



Don't see an event in your region?

Explore this event guide and consider hosting your own Aquatic & Riparian Biodiversity Hunt.

- Recommended event duration: 1-3 hours
- Suitable for: Families, schools, community groups, stewardship organizations
- Group size: 2-30+ participants
- Main activity: Document species using iNaturalist
- Skill level: Beginner friendly
- Cost: Free (smartphone required)


Aquatic & Riparian Biodiversity Hunt

An aquatic and riparian biodiversity hunt is a simple act with a lasting impact, helping people explore and document life along shorelines, rivers, and wetlands. Using iNaturalist, participants contribute real biodiversity data while [building awareness](#) of freshwater ecosystems and the species that depend on them. Participants may observe plants, birds, insects, amphibians, fish, fungi, and other species that rely on aquatic and riparian habitats.

1. Select your site

- Choose a publicly accessible shoreline, riverbank, wetland, or riparian corridor that is safe to explore on foot. Consider site accessibility, permissions, transportation options, parking availability, washrooms, trail conditions, and any environmental or safety risks before confirming your location.

2. Conduct a hazard assessment

- Visit the site in advance to identify potential hazards and outline mitigation measures to reduce risk, including unstable banks, fast-moving water, wildlife activity, and access limitations.
 -  [Hazard Assessment.pdf](#)

3. Plan logistics

- Determine equipment needs (phones/devices with iNaturalist downloaded, optional field guides), and field logistics (group structure, timing, weather considerations, and observation zones).
 - Download iNaturalist for [IOS](#) and [Android](#)
 - Review the Basic Equipment Checklist below and confirm participants have access to the necessary gear and supplies.

4. Create a participant plan

- Share key details including: event description, start/end times, meeting location, directions, transportation options, what to bring/wear, devices and apps needed, and contact information.

5. Familiarize yourself with iNaturalist

- Make sure participants understand how to use iNaturalist before heading into the field, including how to take clear photos of species (ideally from multiple angles), add basic notes such as habitat or location context, ensure location services are enabled, and [upload observations correctly](#). A short practice observation before starting the event is recommended so everyone feels confident using the app.

6. Prepare permissions

- Consider using standard permission forms for youth groups and ensure participants understand photo/data sharing through iNaturalist, including how observations will be publicly shared. Depending on location, permissions may also be required from municipalities and park agencies.

7. Prepare a waiver

- Consider using a standard volunteer waiver and ensure all participants sign it before the event (online or in person at check-in).

8. Promote your event

- Share with local schools, libraries, stewardship groups, youth programs, and community organizations. Post on social media and submit your event through the [One Day of Action for Water registration form](#) to be included on the map.

9. Host your biodiversity hunt

- Begin with a safety and orientation briefing. Assign boundaries and group zones, explain site rules and expectations, and ensure participants understand the focus is observation only (no collecting or disturbing organisms). Support participants as needed while they explore, ensuring safety is maintained throughout and that the activity remains low-impact and respectful of the habitat.

10. Document & report

- Record participation details, number of observations, notable species, and key event highlights. Ensure all data is uploaded to iNaturalist. Take photos of participants, habitat areas, and general site conditions. Share findings with partners such as Living Lakes Canada for reporting and storytelling.

Basic Equipment Checklist

- Smartphone or device with iNaturalist
- Weather-appropriate clothing
- Sturdy footwear
- Water and snacks
- Binoculars (optional)
- Field notebook (optional)
- First aid kit

Define your observation area

Before the event, decide how much shoreline or habitat each group will realistically cover. Prioritize quality over distance.

Consider:

- Group size and experience level
- Habitat type and complexity
- Weather and conditions
- Time available
- Depth of biodiversity recording effort

A helpful starting point is to assign approximately 100–300 metres of shoreline per small group, adjusting based on conditions. For larger groups, divide the area into sections so teams can work independently without overlap.

Permits & approvals

Contact local municipal or environmental authorities in advance to confirm any required permissions, especially in protected or sensitive habitats.

Data & documentation

Use iNaturalist to record species observations and document biodiversity. Photograph organisms clearly from multiple angles where possible. Capture habitat context, not just individual species.

Take photos throughout the event to document participation, key species, and overall habitat conditions. This supports reporting, education, and long-term monitoring.


Group size

Keep groups small and manageable to support safety and strong observation quality. Events can range from 2 participants to 30+ depending on capacity. No group is too small—every observation contributes valuable data.

Safety & operations

Tailgate Safety Meeting (required before starting)

- Assign a main coordinator

- Review site hazards and boundaries
- Invasive species prevention (clean footwear, clean equipment)
- Explain observation-only rules (no collecting or disturbing organisms)
- Confirm group structure and check-in system
- Use this template to complete your safety meeting
 -  Tailgate Safety Meeting .pdf

Key safety rules

- Do not enter deep or fast-moving water
- Avoid disturbing wildlife, nests, or sensitive habitat
- Be cautious near steep, slippery, or unstable shoreline areas
- Do not handle unknown organisms
- Wash or sanitize hands after fieldwork
- Children must be directly supervised at all times

Disclaimer

This guide is intended to support community-led biodiversity events for informational purposes only. Organizers are responsible for assessing the site conditions, participant safety, and any permits or permissions that may be required. Participation is voluntary and at the participant's own risk.

We recommend connecting with Living Lakes Canada or a local stewardship organization for additional guidance and support.