

# **CADETTE ECO TREKKER BADGE**

**Badge Purpose:** When you've earned this badge, you'll have learned the skills for minimizing your impact on the environment while planning and taking an outdoor trek.

Activity Plan Length: This plan should be completed at your own pace.

Activity	Materials Needed
<ul><li>Considerate Comic</li><li>Create a comic frame for each Leave No Trace Principal.</li></ul>	<ul> <li>Computer with internet access</li> <li>"Create a Comic" activity sheet</li> <li>Colorful pencils/pens</li> </ul>
<ul><li>Nature Invaders</li><li>Learn about an invasive species in your area and trek to see them.</li></ul>	<ul> <li>Computer with internet access</li> <li>Suitable outdoor clothing</li> <li>Various materials (depends on activity)</li> <li>Map of area</li> </ul>
<ul><li>Make a Difference!</li><li>Take a step toward eliminating an invasive species and help others do the same!</li></ul>	<ul> <li>Computer with internet access</li> <li>Various materials (depends on activity)</li> </ul>
<ul><li>Explore Ecosystem Gardening</li><li>Plan or plant your own ecosystem garden.</li></ul>	<ul><li>Computer with internet access</li><li>Various materials</li></ul>

#### Activity #1: Considerate Comic

Badge Connection: Step 1 – Learn how to create minimal impact on a trek Materials Needed: Computer with internet access; "Create a Comic" activity sheet; colorful pencils/pens

- 1. Research the Leave No Trace Seven Principles if you don't know them already: <u>https://lnt.org/learn/7-principles</u>
- 2. Using the "Create a Comic" activity sheet (at the end of this activity plan), illustrate a comic frame that demonstrates each Leave No Trace principle. You may create several frames for each principle if you wish, using your own format!
- 3. Share your comic by creating posters to display, sharing with friends and family, sharing online, etc. Be sure to obtain permission before hanging in a public place.

#### **Activity #2: Nature Invaders**

Badge Connection: Step 2 – Plan an eco trek with a purpose and Step 3 – Practice an eco skill on your trek Materials Needed: Computer with internet access; suitable outdoor clothing; various materials; map of area; pen Prep Needed:

- Research Invasive Species in your state, including aquatic and terrestrial invasive species. Learn the difference between non-native and invasive species. DNR websites are a good place to start:
  - o Minnesota: https://www.dnr.state.mn.us/invasives/index.html
  - o Wisconsin: https://dnr.wi.gov/topic/invasives/
  - o Iowa: http://www.iowadnr.gov/Conservation/Forestry/Forest-Health/Invasive-Plants
  - o U.S. Fish and Wildlife Service: https://www.fws.gov/invasives/what-you-can-do.html
- 1. Invasive species are non-native species whose introduction causes or is likely to cause economic or environmental harm, or harm to human health. Invasive species:
  - Reproduce quickly
  - Have few or no predators in the new ecosystem
  - Outcompetes native organisms for resources
- 2. Choose one invasive species that impacts your area and research specific areas near you that are threatened by it. You may need to contact your local DNR to find this out.
- 3. Find out what the invasive species looks like and what signs of its presence you may be able to identify. Example: Is the absence of another species a sign of an invasive one? Is there another plant or animal that thrives alongside the invasive species?
- 4. Plan a hike, canoe, or kayak trip near the area you've identified.
- 5. Print a map of the area.
- 6. Venture out to identify the invasive species. If you see the species or evidence of it, mark the location and prevalence on your map. You might want to make a key to denote the severity.
- 7. Make sure to take adequate steps to prevent the spread of the invasive species (clean your shoes, canoe, etc.) as you leave the area.
- 8. If helpful, share your findings with a local park service, DNR, or residents of the area. If you suspect a new infestation of an invasive plant or animal (one that wasn't noted or suspected before), note the exact location, take a photo or keep the specimen, and call the Invasive Species Specialist in your region (contact found on your state's DNR website).

## Activity #3: Make a difference!

Badge Connection: Step 4 – Make a difference on your eco trek Materials Needed: Computer with internet access; various materials

- 1. Once you have observed the issue of invasive species, research common interventions that are employed to prevent them from spreading or to combat them once they have already spread.
- 2. Identify an audience that might be lacking information on how to prevent the spread of invasive species (People who like to fish, hikers, younger Girl Scouts, etc.).
- 3. Brainstorm a few ideas of how you might reach them best (e.g. a video PSA, poster, permanent sign) and then implement one!
- 4. Collaborate with community organizations (DNR, local newspaper, surrounding troops, or other service unit volunteers) to reach more people with your message.

## Activity #4: Explore Ecosystem Gardening

Badge Connection: Step 5 – Make a difference after your eco trek

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Materials Needed: Computer with internet access; various materials

- 1. Ecosystem gardening is an intentional gardening method where plants are chosen for the role they play in the ecosystem and benefits that they will provide to wildlife. Ecosystem gardens can be used to combat invasive species or to help out endangered ones, purify air and water, preserve soil, control agricultural pests, promote pollination, and more. Find out more here: <u>http://www.ecosystemgardening.com/</u>
- 2. Find out an ideal location for an ecosystem garden near you.
- 3. Create a garden plan for an ecosystem garden in that location. Use the Internet to look up a wide variety of native plants that could be used in your garden. Research good **companion plants** and which plants don't work well together. What is the purpose of your ecosystem garden? To attract pollinators? To help eliminate an invasive species? To successfully grow an endangered plant?
  - On your garden plan, note:
    - Types of plants
    - Location of each plant
    - o Amount of each plant
    - Space needed between plants
    - o Any specific care instructions for each plant
- 4. If you can, implement your garden!

#### More to Explore

- Field Trip Ideas:
  - Participate in an invasive species removal day through your local DNR or other outdoor conservation organization.
  - Help with trail maintenance at a State or National park.
- Speaker Ideas:
  - Invite a DNR Invasive Species Specialist to your troop meeting to talk about the environmental impact of invasive species.
  - Invite a Park Ranger to your troop meeting to talk about best practices that you can carry out while hiking and camping to prevent the spread of invasive species.
- Additional Resources:
  - o Educational Resources: https://www.invasivespeciesinfo.gov/aquatics/education.shtml#aqsp
  - Learn about Climate Change and Invasive Species here with this activity: <u>http://seagrant.psu.edu/sites/default/files/climate%20change%20and%20AIS%20%20double%20wh</u> <u>ammy%20in%20a%20bag%202.pdf</u>

## Create a comic frame for each Leave No Trace Principle

Leave No Trace	Plan Ahead and Prepare	Travel and Camp on Durable Surfaces	Dispose of Waste
Leave What You Find	Minimize Campfire	Respect Wildlife	Be Considerate of Others

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