Oregon 4-H
Aquatic Ecology and Sportfishing Advancement Program

Oregon 4-H Advancement Programs
An introduction for leaders, parents, and members

4-H advancement programs consist of a series of steps that provide a framework for progressive learning within a specific project area. Advancement programs encourage 4-H members to learn at their own speed based on their interests and abilities. Advancement programs are self-paced, and age- and skill-level appropriate. Advancement programs can also be a tremendous help to members as they set their goals each year. In addition, advancement programs are useful to Junior Leaders and more experienced 4-H members who wish to work with younger or less experienced members.

Benefits of 4-H advancement programs

- Make projects more interesting
- Assist members in setting and achieving goals
- Encourage self-paced learning
- Help members learn more about their projects
- Encourage age-appropriate skill level building
- Provide new, enjoyable experiences
- Help prepare members for participation in certain activities and events
- Provide recognition for work done well
- Provide incentive to members to stay in a project over a longer period of time

Life skill development and 4-H advancement programs

Participating in 4-H advancement programs is instrumental in the development of life skills, a major emphasis of 4-H programming. Young people who participate in 4-H are not just gaining knowledge about their project area, they also develop skills they will use throughout their life. Specifically, the 4-H advancement programs are designed to develop life skills in:
- Learning to learn
- Making decisions
• Keeping records
• Planning and organizing
• Achieving goals
• Completing a project or task
• Communicating
• Being responsible
• Developing self-esteem

**About the advancement program steps**

The advancement steps are written to provide a learning sequence for all members. Although all members should start with Step 1, the advancement program is designed so a 4-H member may advance as fast as he or she desires based on interest, effort, and ability. A fourth- or fifth-grade 4-H member may take 2 or 3 years to complete Step 1; an eighth- or ninth-grade member may complete one or two steps in a year.

Members should work on one step at a time. There are, however, times when a member may accomplish an activity in another step before completing the step on which he or she is working. Recognize that if there is considerable difference in the level of skill within a group, members may be working on several levels of the program at one time. Much of the information leaders and members need to complete advancement steps can be found in project materials. In advanced steps, members will need to refer to other sources.

**Recording progress in the advancement program**

Leaders should encourage members to keep the advancement program with their records. Doing so allows leaders and members to evaluate the 4-H experience, review progress, and establish goals for the future. Upon completing an activity, the member fills in the date and has the leader initial the record.

**Reviewing advancement progress**

Once a member has completed an advancement step, the leader should then arrange for a review of the experience. This review often is conducted through an interview process.

If it is feasible, the interview can be conducted by someone other than the leader. It is a valuable experience for members to be interviewed by others who have expertise in a particular area. Such interviews help prepare members for job interviews and other life experiences.

Leaders also may want to arrange for an advancement chairperson or committee to review each member soon after he or she has completed the step requirements. The review is also an excellent opportunity to involve parents in club activities. Several parents can serve on the committee and two or three of them can conduct the interviews. The interviewers should be familiar with the 4-H program, its objectives, and the project area.

The advancement chairperson or committee should approve the advancement only when they are satisfied the member is ready to continue to the next step.
How to use the advancement program

The advancement program should be presented at the beginning of the 4-H year.

Review what was done last year

Before deciding on specific things to include in the club program, leaders should review what the members and club did previously. A review will allow discussion on the following questions:
- “What did we do?”
- “What did we like?”
- “What needs improvement or expansion?”
- “Was everyone involved?”

Review the members’ present interests

Encourage members and parents to express their interests, needs, and goals. This allows them to feel important and to be committed to the final club program.

Share county/statewide special programs

Tell your members about activities available to them through your county or the state. Share your special interests with members and parents. This allows members and parents to learn about new opportunities and helps determine whether the club should set specific goals related to them.

Develop your program

If your group of 4-H participants is small, all the members should be involved in determining the group goals for the year. If the group is large, a special committee may identify the goals for the year’s program. Base your goals on the current members’ range of grades, levels of achievement, and interests. Design the program to meet the needs and interests of each member. Establish goals to meet the interests and needs of youth, to allow individual achievement for each member, and to be within range of accomplishment for each member.

If your club has a wide range of grades, interests, and abilities, divide the club into small groups to work with a Junior Leader. This enhances the learning and satisfaction of all members.

Recognizing advancement

The National 4-H Recognition Model (below) shows five different ways to recognize 4-H members.

1. Participation

This type of recognition program emphasizes the importance of acknowledging young people who have been involved in 4-H educational experiences. For some youth, participation in a 4-H learning experience is an accomplishment.

2. Progress toward self-set goals

Parents and other adults can help youth set realistic goals. Recognition for progress toward self-set goals, no matter how small, is an integral part of this type of recognition.
3. Achievement of standards of excellence

Standards of excellence are established by experts in a given area. By measuring personal progress against standards of excellence, youth can gain insight into their own efforts and abilities.

4. Peer competition

Peer competition is a part of the model for recognition. This type of recognition subjectively identifies, in a concrete time and place, the best team or individual. It is a strong motivator for some youth but is inappropriate for youth under age eight.

5. Cooperation

Learning and working together promotes high achievement. Cooperation may take advantage of all the skills represented in the group, as well as the process by which the group approaches the learning task/goal. Everyone is rewarded.

Advancement certificates

The 4-H Advancement Program is an excellent way to promote and recognize members’ efforts in progressing toward self-set goals and achieving standards of excellence through learning. Advancement certificates that are customized for each project area are available from your local OSU Extension office. Contact a county 4-H staff member to request advancement certificates in your project area.

Earning an advancement certificate deserves recognition. When members have completed a level of advancement, recognize it. This could be done at an achievement meeting or other community event. Extension 4-H staff members also can help leaders prepare pieces for newspaper and radio releases on the members’ achievement.

This section written by Mary Arnold, Extension 4-H youth development specialist, Oregon State University.
Step 1  On the Bank

This is the first step in the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. When you have completed 10 skill options and 3 personal development options, you have completed Step 1.

Skill Options

1. Clean a fish you have caught.
2. Identify a clinch knot from a group of four knots. Tie a clinch knot.
3. Identify a barbed hook from a barbless hook. De-barb a hook.
4. Explain a lake food chain or web. Describe what would happen to the chain if certain species were missing or in short supply.
5. Rig up a spinning rod. Explain the different parts and what you can catch with the set-up.
6. Identify a Palomar knot from a group of four knots. Tie a Palomar knot.
7. Build a one-piece rod or pole from a kit. Describe to your leader what you learned from this experience.
8. Collect, illustrate, or photograph two aquatic insects. Identify and share them with your club, and discuss why they are important to fish.
9. Cast a spin cast for your leader.
10. Demonstrate how to release a hooked fish.
11. Build a spinner or a lure and use it to fish.
12. During a club meeting, role-play asking a private owner for permission to fish on his or her land.
13. Explain when and why you need a fishing license.

Personal Development Options

Fill in options selected from page 12 of this advancement program.

1. Give a demonstration to your club.
2. ______________________________________________________
3. ______________________________________________________

________________________________________________________

Name of club member Age

has completed all requirements for Step 1 of the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program.

Leader Club Advancement chairperson or committee Date
Step 2  
Hook, Line, and Sinker

This is the second step in the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. When you have completed 10 skill options and 3 personal development options, you have completed Step 2.

**Skill Options**

1. Prepare a meal using a fish you have caught.  
2. Identify a surgeon’s knot from a group of four knots. Tie a surgeon’s knot.  
3. Cast a fly line 40 feet into a 32-inch circle 3 times out of 10.  
4. Identify some non-game fish in your area. Explain how one species arrived and how it is affecting the aquatic environment.  
5. Identify a blood knot from a group of four knots. Tie a blood knot.  
6. Make a wading staff and use it on a fishing trip.  
7. Dig a dozen fishing worms and share them with another member or friend on a fishing trip.  
8. On a fishing trip, net a fish for another member or friend.  
9. Demonstrate the proper care and handling of a fish that is caught and released or eaten.  
10. Identify, illustrate, and color three local species of fish.  
11. Explain two reasons to practice catch and release.  
12. Discuss the water cycle with your club or create a poster showing five different areas in which rain water can be collected, stored, or moved through the cycle.  
13. Describe two important structures in the water that fish use to hide or rest.  
14. Describe where you are most likely to find fish on a hot day in a pond or stream.  
15. Define an adipose fin and tell your leader why this fin is clipped on hatchery raised fish.  
16. Visit a fish hatchery with your family or club and find out what they do and why.

**Personal Development Options**

*Fill in options selected from page 12 of this advancement program.*

1.  
2.  
3.  

_________________________  
Name of club member  
Age

has completed all requirements for Step 2 of the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program.

_________________________  
Leader

_________________________  
Club Advancement chairperson or committee  
Date
Fish On!

This is the third step in the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. When you have completed 10 skill options and 3 personal development options, you have completed Step 3.

**Skill Options**

1. Identify a snell knot from a group of four knots. Tie a snell knot.
2. Cast a spinning outfit from 40 feet into a 32-inch circle, 3 times out of 10.
3. Find fishing bait at the river (worms, grubs, grasshoppers, periwinkles, etc.), and use them to fish.
4. Tie two fishing rigs for your leader. Describe the type of fishing for which they would be used.
5. Dissect a fish, and identify the internal organs and their functions.
6. Demonstrate how to replace line on a reel. Explain why this might be a necessary skill.
7. Collect, illustrate, or photograph and identify four aquatic insects. Share the display with your club.
8. Bait cast from 40 feet into a 32-inch circle 3 times out of 10.
9. Row a boat 100 yards. Explain to your leader the proper safety precautions and skills required when in a water craft.
10. Build a two-piece rod or pole.
11. Fish with a rod or pole you have made.
12. Identify the watershed you live or fish in and attend a watershed council meeting.
13. Demonstrate stringing up a fly rod to your club or leader.
14. Sample the water quality at your favorite fishing spot by measuring the pH, dissolved oxygen, and temperature during the summer and winter. Report to your club or leader what you found and what these measurements tell you about what kind of aquatic life could survive under those conditions.

**Personal Development Options**

*Fill in options selected from page 12 of this advancement program.*

1. ______________________________________________________
2. ______________________________________________________
3. ______________________________________________________

Name of club member
__________________________________________________________
Age
_________  __________

Leader  Club Advancement chairperson or committee  Date

Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program  7
Step 4 Fishing by the Sea

This is the fourth step in the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. When you have completed 10 skill options and 3 personal development options, you have completed Step 4.

Skill Options

1. Identify and name all the fins on a fish and what each does. 
2. Explain the difference between saltwater and freshwater lures and flies.  
3. Dig and identify a clam.  
4. Try to catch a crab in a trap (pot or ring). Identify your catch. Explain to your club which crabs are legal catches, and why.  
5. Catch a crab with a fishing rod.  
6. Explain an ocean food chain or web to your club. Describe how ocean food chains impact each other.  
7. Diagram through illustration the life cycle of a chinook salmon or of a steelhead. Share what you've learned with your club.  
8. Cure a skein of salmon or steelhead roe.  
9. Identify three types of fishing line. Explain the fish you might catch with each type.  
10. Tie a rig for spin fishing for salmon in the river and describe its function.  
11. Visit an aquatic science center or another institute dedicated to oceanography. Share with your club what you learned.  
12. Read the Oregon Fishing Regulations for your favorite place to fish.  
13. Research and create an educational display on an issue regarding ocean wildlife and what people can do to help.

Personal Development Options

Fill in options selected from page 12 of this advancement program.

1. ________________________________  
2. ________________________________  
3. ________________________________

Name of club member ________________________________ Age ____________

Leader ________________________________ Club Advancement chairperson or committee ________________________________ Date ____________

Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program
Step 5: Final Series of Last Casts

This is the fifth step in the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. When you have completed 10 skill options and 3 personal development options, you have completed Step 5.

Skill Options

1. Tie a fly from odd material around your home. Explain to your club what type of fish it might catch.

2. Repair a broken fishing rod. Share your success with your club.

3. Demonstrate untangling a backlash on a fishing reel.

4. Describe in detail the individual spots, markings, and coloring of redband rainbow trout, brook trout, and brown trout to your club or leader.

5. Write a one-page report on why a particular fish species has gone extinct or is endangered.

6. Tie an elk-hair caddis fly. Explain why you used elk hair.

7. Tie up three rigs for your leader. Describe what type of fishing you would do with each.

8. Demonstrate a can cast. Cast into a 32-inch circle from 40 feet away. Hit 3 out of 10 attempts.

9. Catch a fish through the ice. Share your experience with your club. Explain the safety precautions required.

10. Identify 13 native Oregon fish species.

11. Identify six main kinds of artificial lures and what you would hope to catch with each.

12. Tie a tapered leader with one dropper line attached.

13. Explain why fish should not be transported and released into waters not native to their species. Give an example of an outcome of this action.

14. Explain why many rivers are “fly fishing only.”

Personal Development Options

Fill in options selected from page 12 of this advancement program.

1. ______________________________________________________  
   Date passed __________ Approved by __________

2. ______________________________________________________  
   Date passed __________ Approved by __________

3. ______________________________________________________  
   Date passed __________ Approved by __________

__________________________________________________________

Name of club member Age

 has completed all requirements for Step 5 of the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program.

__________________________________________________________

Leader Club Advancement chairperson or committee Date
Step 6  Casting for a Record

This is the sixth step in the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. When you have completed 10 skill options and 3 personal development options, you have completed Step 6.

### Skill Options

1. Build an 11.5-foot leader. Use it to fish.
2. Construct a crayfish trap. Explain to your club or leader how it works.
3. Dress and fillet a fish you have caught.
4. Skin a catfish you have caught.
5. Tie a weighted nymph fly.
6. Tie a Gold Ribbed Hare’s Ear fly, using dubbing.
7. Attend an Oregon Fly Fishers meeting, and give a report on what you learned to your 4-H club.
8. Tie a tapered leader with two dropper lines and attached flies.
9. Identify 12 fish species introduced in Oregon.
10. Explain four common rod and reel combinations and name the parts of each.
11. Fashion replicas of historic angling equipment made by Native Americans living in your area.
12. Catch a fish with a grasshopper you’ve caught and baited on your own hook.
13. Teach a non-4-H member to tie a fly.
14. Prepare a meal of crayfish you have caught.
15. Ask a representative from a Native American culture or fisheries management agency to speak to your club on the most critical issues they see threatening Northwest native fish today.

### Personal Development Options

*Fill in options selected from page 12 of this advancement program.*

1. ______________________________________________________
2. ______________________________________________________
3. ______________________________________________________

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**Name of club member**  
has completed all requirements for **Step 6** of the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program.

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Leader  
Club Advancement chairperson or committee  
Date
Step 7 Fish Biologist

This is the seventh step in the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. When you have completed 10 skill options and 3 personal development options, you have completed Step 7. You also have completed the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program. Congratulations!

Skill Options

1. Coordinate a club visit to a fish hatchery.
2. Tie a rig for spin fishing for salmon in a river and describe its function.
3. Plan and coordinate a club fishing trip with another member.
4. Give a demonstration to your club on tying a grasshopper pattern.
5. Collect, illustrate, or photograph and identify six aquatic insects and describe their life cycles.
6. Preserve an aquatic insect specimen, and tie a fly to match.
7. Build a rod wrapping jig.
8. Tie up four fishing rigs for your leader. Describe the types of fishing you could do with each.
9. Build a three- or four-piece rod.
10. Arrange an aquatic insect search-and-identification outing for your club.
11. Coordinate an outing with an Oregon Department of Fish and Wildlife (ODFW) fish biologist for a fish and/or redd count.
12. Provide compass and/or map reading training for your club.
13. Conduct pH and dissolved oxygen tests for a body of water. Share your results with your club.
14. Plan an aquatic ecology community service project for your club or group.

Date passed  Approved by

Personal Development Options

Fill in options selected from page 12 of this advancement program.

1. ______________________________________________________
2. ______________________________________________________
3. ______________________________________________________

Name of club member  Age

has completed all requirements for Step 7 of the Oregon 4-H Aquatic Ecology and Sportfishing Advancement Program.

Leader  Club Advancement chairperson or committee  Date
Personal Development Options

Choose a different Fishing 4-H option each time. You may repeat General 4-H options for credit in different steps.

General 4-H

1. Lead the Pledge of Allegiance and 4-H Pledge at a 4-H meeting.
2. Preside at a meeting of your 4-H club.
3. Present a demonstration or illustrated talk to a group other than your club.
4. Serve as a host for a 4-H meeting. See that everyone is welcomed and made comfortable.
5. Participate in a community service project.
6. Serve as the chair of a club committee.
7. Serve as an officer in your club.
8. Serve as a junior or teen leader.
9. Organize a club fundraiser.
10. Work a shift at a county fair fundraising.
11. Attend a Leadership Retreat.
13. Attend OSU Summer Conference.
15. Apply to be an Oregon 4-H Ambassador.
16. Write a thank-you note to someone who has benefitted your club. Explain how their contribution helped you and the other members of your club.
17. Develop a system for checking out equipment belonging to your club.

Fishing 4-H

1. Give a talk to your club on fishing ethics.
2. Give a presentation and demonstration on fishing safety.
3. Write an article about fishing and aquatic ecology for the county 4-H newsletter.
4. Collect fly tying or other materials for your 4-H club.
5. Co-teach a fishing-related class at a county event.
6. Serve as an assistant or participate in a fishing-related demonstration at a fair.
7. Arrange for a “specialty” speaker to attend one of your 4-H club meetings.
8. Visit an aquatic area. Collect trash to fill a paper grocery bag, and then dispose of it properly.
9. Research and give a club report on a current issue affecting Oregon’s fisheries.
10. Participate in a community service project to protect or enhance fish and wildlife habitat.
11. Explain why it is important to be a responsible angler. Share this information with younger members.
12. Research and share how Northwest Native Americans valued and used fisheries prior to pioneer settlement.
13. Attend and report to the club on an Oregon Department of Fish and Wildlife (ODFW) public meeting.