

Natural Connections

A Cadette and Senior Girl Scout Interest Project Patch

Developed by the Towering Pines Service Unit

Girl Scouts of San Jacinto Council



The purpose of this Interest Project Patch is to encourage Cadette and Senior Girl Scouts to become aware of and involved in environmental issues in their communities through environmental education, outdoor skills development, volunteer service and career awareness. Girls must complete: 2 skill builders, 1 technology activity, 1 service project, 1 career exploration activity, and 2 other activities from any section.

SKILL BUILDERS

1. Attend a "Leave No Trace" workshop. Share what you have learned with a younger troop.
2. **Healthy Stream Critters**
Go on a hike with your troop or group along a stream, wetland or lake walk and make observations and assessments of the water body conditions using macro invertebrates. By studying macroinvertebrates (aquatic insects, clams, snails, crayfish, worms and leeches) determine if your stream or river is healthy. Use the material from the EPA-GSUSA Water Drop Patch Project, Stream Walk and Healthy Stream Critters to assist you with this activity. www.epa.gov/adopt/patch/critters.html.
3. **Wonderful Wetlands!**
With your troop or group, visit a local wetland along a river, or a freshwater wetland such as a bog, swamp or bottom land hardwood forests. Identify the three basic characteristics of the wetlands site you have chosen. As a team of 2-3 girls, using a camera and field guides, photograph and identify the different kinds of animals and plants that live in the wetland site you visit. Record your observations in a journal. Make a poster from your data to display in a public location such as a library, church or school.
4. Create a natural habitat for butterflies and birds. Learn which Texas native plants attract hummingbirds and butterflies. Which native plants produce seed, nuts and berries for attracting wildlife? Help establish or maintain butterfly or humming bird garden at your school, park, church, or your own backyard using some native plants. (see Texas Department of Parks and Wildlife, Wildscaping).

5. Personal Water Audit

How many gallons of water do you use in a typical day? Write down your different water uses and estimate how much water you personally use. (Be sure to include your shower, dishwashing, laundry, cooking, and drinking water!)

Compare your results with data available from the Water Conservation Branch of the City of Houston, or use the water conservation table attached. (This data is adapted from the Official Captain Hydro Water Conservation Workbook, Teacher's Guide. Oakland, CA: East Bay Municipal Utility District, 1993 in Watershare, Department of the Interior, Bureau of Reclamation).

- How much water did you estimate you used personally in a 24 hour period? (People in the United States use 125 - 150 gallons of water per person, per day for domestic purposes.)

- What simple, routine steps could we take to reduce the amount of water we use in a day?

- Using the water-saving methods on the chart, which tasks would make it easy to save water? Which tasks are harder?

- If you were allowed only 25 gallons of water per day, how would you use your 25 gallons?

- Choose three different water saving methods that you could use routinely. How much water would you save in a month if you were to apply these three methods consistently?

TECHNOLOGY

1. Linking Girls To The Land

Learn about the Linking Girl to the Land Initiative, and what benefits it has to offer to girls interested in becoming involved in conservation, and natural resource issues and careers. Attend an event with federal, state or local agencies, offering hands-on and interactive programs that increase awareness about protecting our environment.

2. What's In Your Water?

Do you know where does your drinking water comes from? What does your city put in your drinking water? Talk to someone from the Water Conservation Branch to find out how they monitor the quality of our drinking water and to learn more about water conservation and methods of preserving our water resources.

3. All About Aquifers

What is an aquifer? Talk to a representative from the Harris and Galveston County Subsidence District and learn more about the aquifer in our area and how its hydrology affects regional subsidence.

4. **Water Pollution**
Find out what is the difference between a storm drain and a sewer drain. Where does water which flows into your storm drain end up? Fill out the Home and Lawn Care Checklist from the Water Drop Patch Project, with your family and identify areas where you can reduce your Personal Pollution. Identify what you and your family can do to help protect surface and groundwater from pollution runoff. See: Water Drop Patch Project www.epa.gov/adopt/patch then..... Girl Scout Patch Requirements.... Home and Lawn Care Checklist to download a copy. Take a look at this patch. It is just full of great information.
5. **Air Pollution**
How is the air quality in the greater Houston area monitored? Who is in charge and what do they test for? Help arrange for a speaker to talk to your troop or group, or go listen to a presentation on Air Pollution in this area.
6. **Energy Conservation**
Where does your electricity come from? There are a variety of sources of electricity available in southeast Texas; some are new and unusual such as electricity generated from wind farms. Speak to a representative from one of these companies to find out more about how they generate electricity, and energy conservation.

SERVICE

1. **Storm Drain Stenciling**
Work with your troop to organize a Storm Drain Stenciling Project in your neighborhood. Produce and distribute a flyer or door hanger for households to make them aware of your project and to remind them that storm drains dump directly into your local water body.
2. **Linking Girls to the Land**
Volunteer in a Linking Girls to the Land project or activity with one of the six federal natural resource agencies.
3. **Work with troops in your service unit and your local government to participate in a stream, wetland or beach cleanup. Consider joining the Texas Waterways Annual Trash Bash (www.trashbash.org) held every April.**
4. **Assist with a tree planting or "Adopt a Tree" project at the Big Thicket National Preserve, one of the Texas State Parks, or pot seedlings for your community.**
5. **Learn more about recycling in your area. Is it available and what can be recycled? Sponsor or provide a recycling opportunity for an item, not usually recycled in your area such as batteries or aluminum.**

Career Exploration

1. **Find out if there are any women's organizations whose focus is clean air and monitoring. Invite them to speak to your troop or group about their organization**

2. Talk to someone who works in a conservation-related field about their job. What special training was needed? What is the difference between conservation careers in the government and in the private sector?
3. Learn about Peace Officers that protect the environment. From Police Officers that patrol the ship channel, to game wardens, to rangers - what are the conservation-career options in the law-enforcement field? If possible, invite an officer to visit your troop or group meeting, or participate in a "ride along" tour.
4. Find out about colleges that offer conservation programs. If possible, tour a college, visit a classroom, or interview a professor about conservation-related fields of study.
5. Work with a professional on a conservation activity in your community.