

## **What is the Classroom Mini Marsh Program?**

Since 1993 the Bay Area Restoration Council (BARC) and Royal Botanical Gardens (RBG) have been offering Mini Marsh kits to local schools. At the end of the school year the plants can be returned to the RBG Nature Centre for planting in Cootes Paradise marsh, connecting students with the restoration of a local wetland.

## **Who is the Bay Area Restoration Council (BARC)?**

BARC is a non-profit organization that is working to clean up Hamilton Harbour and its watershed. Hamilton Harbour was once clean and pristine; people could fish and swim safely. However, its connection to Lake Ontario made the Harbour an ideal location for industry, and Hamilton soon became an industrial port. Environmental problems in Hamilton Harbour include industrial pollution, invasive species, infilling of the Harbour, loss of fish and wildlife habitat, and urbanization of the land. By 1960 it was illegal to swim in Hamilton Harbour because it was so polluted.

In the 1980s the International Joint Commission (IJC) labelled Hamilton Harbour as an Area of Concern (AOC). An AOC is a pollution hotspot. We are one of 43 Areas of Concern on the Great Lakes, which means we are one of 43 of the most polluted sites on the Great Lakes. BARC is the community voice for the Hamilton Harbour Remedial Action Plan (RAP), the overall plan to delist Hamilton Harbour as an AOC. BARC offers school programs, plantings, community workshops and events – all related to Hamilton Harbour.

## **Who is the Royal Botanical Gardens (RBG)?**

Recognized as a World Biosphere Reserve by UNESCO, RBG plays a vital role in this region, protecting and preserving 2,700 acres of environmentally sensitive areas (including 2,400 acres of nature sanctuaries, 300 acres cultivated gardens and an arboretum), to improve the ecosystem from Lake Ontario to the Niagara Escarpment; ensuring a balanced relationship between people and nature, and, connecting natural spaces where wildlife can thrive.

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## Classroom Mini Marsh Planting Instructions

Your kit contains the following:

- A bag of soil or sand
- A bowl
- A planting tray with 4 pods
- A bag containing four native marsh plants
- A snail and some lettuce
- Resource materials

If you are not going to plant your Mini Marsh right away, keep it in the refrigerator until planting day. This will keep your snail dormant and happy until you are ready to assemble your marsh. Do not put it in the freezer! If you want the best chance at keeping your plants and snail happy, you can temporarily set up your bowl at home until you are ready to bring it into the classroom.

Setting up your kit is easy:

1. Fill the planting tray with soil.
2. Bury the plants in the tray so that only the green parts of the plants are exposed above the surface. Put one plant in each of the four pots.
3. Place the planting tray in the bowl (there is no need to add additional soil to the bowl).
4. Fill the bowl gently with tap water (it is easiest to pour it from a pitcher). The water may be cloudy for several hours depending on the type of soil in your kit. This will settle out and clear over time.
5. Add the snail to the bowl. The snail will come out of its shell and start looking for food after it is settled. Add a few small pieces of lettuce for the snail to eat. You will have to keep feeding the snail otherwise it will wander outside of the bowl looking for food. You can also feed fish food or other veggies such as zucchini, cucumber or red pepper. \*Do not be surprised if your snail lays eggs. These will look like gelatinous blobs with small dots inside. Shortly after the eggs will hatch into young snails! If this happens be sure to add extra food to keep the new snails fed.\*
6. Keep the water level high throughout the program. Both the plants and the snail are water loving organisms and will not survive if dry for too long.

## Important Things to Remember

1. Your plants MUST have sunlight. Without enough light your plants will not grow. Place plants in a sunny window. If you do not have a sunny window consider purchasing a grow light, your plants will thank you!
2. Return your plants to the RBG Nature Centre to be planted in Cootes Paradise. The more plants that are returned, the bigger impact we can have on restoring Cootes Paradise. Every plant matters! BARC staff will coordinate the pickup of your Mini Marsh kits at the end of the school year. Some schools may not be eligible for pickup depending on location.
3. Send us your photographs! We are always looking for photos to use in our newsletter, website, and social media. So if you have neat shots of your mini marsh and students in the classroom, please email them over to BARC at [swatts@hamiltonharbour.ca](mailto:swatts@hamiltonharbour.ca). You can also send them to us on social media- tag us @HamiltonHarbour on Facebook, Instagram, and Twitter. We will assume that all photos you send us are safe for publication!