thead>
<tr>
<th>Date</th>
<th>Place</th>
<th>Fish Caught</th>
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<tbody>
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</tbody>
</table>

### Learning Experiences

Complete at least three of these activities each year.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Year</th>
<th>Year</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Give a demonstration or speech</td>
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<td></td>
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<tr>
<td>Attend three fishing project meetings</td>
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<td></td>
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<tr>
<td>Help organize a part of a fishing project meeting</td>
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<td>Recruit a fishing project member</td>
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<tr>
<td>Exhibit at a fair</td>
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<tr>
<td>Interview an angler</td>
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<tr>
<td>Participate in a club fishing tournament</td>
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<tr>
<td>Help conduct a sportfishing skillathon</td>
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<tr>
<td>Participate on a sportfishing quiz bowl team</td>
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<tr>
<td>Help a younger project member</td>
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<tr>
<td>(Your own activity)</td>
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<td>(Your own activity)</td>
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</tbody>
</table>

### Sportfishing Project Highlights

Date and list the most fun and interesting things you did.

---

Place a picture of you, the angler, here.
Reel In the Fun
Achievement Program

Guidelines
1. Try to do at least six activities each year.
2. Complete at least 20 of the Reel In the Fun and Fishing Deeper activities within three years to complete this achievement program and receive the completion certificate.
3. Ask your project helper to initial the activities as you complete them.

Reel In the Fun Activities
Complete at least 10 of these activities.

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Activity</th>
<th>Date Completed</th>
<th>Helper’s Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chapter 1</strong></td>
<td><strong>Angling Skills</strong></td>
<td></td>
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<tr>
<td>Fishing On Line</td>
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<tr>
<td>A Different Spin</td>
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<tr>
<td>Turning the Crank</td>
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<td>“Knot” Too Hard</td>
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<td><strong>Chapter 2</strong></td>
<td><strong>People and Fish</strong></td>
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<td>A Fine Kettle of Fish</td>
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<td>Clean Up the Litterbug</td>
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<td>Fishing by the Rules</td>
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<td><strong>Chapter 3</strong></td>
<td><strong>Tackle Crafting</strong></td>
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<td>Flashy and Fun</td>
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<td>Making a Fly Wallet</td>
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<td>The Woolly Bugger</td>
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<td><strong>Chapter 4</strong></td>
<td><strong>Aquatic Ecology</strong></td>
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<td>Trapped in a Bottle</td>
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<td>Fishy Smells Something</td>
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<td>A Fish by Design</td>
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Fishing Deeper
Select any of the Fishing Deeper activities. Record the page number of the activity you complete and discuss with your helper.

<table>
<thead>
<tr>
<th>Page #</th>
<th>Activity</th>
<th>Date Completed</th>
<th>Helper’s Initials</th>
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Write your own activity here.

Date_________________ Helper’s Initials_________________

Write your own activity here.

Date_________________ Helper’s Initials_________________

Write your own activity here.

Date_________________ Helper’s Initials_________________

Write your own activity here.

Date_________________ Helper’s Initials_________________

Completion Certificate
I certify that

__________________________________________________________

has completed all requirements of the Reel In the Fun
Achievement Program in the Sportfishing Adventure Series.

Helper’s Signature________________________________________________________ Date___________________
Fishing On Line

Do you have access to the Internet? Do you know how to search for information on the World Wide Web? Do you have someone who can help you if you don’t have access or don’t know how? This activity will be your opportunity to learn or sharpen your computer skills, while learning more about fish and fishing.

Baiting the Hook

List five fishing web sites and the type of information found on each. Print five pieces of information that interests you. Work with other group members to put together a notebook of the printed information. Everyone, including those who don’t have access to the Internet, can then use this notebook. Make a display poster of fishing resources on the web. This poster can be used in presentations and displayed at fairs. Be prepared, there are thousands of potential sites that have something to do with fishing!

Sharing Fish Tales (With your helper)

Casting Out (Share what you did)
What kind of interesting web sites did you find?
Who sponsored the web sites? Fishing associations, manufactures of fishing equipment, fishing equipment suppliers, schools and universities? What others?

Working the Lure (Process what’s important)
How will the information you printed help others learn about fishing?

Setting the Hook (Generalize to your life)
If you need other information about a topic that interests you, how would you find it?

Landing the Fish (Apply what you learned)
What would you do if something you found on the web didn’t seem to be in line with information you already knew to be correct?

Fish Talk Words

• Internet

The Internet

The Internet has become a valuable and popular source for all kinds of information. Individuals, organization, universities, clubs, companies and many other kinds of groups have their own web sites or make information available through some other means on the web. The “up side” of the web is that it makes it possible to send new information rapidly throughout the world. Information is available to anyone with a computer and Internet connection. People with similar interests can communicate with each other. The “down side” of the web includes the vast amount of information to wade through and the wide range of quality of the information on the web.

Acknowledgments: Written by Tom Zurcher.
A Different Spin

Whether you now use a cane pole, spinning rod, bait-cast rod or fly rod, most of the time you’ll find that using a spinning rod and reel will be what you’ll choose in many fishing situations. Because spinning rods and reels allow for more line to be quickly peeled off the reel, you can cast longer distances. You can also use ultralight tackle with lines testing about four to six pounds to heavy surf rods that handle lines in the 25 to 40 pound class. In this activity you’ll practice your casting technique.

Casting with a spinning outfit takes practice.

Practice with a plastic casting plug until you feel comfortable. Test yourself by seeing how many times you can hit a target at various distances. Ask a friend to also see how many targets he/she can hit. When you feel that you are an “expert” using the overhead cast described in Angling Tips, try casting as if you are under a tree or other more challenging situations. Record your results. Try to find targets like milk cartons or something a little larger to cast into.

My Casting Record

<table>
<thead>
<tr>
<th>Cast</th>
<th>Target 10’</th>
<th>Target 15’</th>
<th>Target 25’</th>
<th>Target 35’</th>
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</table>

A Different Spin

Fishing Project Skill: Casting using a spinning rod and reel properly
Life Skill: Developing confidence
Success Indicator: Completes the spin rod and reel casting record.

Baiting the Hook

Practice with a plastic casting plug until you feel comfortable. Test yourself by seeing how many times you can hit a target at various distances. Ask a friend to also see how many targets he/she can hit. When you feel that you are an “expert” using the overhead cast described in Angling Tips, try casting as if you are under a tree or other more challenging situations. Record your results. Try to find targets like milk cartons or something a little larger to cast into.

Spinning Reel Parts

A. Antireverse Lever  F. Reel Body
B. Bail  G. Reel Handle
C. Drag Adjustment  H. Reel Seat
D. Line Roller  I. Spool Release
E. Line Spool
Using a Spinning Rod

Spinning reels are mounted underneath the rod and near the middle of the handle or grip. The rod guides closest to the reel are oversized compared to those on a spin cast or casting rod. Since the line comes off the reel in a spiral, the larger guides gather and direct the line without adding too much drag or friction. This permits longer casts.

Spinning reels feature a fixed spool, usually with an adjustable drag that allows the spool to turn under pressure. The bail revolves around the spool that moves forward and back as the reel is turned to wind line evenly on the spool.

Choice of reel and rod hands is a matter of personal preference, but most anglers prefer to hold the rod in their dominant hand and reel with their non-dominant hand. By simply unscrewing the handle and screwing it into the other side of the reel you can easily and quickly convert nearly all modern spinning reels.

**Overhand Cast.** Make sure the area around you is clear and that there are no overhead wires or other obstacles. Face your target squarely. Grasp the rod handle so the foot of the reel is centered between the middle and ring fingers on your casting hand. With the casting plug or light sinker about four to six inches from the rod tip, hook the line with the tip of the index finger of your rod hand and open the bail of the reel. Point the rod at the target, raise it sharply to just beyond vertical (about 2 o’clock) and immediately snap it forward, releasing the line by pointing your finger as the lure passes overhead.

The lure or casting plug goes where it was pointed at the instant of the release. If it goes very high, the release was too early. If it hits the ground hard near you, you released it too late. A perfect release will have the plug going nearly straight toward the target at a low trajectory.

*Practice, practice, practice! Although it may feel awkward at first, spinning tackle is easily mastered once the feel of a well-timed cast is learned.*

**Fish Talk Words**
- Spinning reel
- Rod guides
- Spinning rod

**Fish Tales**
- 1. Write the steps to casting a spinning rod that you would use to teach a new angler.
- 2. Perform an underhand or flip cast. Start with the lure or plug a bit further from the rod tip with the rod pointing at the target. Bend the rod hand wrist downward fairly quickly, and then flick it upward and outward toward the target without pausing.
- 3. Rotate the overhead cast 90 degrees and perform a sidearm cast. Make sure you have an adequate safety zone around you before attempting this cast. Precise release points in the cast are important to good placement of the cast on target.
Baiting the Hook

Before you begin practice casting using a bait casting reel, identify the parts of the reel. Now practice your technique. Describe what you did to improve your technique and accuracy. When you feel comfortable, help another person learn how to use a bait-casting reel.

Tackle Box

Materials Needed

• Bait casting rod and reel
• Practice plug
• Casting targets
• Safety glasses or sun glasses
• Line clippers
• Swivel snaps (size 7)

Sharing Fish Tales

Casting Out
What part of bait casting was easiest for you?

What part of bait casting was hardest for you?

Working the Lure
How does a backlash occur?

What did you learn as you did this activity?

Landing the Fish
Under what fishing conditions would you be most likely to use a bait-casting reel?

Fish Talk Words

• Pendulum
• Inertia
• Flip
• Pitch
• Arbor
• Pawl

I really like my baitcasting reel.

How I Improved My Technique and Accuracy

Acknowledgment: Revised by Ronald A. Howard, Jr.
**Bait Casting**

**Casting Reels.** Casting reels have a revolving spool. The revolving spoon is great for long casts because the rotating spool literally throws the line toward the lure once its inertia builds up. Bait casting reels can handle stronger, heavier lines and a wide range of lure weights. This makes them an excellent choice for anglers fishing for bass, pike or musky and many inshore saltwater fish.

**Controlling the Speed.** The trick to bait casting is learning to control the rotation of the spool through the cast with your thumb. Too much pressure results in short casts with splashy entries into the water. Too little pressure may allow the spool to throw more line than the lure can keep tight. The result is a backlash or “bird’s nest” - a tangled mess!

Baitcasting reels are equipped with a spool-tensioning device and/or magnetic or centrifugal brakes that help to control the spool. Some can be set so tightly that line will hardly come off the spool or so loosely that it will over-run very easily. Learning to use the device is very important, particularly for beginning bait casters. Every time a lure is changed, making an adjustment in the spool tension aids the caster. Eventually you can set it very lightly, just like the experts!

For starters, try setting the tension so line runs smoothly but fairly slowly off the spool with no thumb tension. Loosen the tension as you are able to control the line better with your thumb.

**The Overhead Cast**

**Hand placement.** Grasp the rod with your forefinger extended and comfortably around the handle trigger (on those rods that have one). Place your thumb on the spool and turn your hand so your palm faces down and the reel handles are up. Hold the grip firmly but relaxed. Press the free spool release and rest your thumb on the spooled line. Find a spot that is comfortable to you. Thumb pressure will be relaxed as the cast begins and increased as it nears completion.

1. **Aim.** Face the target with the foot on your casting hand slightly forward of the opposite foot. Stand comfortably. With the rod tip at about eye level and the lure hanging a few inches from the rod tip, look directly at your casting target while facing it squarely. Your casting arm should be extended slightly away from the body for free movement. The cast will be one continuous motion with several parts or actions.

2. **Back Cast.** Start the back cast by raising the rod tip sharply, like you were lifting a hammer to hit a nail, until it is vertical or slightly past vertical. Your elbow should be about eye level.

3. **Stop and Cast.** Stop the rod abruptly at approximately vertical. The weight of the lure or casting plug will load the rod, putting a casting bend in it. This provides the casting power. Immediately snap your wrist and forearm forward toward the target, relaxing the pressure with your thumb at about half way between vertical and horizontal. A good release will cause the lure to arc out toward your target. Maintain light pressure on the spool throughout the cast, increasing the pressure as the lure slows or reaches the impact area. Slight over-runs on the spool are common when you are learning, so do not be too frustrated if you have some difficulty avoiding them at first.

4. **Stop.** Stop the rod at the original starting position. As the lure or plug nears the target, increase thumb pressure, stopping the spool as the lure or casting plug impacts. As you get better with this type of tackle, you will be able to use less mechanical tension, less...
Have you ever caught a fish using a fly? If you have you probably have learned the techniques needed to cast a fly using a fly rod. In this activity you’ll learn how to grip, pick up, position the rod, back cast, and stop and release the line on the forward cast. Sound easy? Fly fishing anglers can spend years developing their techniques. As you develop your skills you will soon realize that fly fishing is a dance with the rod and a heavy line—part technique, part rhythm and part feeling the movement of the rod and line. Have fun!

Invite a friend, family member or your helper to do this activity with you. Before you begin seriously practicing, record below how well you can perform each aspect of fly-casting. Now practice each of these techniques. When you feel that you are ready see how many targets at 15’, 20’, 25’, 30’ and 35’ you can place your “fly” within one foot.

### Baiting the Hook

### Tackle Box

**Materials Needed**
- One fly rod (8 to 9 feet) and reel matched to a 5 or 6 weight DT or WF line
- 7 to 9 foot leader attached to a nail knotted permanent leader butt, twine or yarn
- Targets

### My Fly Casting Score Card

<table>
<thead>
<tr>
<th>Before Practice</th>
<th>After Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grip 1 2 3</td>
<td>Grip 1 2 3</td>
</tr>
<tr>
<td>Pick Up 1 2 3</td>
<td>Pick Up 1 2 3</td>
</tr>
<tr>
<td>Positioning Rod 1 2 3</td>
<td>Positioning Rod 1 2 3</td>
</tr>
<tr>
<td>Back Cast 1 2 3</td>
<td>Back Cast 1 2 3</td>
</tr>
<tr>
<td>Stop 1 2 3</td>
<td>Stop 1 2 3</td>
</tr>
<tr>
<td>Forward Cast 1 2 3</td>
<td>Forward Cast 1 2 3</td>
</tr>
<tr>
<td>Line Release 1 2 3</td>
<td>Line Release 1 2 3</td>
</tr>
<tr>
<td>Hitting Target 1 2 3</td>
<td>Hitting Target 1 2 3</td>
</tr>
</tbody>
</table>

1 - Outstanding 2 - Pretty good 3 - Need practice

### Accuracy Score Card

<table>
<thead>
<tr>
<th>Cast Distance</th>
<th>Number of Casts (out of 10 within one foot of target)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15’</td>
<td></td>
</tr>
<tr>
<td>20’</td>
<td></td>
</tr>
<tr>
<td>25’</td>
<td></td>
</tr>
<tr>
<td>30’</td>
<td></td>
</tr>
<tr>
<td>35’</td>
<td></td>
</tr>
</tbody>
</table>

### Fish Talk Words

- Nail knot
- Surgeon’s knot
- Improved clinch knot
- Blood knot
- Back cast
- Forward cast
- Roll cast

### Facts

Calm, smooth water surfaces act like a mirror to fish. They can see well only in a cone above their eyes. Objects outside the cone are covered by a mirror-like reflection. On the other hand, if you are inside the cone of vision, your image may look like it is hovering over the fish.

### Success Indicator:

Demonstrates proper fly-casting techniques.

### Fishing Project Skill:

Casting a fly

### Life Skill:

Problem solving (hand-eye coordination)
Casting Out
How did you cast a fly?
What part of fly-casting was easiest for you?
How is fly casting different from other types of casting?

Working the Lure
With the fly weighing almost nothing, what carries it to the fish?
What would happen if you bent your wrist while fly-casting?
Why is it important to practice a new skill?

Setting the Hook
How do the problem-solving skills needed to successfully cast a fly apply to other things you need to learn in your life?

Landing the Fish
What parts of fly casting do you need to continue improving?

Casting a Fly
1. If your fly outfit is already set up, attach a piece of yarn or twine to the leader with an improved clinch knot. If the leader is not attached to the fly line, attach a butt section to the line with either a loop-to-loop connection, needle knot or a nail knot. Use a similar connection, blood knot or double surgeon’s knot to attach the remainder of the leader.
2. Select a location with about 50 feet of open area both behind and in front of you where people will not be walking. Remember, fly casting is different from other types of casting. In this case, a heavy line is used to throw a light lure. As a result, controlling the line with the rod is the key to good casting.
3. Start with about 20-30 feet of line outside the rod tip. With your dominant hand, grasp the handle of your rod with the thumb on top of the grip and your fingers holding the rod.
4. Stand square to the direction you intend to cast with the rod pointing straight toward the line and your upper arm held against the side of your chest. Without moving the elbow of the casting hand accelerate the rod sharply until it is pointing straight up. Stop abruptly at that point. When you feel the line pulling on the rod (when the line straightens), snap the casting arm forward to about the 2 o’clock position. As the line straightens on the forward cast, follow it down with the rod. You may false cast by starting back to the upright position as soon as the line straightens on the forward cast. Try several false casts before laying the line down.
5. If the line comes in low and in a wide loop, you are waiting a bit too long to change directions. If you hear the yarn or twine pop like a whip, you are starting the cast in the opposite direction a split second too soon. While the motion is like cracking a whip, you do not want to pop leaders by having them go supersonic.
6. Once the basic casting motion and feel are learned, pull a bit more line off the reel and grasp the line forward of the rod handle with your off hand. As you lift for the back cast, pull down on the line with your hand. This adds speed to the line and makes the back cast more powerful. Let the hand drift upward with the line as it pulls behind you. As you start the line forward, pull down again to add speed to the line. Once you have mastered these pulls or “hauls” as they are called, you can learn to feed line on the cast. To do that, simply release the line held in the off hand as you feel the line being cast pulling on your hand. It will be carried out with the line free of the rod to lengthen your cast.

Fishing Deeper
1. Video tape your casting technique and discuss what you observe with your helper.
2. Make a video on how to cast a fly. Share your production with your fishing group or family.
3. Find someone who fly fishes and talk to them about your interest in this technique. See what kinds of fish are available and what kinds of flies and tackle are needed. Share what you learn with your helper.
4. Demonstrate the roll cast. Cast the fly on the water. Life the rod and let the line fall toward you until it is hanging slightly behind the rod. As it passes behind the rod, snap the rod tip downward. The line should pick up, roll over in the air and land back where you started.