



Girl Scouts of Connecticut

Pondering Ponds



Girl Scouts of Connecticut, Inc.
Program Department
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Pondering Ponds was created by teen Girl Scouts as part of a “Linking Girls to the Land” grant from GSUSA. It is their hope that through fun & interesting activities, girls will become familiar with water cycle, the unique qualities of a pond ecosystem, and the importance of keeping both healthy.

Girls may choose to explore a pond near them or at a pond at a Program Center. Murray Program Center has a set of pond exploration equipment for troop use. This equipment is housed in the Chalet. Rocky Craig has pond exploration equipment in the Laurel Shelter. Please complete a site reservation form indicating reservation of equipment as well as a site.

- Please adhere to Safety-Wise while pondering a pond. Most pond exploration can be done without entering the water!
- Secure permission from landowners/authorities before exploring a pond.
- Choose exploration activities that are appropriate to the girls’ ages, and have fun pondering the pond!

All age levels are invited to explore an exciting and intricate pond ecosystem.

Choose at least four “Explorations”, including one with a *, and go Ponder a Pond!



The Pondering Ponds patch may be obtained from the Girl Scouts of Connecticut Shops. You may shop online at www.gsofct.org . You may also contact the Shop at 203-234-6253 or shop@gsofct.org . Please contact the Girl Scouts of Connecticut Program Department for more information at 203-239-2922 or 800-922-2770 or program@gsofct.org .

Explorations



- 1. Where's the Water?**

Water is a precious resource. Learn about the water cycle. How does water move through our world? Play a game or do an activity related to the water cycle.
- 2. How's the Water?**

The type of aquatic organisms living in a pond or stream can reflect the quality of the water. These creatures react differently to environmental stressors like pollution, sediment loading and habitat changes. Some can tolerate very little of these stressors, some can tolerate more. Collect samples from a pond to get a picture of how healthy the water is. For more information visit:
<http://www.edu/sciencejunction/depot/experiments/water/lessons/macro/macrolesson1.html>
<http://k12science.ati.stevens-tech/langley.pdf>
- 3. Testing, Testing 1, 2, 3...**

Learn how to test the pH and oxygen levels in water, and how these levels affect the creatures that live there. For more information visit <http://ga.water.usgs.gov/edu/phdiagram.html>
- 4. Collecting Data**

Be a part of long term project. Gather information for the [Pond Journal](#) at Murray Program Center!
- 5. Kind Observations**

Learn and demonstrate safe collecting techniques that show respect for the samples. Collect and observe several aquatic insects and other small organisms. Using a field guide, try to identify a few. Can you tell how they adapted to live in their environment?
- 6. Take a Closer Look!**

Use equipment to get a better view of the life in and around a pond. Depending on your age and ability try using magnifying lenses, microscopes, spotting scopes, or other equipment. Show that you know how to properly care for the equipment.
- 7. It's All About Shape!**

Compare several fish and see how their body is shape helps them live in their specialized environment (pond, ocean, swiftly moving stream...). Using fish from the grocer or rubber models try the Japanese art of fish printing.
- 8. Birds Need Water Too!**

Observe the birds that live on or near a pond. Learn to recognize a few by their calls, flight patterns, shape and/or plumage. How do these birds use the pond?
- 9. Who Was Here?**

Look for signs of past visitors to a pond in the mud and/or snow. Use a field guide to identify who made these tracks. As you follow a set of tracks try to find the story they tell. What was this animal doing?
- *10. *Do You Hear What I hear? Do You See What I See?**

Stand silently in a circle of friends, observe what you hear or see. After a few minutes, share your observations. Did you see what they saw?

11. Various Vegetation

Get to know the vegetation in and around a pond. How are the plants in the water, at the pond's edge and a few yards away similar and different? Use a guide to identify a few of these plants.

*12. *I Was Thinking....

Use a nature journal to help record what you see and hear at the pond. Draw sketches of plants and animals. Jot down notes on your observations or how you feel being here at this watery spot.

13. Love a Leaf

Create a work of art that uses the various shapes and colors found in leaves. If using real leaves collect from the ground or from areas that won't be greatly affected by the collecting. What is it that gives a leaf its color?

14. Where'd It Come From?

Non-point pollution is a major concern. It can silently slip into the groundwater. Do an activity or play a game that demonstrates how non-point pollution can affect a body of water. What actions can people take to reduce non-point pollution? (Non-point pollution comes from many sources; fertilizing the lawn, washing the car, etc...) For more information visit:

<http://www.dep.state.ct.us/wtr/nps/npsp/sum.htm>

15. Get It Out!

Learn how to recognize an aquatic invasive species and how it is threatening your area. If possible, become involved in the removal of an invasive species. Why not have a "Pulling Party"! For more information visit <http://www.invasivespecies.gov/profiles/main.shtml#aqplants>

16. Look at That Light!

After viewing aquatic insects in the daylight, try observing them at night while "flashlight fishing". Seal a flashlight in a clear waterproof container and lower it into a pond. Take note of which creatures move towards the light and which creatures turn the other way.

17. All Grown Up

Many of the flying insects near a pond began their lives in the water. After dark, set out a light (mercury vapor or black) to attract these and other insects. Hang a white cloth nearby to act as a viewing area. Leave your light trap on as long as possible. Who comes to visit? For this activity you might want to wear long sleeves and pants, and something to cover your head and ears.

18. What's For Dinner?

The plants and animals in and near a pond make up a unique food web. Observe the area and look for signs of this web. Play a game or do an activity that recreates a part of this web.

*19 *Can You Find It?

Using a scavenger hunt, explore the pond area for a variety of items in the pond environment's food web. When you create the hunt include signs of the *sun* (a warm rock, shadow...), *producers* (duckweed, cattails...), *consumers* (tadpoles, diving beetles...) and *decomposers* (snail, fungus...)

