



# Fish and Wildlife Management

## Merit Badge Workbook

This workbook can help you but you still need to read the merit badge pamphlet.

The work space provided for each requirement should be used by the Scout to make notes for discussing the item with his counselor, not for providing the full and complete answers. Each Scout must do each requirement.

No one may add or subtract from the official requirements found in **Boy Scout Requirements** (Pub. 33216 – SKU 34765).

The requirements were last issued or revised in 2005 • This workbook was updated in April 2012.

Scout's Name: \_\_\_\_\_ Unit: \_\_\_\_\_

Counselor's Name: \_\_\_\_\_ Counselor's Phone No.: \_\_\_\_\_

<http://www.USScouts.Org> • <http://www.MeritBadge.Org>

Please submit errors, omissions, comments or suggestions about improving this workbook to: [Workbooks@USScouts.org](mailto:Workbooks@USScouts.org)

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1. Describe the meaning and purposes of fish and wildlife conservation and management. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  2. List and discuss at least three major problems that continue to threaten your state's fish and wildlife resources.  
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\_\_\_\_\_  
\_\_\_\_\_
  3. Describe some practical ways in which everyone can help with the fish and wildlife conservation effort. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  4. List and describe five major fish and wildlife management practices used by managers in your state.
    1. \_\_\_\_\_
    2. \_\_\_\_\_
    3. \_\_\_\_\_
    4. \_\_\_\_\_
    5. \_\_\_\_\_
  5. Do ONE of the following:
    - a. Construct, erect, and check regularly at least two artificial nest boxes (wood duck, bluebird, squirrel, etc.) and keep written records for one nesting season.
    - b. Construct, erect, and check regularly bird feeders and keep written records of the kinds of birds visiting the feeders in the winter.

- c. Design and implement a backyard wildlife habitat improvement project and report the results.

\_\_\_\_\_

\_\_\_\_\_

- d. Design and construct a wildlife blind near a game trail, water hole, salt lick, bird feeder, or birdbath and take good photographs or make sketches from the blind of any combination of 10 wild birds, mammals, reptiles, or amphibians.

6. Do ONE of the following:

- a. Observe and record 25 species of wildlife. Your list may include mammals, birds, reptiles, amphibians, and fish. Write down when and where each animal was seen.

1. Species: _____	When: _____	Where: _____
2. Species: _____	When: _____	Where: _____
3. Species: _____	When: _____	Where: _____
4. Species: _____	When: _____	Where: _____
5. Species: _____	When: _____	Where: _____
6. Species: _____	When: _____	Where: _____
7. Species: _____	When: _____	Where: _____
8. Species: _____	When: _____	Where: _____
9. Species: _____	When: _____	Where: _____
10. Species: _____	When: _____	Where: _____
11. Species: _____	When: _____	Where: _____
12. Species: _____	When: _____	Where: _____
13. Species: _____	When: _____	Where: _____
14. Species: _____	When: _____	Where: _____
15. Species: _____	When: _____	Where: _____
16. Species: _____	When: _____	Where: _____
17. Species: _____	When: _____	Where: _____
18. Species: _____	When: _____	Where: _____
19. Species: _____	When: _____	Where: _____
20. Species: _____	When: _____	Where: _____
21. Species: _____	When: _____	Where: _____
22. Species: _____	When: _____	Where: _____
23. Species: _____	When: _____	Where: _____
24. Species: _____	When: _____	Where: _____
25. Species: _____	When: _____	Where: _____

- b. List the wildlife species in your state that are classified as endangered, threatened, exotic, game species, furbearers, or migratory game birds.

Wildlife Species	Endangered	Threatened	Exotic	Game Species	Furbearer	Migratory Game Bird
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- c. Start a scrapbook of North American wildlife. Insert markers to divide the book into separate parts for mammals, birds, reptiles, amphibians, and fish. Collect articles on such subjects as life histories, habitat, behavior, and feeding habits on all of the five categories and place them in your notebook accordingly. Articles and pictures may be taken from newspapers or science, nature, and outdoor magazines, or from other sources including the Internet (with your parent's permission). Enter at least five articles on mammals, five on birds, five on reptiles, five on amphibians, and five on fish. Put each animal on a separate sheet in alphabetical order. Include pictures whenever possible.

7. Do ONE of the following:

- a. Determine the age of five species of fish from scale samples
  - Fish Species 1: \_\_\_\_\_ Age: \_\_\_\_\_
  - Fish Species 2: \_\_\_\_\_ Age: \_\_\_\_\_
  - Fish Species 3: \_\_\_\_\_ Age: \_\_\_\_\_
  - Fish Species 4: \_\_\_\_\_ Age: \_\_\_\_\_
  - Fish Species 5: \_\_\_\_\_ Age: \_\_\_\_\_

or identify various age classes of one species in a lake and report the results. \_\_\_\_\_

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- b. Conduct a creel census on a small lake to estimate catch per unit effort.
- c. Examine the stomach contents of three species of fish and record the findings. It is not necessary to catch any fish for this option. You must visit a cleaning station set up for fishermen or find another, similar alternative.

Fish Species 1: \_\_\_\_\_

Stomach contents: \_\_\_\_\_

Fish Species 2 \_\_\_\_\_

Stomach contents: \_\_\_\_\_

Fish Species 3 \_\_\_\_\_

Stomach contents: \_\_\_\_\_

- d. Make a freshwater aquarium. Include at least four species of native plants and four species of animal life, such as whirligig beetles, freshwater shrimp, tadpoles, water snails, and golden shiners.

Plants

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

Animal life

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

After 60 days of observation, discuss with your counselor the life cycles, food chains, and management needs you have recognized

life cycles \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

food chains \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

management needs \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- After completing requirement 7d to your counselor's satisfaction, with your counselor's assistance, check local laws to determine what you should do with the specimens you have collected.

8. Using resources found at the library and in periodicals, books, and the Internet (with your parent's permission), learn about three different kinds of work done by fish and wildlife managers.

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**Requirement resources can be found here:**  
[http://www.meritbadge.org/wiki/index.php/Fish\\_and\\_Wildlife\\_Management#Requirement\\_resources](http://www.meritbadge.org/wiki/index.php/Fish_and_Wildlife_Management#Requirement_resources)

## Important excerpts from the [‘Guide To Advancement’](#), No. 33088:

Effective January 1, 2012, the ‘Guide to Advancement’ (which replaced the publication ‘Advancement Committee Policies and Procedures’) is now the official Boy Scouts of America source on advancement policies and procedures.

- **[ Inside front cover, and 5.0.1.4 ] — Unauthorized Changes to Advancement Program**  
**No council, committee, district, unit, or individual has the authority to add to, or subtract from, advancement requirements.**  
(There are limited exceptions relating only to youth members with disabilities. For details see section 10, “Advancement for Members With Special Needs”.)
- **[ Inside front cover, and 7.0.1.1 ] — The [‘Guide to Safe Scouting’](#) Applies**  
Policies and procedures outlined in the ‘Guide to Safe Scouting’, No. 34416, apply to all BSA activities, including those related to advancement and Eagle Scout service projects. [Note: Always reference the online version, which is updated quarterly.]
- **[ 7.0.3.1 ] — The Buddy System and Certifying Completion**  
Youth members must not meet one-on-one with adults. Sessions with counselors must take place where others can view the interaction, or the Scout must have a buddy: a friend, parent, guardian, brother, sister, or other relative—or better yet, another Scout working on the same badge— along with him attending the session. When the Scout meets with the counselor, he should bring any required projects. If these cannot be transported, he should present evidence, such as photographs or adult certification. His unit leader, for example, might state that a satisfactory bridge or tower has been built for the Pioneering merit badge, or that meals were prepared for Cooking. If there are questions that requirements were met, a counselor may confirm with adults involved. Once satisfied, the counselor signs the blue card using the date upon which the Scout completed the requirements, or in the case of partials, initials the individual requirements passed.
- **[ 7.0.3.2 ] — Group Instruction**  
It is acceptable—and sometimes desirable—for merit badges to be taught in group settings. This often occurs at camp and merit badge midways or similar events. Interactive group discussions can support learning. The method can also be attractive to “guest experts” assisting registered and approved counselors. Slide shows, skits, demonstrations, panels, and various other techniques can also be employed, but as any teacher can attest, not everyone will learn all the material.

There must be attention to each individual’s projects and his fulfillment of *all* requirements. We must know that every Scout— actually and *personally*— completed them. If, for example, a requirement uses words like “show,” “demonstrate,” or “discuss,” then every Scout must do that. It is unacceptable to award badges on the basis of sitting in classrooms *watching* demonstrations, or remaining silent during discussions. Because of the importance of individual attention in the merit badge plan, group instruction should be limited to those scenarios where the benefits are compelling.

- **[ 7.0.3.3 ] — Partial Completions**  
Scouts need not pass all requirements with one counselor. The Application for Merit Badge has a place to record what has been finished — a “partial.” In the center section on the reverse of the blue card, the counselor initials for each requirement passed. In the case of a partial completion, he or she does not retain the counselor’s portion of the card. A subsequent counselor may choose not to accept partial work, but this should be rare. A Scout, if he believes he is being treated unfairly, may work with his Scoutmaster to find another counselor. An example for the use of a signed partial would be to take it to camp as proof of prerequisites. Partial completions have no expiration except the 18th birthday.