

Nature

Merit Badge Workbook



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

This Workbook can help you organize your thoughts as you prepare to meet with your merit badge counselor

Merit Badge Counselors may not require the use of this or any similar workbooks.

You still must satisfy your counselor that you can demonstrate each skill and have learned the information. You should use the work space provided for each requirement to keep track of which requirements have been completed, and to make notes for discussing the item with your counselor, not for providing full and complete answers. If a requirement says that you must take an action using words such as "discuss", "show", "tell", "explain", "demonstrate", "identify", etc, that is what you must do. No one may add or subtract from the official requirements found in Scouts BSA Requirements (Pub.# 33216) and/or on Scouting.org.

The requirements were last issued or revised in 2023 • This workbook was updated in February 2024.

| Scout's Name: | Unit | _Date Started |
|-------------------|------------|---------------|
| Counselor's Name: | Phone No.: | _Email: |

Please submit errors, omissions, comments or suggestions about this <u>workbook</u> to: <u>Workbooks@USScouts.Org</u> Comments or suggestions for changes to the <u>requirements</u> for the <u>merit badge</u> should be sent to: <u>Merit.Badge@Scouting.Org</u>

1. Name three ways in which plants are important to animals.

| 1. | |
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Workbook © Copyright 2024 - U.S. Scouting Service Project, Inc. - All Rights Reserved Requirements © Copyright, Boy Scouts of America (Used with permission.)

This workbook may be reproduced and used locally by Scouts and Scouters for purposes consistent with the programs of the Boy Scouts of America (BSA), the World Organization of the Scout Movement (WOSM) or other Scouting and Guiding Organizations. However it may NOT be used or reproduced for electronic redistribution or for commercial or other non-Scouting purposes without the express permission of the U. S. Scouting Service Project, Inc. (USSSP). Name a plant that is protected in your state or region, and explain why it is at risk.

2. Name three ways in which animals are important to plants.

| 1. | |
|----|--|
| | |
| 2. | |
| | |
| 3. | |
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Name an animal that is protected in your state or region, and explain why it is at risk.

3. Explain the term "food chain."

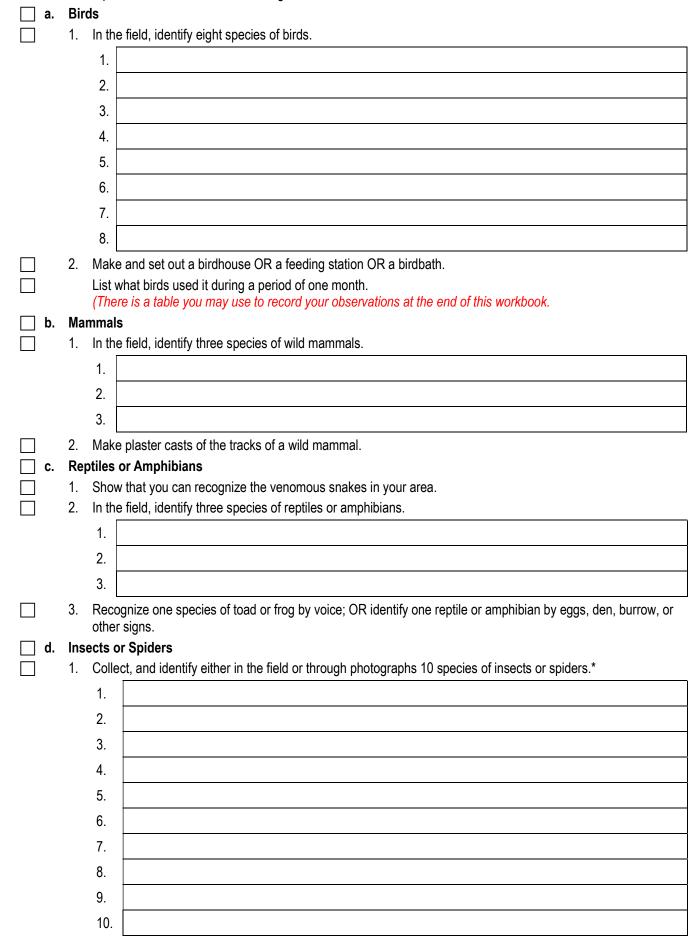
Give an example of a four-step land food chain and a four-step water food chain.

Land food chain

| 1. | |
|----|------------------|
| 2. | |
| 3. | |
| 4. | |
| | Water food chain |
| 1. | |
| 2. | |
| 3. | |
| 4. | |

Nature

4. Do all of the requirements in FIVE of the following fields:



| Nature | | Scout's Name: | | | | | | |
|--------|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|
| | 2. | Hatch an insect from the pupa or cocoon; OR hatch adults from nymphs; OR keep larvae until they form pupae or cocoons; OR keep a colony of ants or bees through one season. | | | | | | |
| 🗌 e. | Fisł | | | | | | | |
| | 1. | entify two species of fish native to your area. | | | | | | |
| | | 1. | | | | | | |
| | | 2. | | | | | | |
| | 2. | Collect four kinds of animal food eaten by fish in the wild. | | | | | | |
| | | 1. | | | | | | |
| | | 2. | | | | | | |
| | | 3. | | | | | | |
| | | 4. | | | | | | |
| 🗌 f. | Mol | lusks and Crustaceans | | | | | | |
| | 1. | Identify five species of mollusks and crustaceans. | | | | | | |
| | | 1. | | | | | | |
| | | 2. | | | | | | |
| | | 3. | | | | | | |
| | | 4. | | | | | | |
| | | 5. | | | | | | |
| | 2. | Collect, mount, and label six shells. | | | | | | |
| | | 1. | | | | | | |
| | | 2. | | | | | | |
| | | 3. | | | | | | |
| | | 4. | | | | | | |
| | | 5. | | | | | | |
| | | 6. | | | | | | |
| 🗌 g. | Plai | | | | | | | |
| | 1. | In the field, identify 15 species of wild plants. | | | | | | |
| | | 1. | | | | | | |
| | | 2. | | | | | | |
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| | | 4. | | | | | | |
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| | | 11. | | | | | | |

| 12. | | | |
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| 13. | | | |
| 14. | | | |
| 15. | | | |
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| | | llowing options: | |
| a. □b. | | label the seeds of six plants OR the leaves of 12 plants. the seeds of six plants OR the leaves of 12 plants and create a catalog of your photos. | |
| L 0. | 1. | | |
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| | 2. | 8. | |
| | 3. | 9. | |
| | 4. | 10. | |
| | 5. | 11. | |
| | 6. | 12. | |
| 🗌 h. Soils ar | nd Rocks | | |
| 1. Coll | lect and identify | fy three different types of soil that represent soils high in sand, clay and humus. | |
| Hig | gh in Sand | | |
| Hi | gh in Clay | | |
| Hi | gh in Humus | | |
| | - | fy five different types of rocks from your area. | |
| 1. | | <u></u> | |
| 2. | | | |
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| 3. | | | |
| 4. | | | |
| 5. | | | |
| 5. Discuss the princ | iple of Leave N | No Trace and how it relates to nature. | |

6. Do the following:

a. Explain what succession is to your counselor.

b. Visit a natural area (forest, grassland, meadow, water feature) and explain what stage of succession (both plant and animal) the area is in.

Talk about what community/succession stages may have been there before and what community/succession stages may replace what you see now.

Discuss what disturbances or changes have taken place in the past to create this landscape and what changes may occur in the future to change the landscape further.

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*Photos may be those taken with your own equipment or gathered from other sources.

Note: In most cases all specimens should be returned to the wild at the location of original capture after the requirements have been met. Check with your merit badge counselor for those instances where the return of these specimens would not be appropriate.

Under the Endangered Species Act of 1973, some plants and animals are or may be protected by federal law. The same ones and/or others may be protected by state law. Be sure that you do not collect protected species.

Your state may require that you purchase and carry a license to collect certain species. Check with the wildlife and fish and game officials in your state regarding species regulations before you begin to collect.

When working on merit badges, Scouts and Scouters should be aware of some vital information in the current edition of the *Guide to Advancement* (BSA publication 33088). Important excerpts from that publication can be downloaded from http://usscouts.org/advance/docs/GTA-Excerpts

You can download a complete copy of the Guide to Advancement from http://www.scouting.org/filestore/pdf/33088.pdf.

| Requirement 4a(2) | Listing of what birds u | sed the birdhouse. | feeding station. | or birdbath | vou set out |
|-------------------|-------------------------|--------------------|------------------|-------------|-----------------------|
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| Starting I | Jate: | | | | Ending Date: | | | |
|------------|-------|-------|--------|---------|--------------|----------|--------|----------|
| Week | Si | unday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
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