Recreation Station Leader Guide

See the field journal answer key included with this guide.

Station objectives

At the end of the lesson, students will be able to:

- Explain what the fire danger sign levels mean and how the levels impact outdoor recreation.
- Provide examples of how responsible people ensure their outdoor activities do not harm the environment, other recreationists, or landowners.
- Identify the primary safety concerns when recreating in a forest and ways to stay safe.

Session length and rotation

- Sessions run for 40-50 minutes with 4 sessions each day (2 before lunch and 2 after lunch).
- The Recreation station is divided into 6 substations. On a typical day, the Recreation station is facilitated by 3 leaders who stay with their group for the entire session.
    - The substations are: 1 - **Fire Awareness**, 2 - **Respecting Property**, 3 - **Smart Recreation**, 4 - **Camping**, 5 - **Hiking**, and 6 - **Navigating.**
    - Leaders begin at different substations and rotate in coordination with each other.
- When the students arrive, you and the other Recreation leaders will divide students by their animal group: “bears,” “elks,” and “cougars” (small groups may be divided differently).
- At the end of Session 1 and Session 3, students at the Recreation station switch with students at the Water and Soil station; FTF staff will help facilitate this transition (after Session 2, students go to lunch; students leave after Session 4).

When you arrive

- Review the attached student field journal pages. These are the questions students are expected to answer by the end of your session.
- Walk the Recreation trail and review the teaching materials at each substation. A flame sign means there is a wildfire component to the lesson at that location.
- Remember that FTF staff are available to answer any questions about the lesson or materials.

Sample lesson

Visiting 6 substations in 40-50 minutes means that your time at each stop is short.

NOTE: There is a giant carved redwood snail at the start of the Recreation trail. Students are allowed to sit on “Sir Edward,” but they are not allowed to pull or hang on the eyestalks. Because time is short, do not allow students to play on Sir Edward at the beginning of the session. At the end of the session if time permits, you may allow respectful and well-behaved student groups to enjoy Sir Edward.

Substation 1: Fire Awareness

Students learn the purpose of a fire danger rating sign and what the levels mean. Use the fire danger rating sign and question 1 on page 13 to guide the discussion.

- Explain: Fire danger signs inform the public about the current risk of wildfires and to communicate restrictions and precautions.
    - **Low**: fires are possible but not easily started; **Moderate**: fires may start and can spread; **High**: fires start easily and can spread at a fast rate; **Extreme**: fires start very easily and intensify quickly.
- Ask: What activities do you think are restricted or prohibited when fire danger is “high” or “extreme?”

- Restricted/prohibited activities not included in the field journal: using sky lanterns, exploding targets, and tracer ammunition; burning debris; mowing dry grass; and outdoor metalworking.

Substation 2: Respecting Property

Students consider the economic and environmental harm caused by dumping, theft, and vandalism.

- Have students define "trespassing" in their own words. Explain that trespassing can lead to other, more serious, crimes:
  - Dumping - harms the environment and costs money to clean.
  - Theft and vandalism - costs money to repair or replace lost/damaged property.

<u>Dumping</u>

Explain to students that they are going to play a game. You will read aloud 2 descriptions of items in the dump pile; they need to guess which items you are describing. Choose from the following descriptions:

- This item is extremely poisonous; when spilled, it kills grass and other plants. Swallowing a small amount causes illness or death in animals. It often contains poisonous metals which can contaminate soil and water if poured on the ground. It is estimated that between 25 percent and 50 percent of the 400 million gallons of this item produced each year ends up disposed of improperly, polluting the environment. (*Answer: antifreeze*)

- This item contains environmentally harmful chemicals and poisonous metals. It sticks to everything. If it gets into waterways, it can kill fish and other organisms. One gallon of this item can ruin the taste of a million gallons of drinking water. Although it can be cleaned and reused, only 60% of this item is recycled in the US. (*Answer: motor oil*)

- This item takes 50-80 years to decompose. Because it holds water, it makes a perfect breeding ground for mosquitoes. This item is prone to catching fire. When burned, it breaks down into hazardous compounds including gases, poisonous metals, and an oily substance that pollutes groundwater and surface water. (*Answer: tire*)

- This item contains poisonous metals. When dumped, toxic chemicals can leach into the soil, causing groundwater contamination. Despite making up only 2% of the trash in landfills, this item accounts for nearly 70% of the poisonous metals found in landfills. (*Answer: computer tower, which is a form of electronic waste, also known as "e-waste"*)

<u>Vandalism</u>

- Ask: Which items in the trash pile do you think show vandalism? (*Answers: the shot-up signs and the carved-up bench*)
- Ask: What type of vandalism can cause a wildfire? (*Answer: arson*)

<u>Theft and Trespassing</u>

- Ask: What have you seen on this property today that trespassers might steal?
- Ask: What can landowners do to help stop trespassing? (*Install signs, cameras, fences, gates, barriers at vehicle access points, etc.)*

Substation 3: Smart Recreation
Through a hands-on activity, students consider the importance of being prepared when recreating. Use the supplies at the shelter and question 3 on page 13 to guide the activity.

- The note (not on the supply list) is a reminder that recreationists should always let someone know where they are going and when they will be back.
- A survival blanket can be converted into a makeshift tent.
- Fire starting tools should be used carefully. Even when lost, recreationists can be held responsible for causing a wildfire (pay a fine, go to jail).
- The map and compass are navigation tools (cell phones/GPS are not reliable in the woods).
- The whistle and the mirror are communication tools. A whistle can be heard up to a mile away; sunlight flashing off a mirror can be seen for several miles.
- The shovel is for burying human waste, which is smelly, unsightly, and can carry diseases.

Substation 4: Camping
Students inspect a campsite for comfort and safety and consider the impact camping can have on wildlife. Use the laminated sheets in the cooler and question 4 on page 14 to guide the activity.

- Explain to students that this is a bad campsite. Ask them to identify 3-4 problems with the site.
    - The most serious problems are described in more detail on the laminated sheets: overhanging tree, cooler, garbage can, fire pit, no water.

Substation 5: Hiking
Students appreciate the forest while learning about hiking etiquette as they walk our Forest Appreciation Trail. There are native plants identified by placards on the trail. The talking points below correspond to locations along the path. Use the talking points and question 5 on page 14 to guide the discussion.

- **Invasive Species**: Invasive species can be spread by recreationists. Thoroughly cleaning your clothing, shoes, gear, and vehicle is one way to help stop the spread of invasive species.
- **Trail Cutting**: Stay on the trail, even if you see what you think is a side path or shortcut. Trail cutting damages plants, compacts soil, and can cause erosion.
- **Right of Way**: When passing others on a trail, the uphill hikers have the right-of-way. This is because hiking uphill is harder than hiking downhill.
- **Dog Doo**: Always clean up after your dog and dispose of your dog poop bags in a garbage can.
- **Sticking Together**: Wait for your hiking buddy at every fork and junction along the trail. Never assume you and your buddy both know which way to go.

Substation 6: Navigation
Students learn to interpret a topographic map and how to use a compass. Use question 6 on page 14 to guide the activity. This short video demonstrates how to teach this activity. This 2-min. video provides a good approach for teaching students how to find a bearing (N, S, E, W) using a compass: How to Use a Compass

- Provide an overview of the map's features: elevation lines, roads, streams, etc.
- Explain: The top of the map is north. Ask: If the top of the map is north, where are south, east, and west? (You may need to teach them a mnemonic such as "Never Eat Squishy Worms.")
- Ask: How can you know where north is when you're in the woods? *(Answer: from the position of the sun and stars, or by using a compass)*
- Give each student a compass and show them how to hold it. Ask them to find "north" using the compass (they should understand that "north" is not "up.")

- Show the students where they are on the map (the star). Using their compasses, ask students to find the direction they would need to walk if they wanted to get to a specific location on the map: their school, the Pacific Ocean, the I-5/I-105 junction, etc.