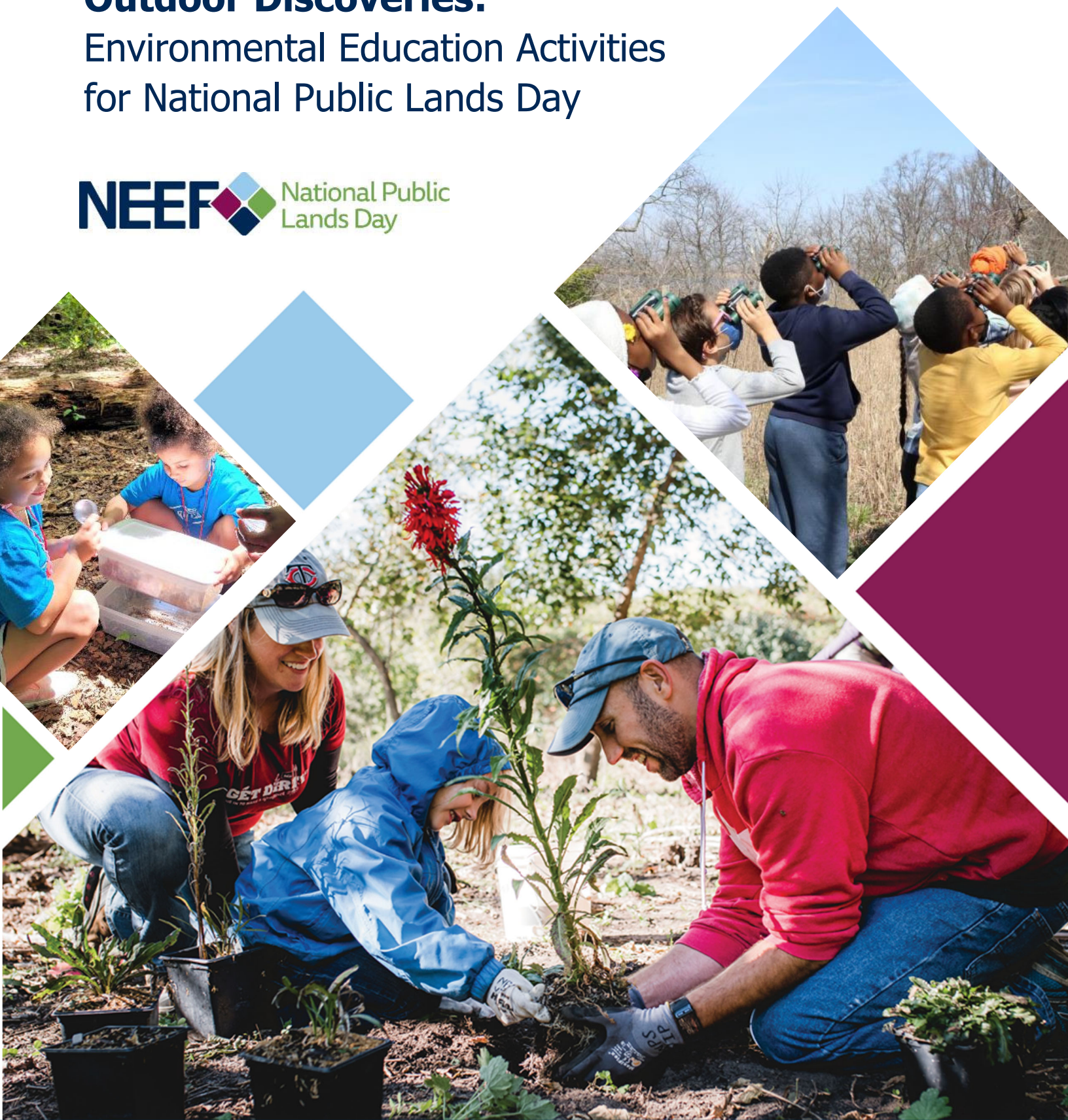


Outdoor Discoveries: Environmental Education Activities for National Public Lands Day





Introduction

Welcome to the ultimate guide for celebrating National Public Lands Day (NPLD) with a focus on environmental education. This special day offers a unique opportunity to bring educators, youth, and other community members together to make a tangible impact on our public lands. Whether you're a seasoned volunteer manager or an enthusiastic educator, this guide is designed to help you lead inspiring and educational activities that not only enrich our natural spaces but also foster a deeper appreciation for the environment among participants.

Incorporating youth engagement and environmental education into your NPLD event can:

- Expand your target audience by attracting families with children or youth groups
- Improve the volunteer experience by adding options for your visitors and allowing them to learn and have fun while also giving back
- Connect youth to your public land site and inspire them to become lifelong stewards

Our guide highlights three exciting activities that promise to engage and educate: promoting pollinators, exploring biodiversity, and a template for a scavenger hunt activity. Each activity is crafted to provide hands-on learning experiences that connect participants with the natural world while contributing to the health and sustainability of our public lands.

Making it Your Own

As you plan your event, remember that any environmental education activity you choose to include should ideally have some connection to the event theme or location. While many of the activities found in this guide can be used without modification, there are some simple ways to adapt them to your local event. Here are three suggestions to increase the relevance and effectiveness of an activity:

- **Introduction:** Consider what interpretation you can add at the beginning of the activity to add context for your public land, habitat type, or to draw connections to the volunteer activities at the event.
- **Customization:** Substitute local species and habitats during an activity to illustrate local connections and importance.
- **Conclusion:** Conduct a short debrief after an activity that encourages participants to share what they have experienced, learned, or plan to do differently going forward.



Activity Style & Sample Schedule

Depending on the type of event you are hosting, you might consider adding activity stations or incorporating dedicated environmental education time into your schedule. Some environmental education activities in this guide are best run as a station where families can come and go, while others require a more dedicated audience. There are merits to each approach.

Activity Station

A staffed booth with a self-led activity that can be visited at any point throughout the event. Staff or volunteers provide an introduction to set the context, then give the family or child a worksheet or assignment to carry out on their own before returning—perhaps for a prize! The following schedule allows for stations to be explored during volunteer activities and for an hour after the thank-you address. This will help accommodate older youth who may be content to volunteer for the entire two-hour duration of the project, as well as any additional visitors who may not be a part of your volunteer event and are just stopping by.

Sample Schedule:

Time	Activity	Details
9:00 a.m.	Volunteer check-in	
9:15 a.m.	Volunteer welcome	
9:30 – 11:30 a.m.	Volunteer projects	Project A: Leapfrog Trail Project B: Star Meadow
9:30 a.m. – 1:00 p.m.	Education stations	Activity A: Leapfrog Trailhead Activity B: Visitor Center Porch
11:30 a.m. – 1:00 p.m.	Volunteer clean-up and thank you	

Scheduled Activity Time(s)

Staff will lead the activity or hike starting at a particular time that has been advertised ahead of time. If you need a headcount for supplies or staffing estimates, consider adding registration slots to your volunteer registration platform or a free service like Eventbrite. You can also catch sign-ups at volunteer check-in or allow a certain number of walk-ups.

Note: According to equity and inclusion best practices, you should only require registration if it is essential to the activity's function; in these cases, the registration process should be restricted to five questions or less.



The following schedule will split the volunteers into two groups, each with a volunteer project rotation. This way, families that are taking advantage of the nature hike will join the next project when your staff is ready for them, rather than show up mid-project.

Sample Schedule:

Time	Activity	Details
9:00 a.m.	Volunteer check-in	
9:15 a.m.	Volunteer welcome	
9:30 – 11:00 a.m.	Volunteer project	Rotation A
9:30 a.m. – 10:30 a.m.	Nature hike & BioBlitz 1	
11:00 – 12:30 p.m.	Volunteer project	Rotation B
11:00 a.m. – 12:00 p.m.	Nature hike & BioBlitz 2	
12:30 – 1:00 p.m.	Volunteer clean-up and thank you	

As you embark on these activities, remember that National Public Lands Day is more than just a day of service—it's a celebration of our collective commitment to the environment. Each activity is a step towards nurturing a generation of environmentally conscious individuals who understand the value of our natural resources and are motivated to protect them. So gather your teams, roll up your sleeves, and let's make this National Public Lands Day a memorable and impactful experience for all!



Activity Ideas

Idea 1: Designing a Pollinator Habitat

Recommendations	
Activity Style	<i>Activity Station</i> Using an activity station approach—a series of tables with supplies for creating a specific type of habitat—can make this activity easier for staff to manage. Including additional tables for finished work will allow participants to safely store their project until the end of the event.
Duration	30-60 minutes
Age Range	Grades 6-8. This activity is designed for youth to learn about the importance of pollinators, the threats they face, and how to mitigate these threats. Adapt for younger participants: Consider highlighting local pollinators and providing them with research about the selected species. Adapt for older participants: Consider providing guidebooks and other reference materials for them to conduct more independent research on local pollinators. The extension activity included in the handout suggests having youth build their pollinator habitat. This could be an optional station for older youth to contribute to pollinator habitat.

Description:

In this activity, youth will select a local pollinator from a handful of short profiles created by your public lands staff. Once they learn about their chosen pollinator’s diet, habitat, reproduction, and risks, they will use the worksheet to document their pollinator’s preferences and design a pollinator habitat to best suit their needs.

To be successful with this worksheet, we recommend hosting a short walking tour of a demonstration pollinator garden, for your activity to be stationed at a prairie lookout, or to print and laminate pollinator habitat examples for reference. You will need to help build a solid foundation of knowledge on the concepts of habitat, predators, and pollinators before you can get started.

At a National Public Lands Day service event, you might use your introduction to make the connection between pollinator habitat and invasive species management, litter clean-ups, or whichever service project you are hosting. Perhaps you might consider calling your event a “Pollinator Party” in lieu of a traditional volunteer day—branding your event as part-education, part-fun, part-volunteerism can be an excellent way to attract new families to your public land!

We recommend station rotations for a more structured event, or an open house-style event with multiple activity stations if you feel more comfortable with a flexible event schedule.

[Download the printable worksheet, pollinator background, and lesson plan here!](#)





Idea 2: A Mini-BioBlitz for Biodiversity

Recommendations	
Activity Style	<i>Scheduled Activity</i>
Duration	60 minutes
Age Range	Grades 6-8. This activity is ideal for a one- or two-hour session and works best for NPLD events focused on environmental education, where you have an engaged audience for an extended time. Other activities may be better suited as supplemental options to engage youth while their guardians volunteer.
	Adapt for grades 9-12: This activity can be scaled up and pairs well with a teen-focused volunteer event on National Public Lands Day.

Description:

In this project, youth will engage in a mini-BioBlitz by surveying their local surroundings to determine species richness and whether there are native or invasive plant species in their area. Participants will document this information and evaluate the possibility of invasive plant removal to improve the biodiversity in the area. They will come away from the activity able to identify a few plant species, explain possible consequences of invasive species to the local public land site, practice common biological survey methods, and apply mathematical concepts to measure and analyze data.

This lesson plan introduces participants to the concepts of native and invasive species through engaging discussions and a hands-on mini-BioBlitz project. In small groups or individually, participants will identify and document native and non-native plants in their community using identification guides and/or apps. You might consider working in a particular area of your public land site with a few distinct species to make it more appropriate for younger audiences.

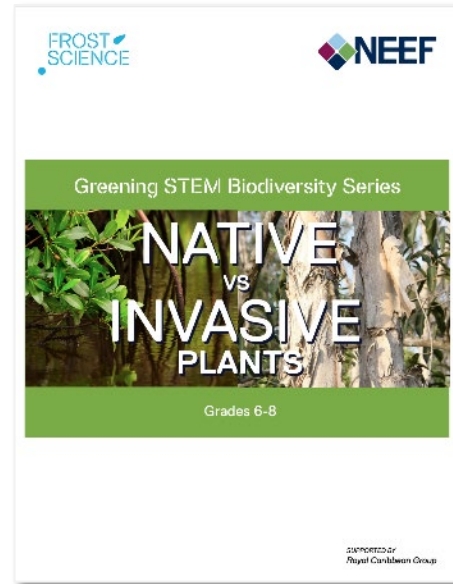
Participants will select a sampling site, establish a perimeter, and record data on plant abundance and distribution. They will use the worksheet to sketch their site in four quadrants, log their plant findings, and calculate area and abundance. There is an optional extension to the activity to create a biodiversity action plan.



Safety tip:
Be sure to check for poison ivy or other hazards before selecting your site.

Download the printable worksheet, biodiversity background, and lesson plan can be found below.

[Download the printable worksheet, biodiversity background, and lesson plan!](#)



iNaturalist is a great tool to take this activity into the 21st century. NEEF hosts an NPLD iNaturalist project that can be used by any member of the public to record and track their findings on NPLD. Empower your young scientists to join this citizen science movement using our project and iNaturalist flyer. Download below.

[Download the iNaturalist project flyer to display at your event!](#)





Idea 3: Public Lands Scavenger Hunt

Recommendations	
Activity Style	<i>Activity Station or DIY Printable Form/QR Code</i>
Duration	30 to 90 minutes
Age Range	Grades K-8: This activity is ideal for elementary and middle school students but can be adapted for all age ranges (see below)

Description:

This activity is the most adaptable of the three to fit your event, age ranges, and local interpretive elements. Termed a “scavenger hunt,” participants receive a 3”x4” card and are challenged to color in each respective box as they find examples of biodiversity.

This style can be adapted to your event’s theme. A cohesive, successful scavenger hunt has a theme to unify each term. Some ideas for adapting the scavenger hunt include:


- **Biodiversity:** The activity guide is prepopulated with simple items like carnivore, prey, fungus, vine, etc. to demonstrate the diversity of the flora and fauna around us. You could substitute other examples that are present at your site to engage participants in different ways.
- **Habitat identifiers:** Populate the scavenger hunt grid with terms relating to the NPLD site habitat; for example, “What’s Up with Wetlands?”, “Beachside Explorers”, “Mountain Meadow Mystery”, or “Evergreen Explorers”. You can also incorporate sounds (e.g., a bird call, cicadas buzzing, wind through the trees) and smells into the activity.
- **Habitat condition assessment:** Including habitat quality markers in your scavenger hunt is a great way to introduce concepts such as habitat quality, habitat types, and habitat extent to teens and tweens.
- **Site history:** Use signage or staff stations to include a land acknowledgement, find evidence of early settlers, and point out environmental justice concerns like redlining or illegal dumping.
- **Leave No Trace:** Use signage, staff stations, or evidence of poor LNT ethics to teach about hiking, camping, and outdoor recreation safety and minimum-impact practices. Adapt this for teens by including concepts such as ADA compliance, safety hazards, and sign inventory.

Bonus:

Incentivize this activity with a prize once the full bingo card is turned in, or as a raffle opportunity for an extra-special prize! We recommend a relevant environmental education prize that helps young explorers build their skills and passion, such as a free pass to come back to the park, access to a future paid program at the park with a partner, a junior field guide, or kids' binoculars.

The printable activity guide can be found below.





[Download the printable activity to use at your event!](#)

Biodiversity Activity Guide  Federal Environmental Education Foundation

What is Biodiversity?
Biodiversity is the variety of animals and plants and habitats found on this planet. It is important everywhere, from your backyard to a National Park. Biodiversity plays an important role in maintaining healthy ecosystems.

Why do we care about Biodiversity?
Biodiversity is extremely important to people and the health of ecosystems. A few of the reasons are: It provides us with an array of foods, medicines, as well as oxygen (from plants) and clean water (from wetlands).

What biodiversity can you find? Color in the box on this Scavenger hunt when you find it:

 something with WINGS	an example of CAMOUFLAGE	a plant that is TALLER THAN YOU	 two POLLINATORS
CARNIVORE	PREDATOR	PREY	draw a SEED
HERBIVORE	OMNIVORE	a FUNGUS 	a VINE 

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