

Invasive Phragmites Surveying Protocol



The Land Between

Cottage Country's
Conservation Organization

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A. Safety Recommendations

1. General

- This protocol can be carried out individually or in small teams of your choosing.
- Wear proper clothing when conducting surveys including closed-toed shoes, gloves, and long pants.
- Wear clothing that is easily visible (bright coloured shirts, safety vests, etc.).
- Wear clothing that is weather appropriate. If it's cold, hot, rainy or otherwise, ensure you are dressed for the weather.
- Make a route plan for the day and we recommend that you let someone know your route and where and roughly when you plan to be in a given area.
- Pack a cell phone, charger, water, and extra snacks.

2. Road

- Always follow the rules of the road.
- If you are driving and you see a Phragmites stand, carefully slow down, put your four-ways on, and pull over to the side of the road. Make sure that you are parked completely off the road (outside the white lines).
- Only pull over if and when it is safe to do so. Do not stop in an active lane of traffic.
- If you are walking or biking along the road, be vigilant and alert at all times. Pay attention to on coming traffic

3. Emergencies

- In the event of an emergency, call 911
- Always pay attention to where you are so that this information can be communicated to emergency professionals if need be.

B. Before you Begin your Survey

- Register as a Phrag Fighter on The Land Between Citizen Science Centre page.
- Acquire an Invasive Phragmites Surveying Kit. This kit will be e-mailed to you after you have registered as a Phrag Fighter. You can also access the information in this kit on the Phragmites Fighters page under the Citizen Science Centre tab of The Land Between website.
- Download **EDDMapS Ontario App** and make an account with your organization listed as "TLB"
- Wait to be assigned a township (or portion thereof) to survey



C. What you Will Need

- Survey area map
- Pen/pencil
- Cell phone with the EDDMapS App downloaded.
- Field reporting sheets (if not using app/just in case)
- Percent cover estimation sheet
- *Guide to Identifying Native and Non-Native Phragmites australis*
- Car
- High visibility vests (one per team member)
- First Aid Kit

D. How to register with EDDMaps Ontario – App

1. Download the EDDMapS Ontario App from the App Store (iPhone) or the Google Play Store (Android). Open the app.
2. To create an account, on the home screen, click on “**EDDMapS Login**”. Select “**Register with EDDMapS**”.
3. Input your information (name and email), and create a password. Under “**Organization**”, input “**TLB**”. This way we will be able to find your data easily. Click submit.
4. You are now registered and ready to use the app.

E. How to Report a Phragmites Sighting using EDDMapS Ontario

1. Open the app. Make sure you are signed in with your account.
2. To login to your account, click “**EDDMapS Login**” from the home screen. Input your account information (email and password), and click “**Login**”.
3. To report Phragmites, from the home screen, select “**Species Categories**”. You will be taken to a screen where you can select from either Aquatic Animals, Aquatic Plants, Invasive Forest Pests, Invasive Pathogens, or Terrestrial Plants. If you are **near water**, select “**Aquatic Plants**”. If you are **not near water**, select “**Terrestrial Plants**”.
4. You will then be brought to a list of species. Click on the search bar at the top of the screen. If you want to search by common name (**European Common Reed**), ensure that “**Common Name**” is highlighted. If you want to search by scientific name (***Phragmites australis subsp. australis***), ensure “**Scientific Name**” is highlighted. Type the name of the species into the search bar and click on it when it appears.



Remember that this app can only be used to report invasive species, so do not worry about accidentally selecting the native species of Phragmites.

5. When you select Phragmites from the list of species, you will be brought to the reporting page. The date, time, and your location should be automatically populated. If they are not, input the missing information.
6. To take photos and upload them to the app, click on the image of the **camera**. Select **“yes”** to allow the app to access your camera and your photos. A box will appear asking if you would like to take a photo, or upload a photo from your phone library. If you have already taken the photos, click **“Select from Library”**. If you have yet to take a photo, click **“Take a Photo”**. Please ensure that you take **clear photos** as in order for your sighting to be verified by professionals, they must be able to identify the plant based on the images you provide.

After you take a photo, you will be able to add a **brief description** to it. Provide as much information in the caption as possible.

7. After you have uploaded your photos, input the rest of the required information including **“Habitat”** (from a list of options), **“Abundance”** (choose from options including Single Plant, Scattered Plants, and Dense Patches), and an estimation of the **Area** occupied by Phragmites. The size estimate can be made in hectares or square meters.
8. Under the **“Protocol”** section, select **N/A**.
9. Under **“Description”**, select all of the descriptions that apply. It is possible that **“In Flower”**, **“Seeds”**, and **“Dormant/Dead”** all apply to the same stand.
10. Please note that if you searched for Invasive Phragmites under the **“Terrestrial Plants”** section of the app, you will be asked for some additional information regarding the stand including the **“Approximate number of individuals”** and **“Canopy Closure/Ground Cover (trees)”**. You will also be presented with additional options in the **“Description”** section including **“Mature”** and **“Immature”**. For the purposes of these surveys, we will not require any of these fields to be populated/selected. However, if you would like to provide this information in the app, please feel free to do so.
11. If you have any additional information regarding the sighting, please include it in the **“Notes”** section at the bottom of the screen. Helpful information could include the nearest intersection of roads, or other landmarks that could be used to find the stand at a later date. We would also appreciate it if you could include in this section an **estimate of the percent cover of Invasive Phragmites** across the given



habitat. For example, if Phragmites is occupying the entire shoreline around a body of water, we would like to know what percentage of the entire lake environment is occupied by the Phragmites. **The Percent Cover Estimation Sheet** attached to this protocol can be used to make this estimate.

12. After you have input all of the necessary information and attached the photos to the sheet, click "**Save**" in the bottom right corner. When you click "**Save**", your report will be added to your "**Upload Queue**". Reports in your upload queue can be **viewed**, **edited** or **uploaded**.

To **edit** a report in your queue, click on the report in the Upload Queue list, and make the required changes. To **delete** a report from the Upload Queue, select "**Actions**", select the report, then select "**Delete**" from the bottom right hand corner of the screen.

13. When your sighting report is complete, and you are in an area with cellular data or internet, select "**Actions**" from the top right corner of the **Upload Queue** screen. Select the species **report** from the list that you would like to upload, then select "**Upload**" from the bottom centre of the screen.

14. After you have uploaded your observation reports, wait for your sighting to be confirmed. This process usually takes about a week. After your sighting has been confirmed it will be visible to other users of the app so that individuals or organizations can strategize and prioritize for its removal.

*If you would prefer to report your Phragmites sightings on the EDDMapS website, go to eddmapp.org/ontario/, log in with your account, and input your observations. If you will be reporting your sightings using the website, we recommend using the field reporting sheet to record your field observations, and then inputting the data into the website after you return home for the day.

F. Survey Procedure

1. Come up with a plan for the survey route that you will drive for the day. Include as much detail in this plan as possible (approximate times you will arrive at each location, etc.). Share this plan with at least one person who will not be participating in the survey. This way someone will know where to look for you if need be.
2. Systematically drive through your pre-planned route.

Please try to survey as much of your assigned survey area as possible. The entirety of your assigned area does not have to be surveyed in one day, but mapping of Phragmites stands should be completed by May 31st. Any stands surveyed after this



date will not be factored into consideration for removal this year. However, continued surveying after May 31st is still encouraged, as the more we know about where Phragmites is, the better.

Please also remember that we will be **prioritizing smaller stands** of Invasive Phragmites for removal. This is because smaller stands of Phragmites actually have the potential to be removed by manual methods, whereas larger stands tend to require additional measures for successful removal. If you find that your assigned survey area has a lot of Invasive Phragmites, we ask that you prioritise reporting the smaller stands first. For our purposes, a **small stand will be defined as 4x4 meters (12x12 feet) or less.**

3. When you come across what you believe to be a stand of Phragmites, carefully pull over to the side of the road if it is safe to do so.

Using the ***Guide to Identifying Native and Non-Native Phragmites australis***, determine if the stand is native or Invasive Phragmites.

If you are using the EDDMapS app to do your reporting, you can also refer to the photos of Invasive Phragmites contained within the app to aid in your identification. To access the photos in the app, click on the info button (circled lower case "i") next to the species name in the list of species.

4. If you determine that it is Invasive Phragmites, report the sighting using the EDDMapS Ontario App (see instructions for using the app in **Section E**) or the Phragmites field reporting sheet. Include at least two photographs, one of the stand as a whole, and a close up of the individual plant.

If you have time, it would also be helpful to photograph features of an individual stalk that can be used to confirm its identity. These features could include the flower, the base of the stalk, the leaves, the ligules, etc. Please ensure you take clear photos.

If you are reporting the sighting using the field sheet rather than the EDDMapS app, keep track of which photos belong to each sighting to ensure the appropriate photos are uploaded with the right report.

5. Ensure that all of the necessary information has been recorded in either the **app** or the **reporting sheet** before leaving the site.

Please do not forget to include an estimation of the percent of the total habitat area occupied by the Invasive Phragmites in the **Notes** section of the report. This estimate can be made using the **Percent Cover Estimation Sheet** included in this



protocol. For example, if the Invasive Phragmites is occupying a stretch of a roadside ditch, estimate what percentage of the ditch is occupied by Phragmites compared to other plants, woody debris, bare ground, etc.

Please also mark the approximate location of the Invasive Phragmites stand on the hard copy of your survey area map.

6. If you are using the app, when all of the necessary information has been recorded, select **“save”**. When you are home and/or in an area with access to cellular data/wifi, upload your reports and await their confirmation.

If you are using a paper copy of the Phragmites field reporting form, when you have completed your survey for the day, scan/photograph your data sheet(s) and email them, along with all of your photos to **CitizenScienceTLB@gmail.com**, and we will upload your data to the EDDMapS database. Please be sure that the correct photos are attached to the correct reports.

7. Carefully return to your vehicle, signal appropriately, and continue your survey throughout your designated area.
8. **When you have completed your surveys for the season, please scan/photograph your survey area maps with the approximate locations of Invasive Phragmites stands marked on them and send them to CitizenScienceTLB@gmail.com.**

Thank you again for your help in the fight against Invasive Phragmites!

