



GroWet

School Pack

Help stop the decline of rare wetland plants!

What is GroWet?

GroWet is a citizen science initiative aiming to address the ongoing declines in wetland plants by actively engaging communities in ecological recovery.

Volunteers are invited to help to grow on a selection of rare wetland plants that are at increasing risk of local extinction. These plants are then re-introduced back into the landscape at sites with suitable habitat and management where they can thrive, bolstering and expanding populations.

Why try to stop the decline of rare wetland plants?

Research is showing that in the lowlands, wetland plant diversity is currently declining at approximately 1% per annum. These declines are even more severe for endangered and uncommon species.

As species become more isolated and dispersal mechanisms are disrupted they can no longer move across the landscape. This means that even when suitable habitat is created or restored many species are unable to reach it.

GroWet gives these plants a helping hand, enabling them to reach good sites, increasing their abundance and distribution, and most importantly reducing their risk of extinction.

freshwaterhabitats.org.uk/projects/growet

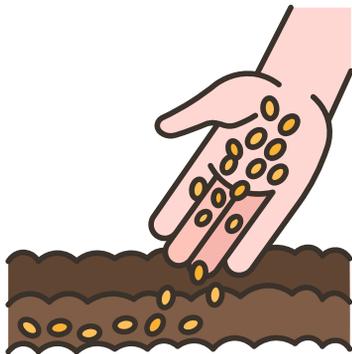


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Schools can get involved in 2 ways!

1.



Take part in GroWet school sessions

An in-school session with a GroWet project officer to go on a wetland journey: sowing and caring for plants, and learning about their ecology and pollution pressures.

2.



Join us for a wetland field trip

Join us to plant our GroWet plants back out into the wild at one of Buckinghamshire's good quality wetland habitats!

Support available for travel expenses

Schools can take part in 1 or both of our GroWet school sessions. Session 1 can be undertaken in the classroom or outside.

The sessions are aimed at KS2, but can also be adjusted for older students.

Session 1: Exploring Plant Propagation, Water Quality and Pollution

- Students will learn about wetland plant growth and propagation techniques including seed sowing and cuttings.
- Students will explore how to test the quality of water and learn about water pollution and its hidden impacts on plant growth and ecosystems.



Field Trip: Planting Out Event At A Local Important Wetland

- Students will learn how to plant grown plants into wetland habitats.
- Students will explore wetland ecosystems, observe and identify different organisms, and understand the importance of biodiversity.



Exploring Plant Propagation, Water Quality and Pollution

Duration: 2 hours 

Learning objectives:

- Students will learn about wetland plant growth and propagation techniques including seed sowing and cuttings.
- Students will explore how to test the quality of water and learn about water pollution and its hidden impacts on plant growth and ecosystems.

Equipment provided:



Wetland plant seeds and cuttings



Gloves



Pots for planting



Cups for cutting propagation



Compost



Watering cans



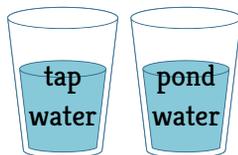
Nutrient test kits



Activity sheets



Stopwatch



Water samples

Part 1: Introduction (20 minutes)

1. Welcome and Introduction

- GroWet project officer to greet the students, provide a brief overview of the lesson and introduce the GroWet project.

2. Icebreaker Activity

- Engage students with a short activity to get them thinking about freshwater habitats and their significance. Example: Ask students to name as many different types of wetland habitats as they can in 2 minutes.

Part 2: Wetland Plant Propagation (30 minutes)

3. Seed Sowing

- Explain the concept of seed sowing and how it would occur naturally.
- Health & safety brief.
- Demonstrate how to sow wetland plant seeds in pots or trays.
- Have students sow seeds in their own pots.
- Class room experiment: Water half of plants with rainwater and half with tap water to see how this influences plant growth.

4. Cutting Propagation

- Introduce cutting propagation as an alternative method.
- Explain how to take cuttings from wetland plants and how to root them.
- Students to practice taking cuttings and helping them to root.
- Class room experiment: Place half of cuttings in rainwater and half in tap water to see if this influences plant growth.

10 minute tidy up

60
minutes

Part 3: Water Quality Testing & Water Pollution (40 minutes)

6. Introduction to Water Pollution and Water Quality Testing

- Introduce the concept of water pollution and its sources (hidden nutrient pollution from phosphate & nitrate).
- Discuss where pollution can come from, its sources (sewage, agriculture, industry, urban).
- Discuss how polluted water can negatively impact plant growth and the surrounding ecosystem.
- Explain the importance of testing water quality for environmental and plant health.

7. Hands-on Activity: Water Quality Testing

- Test water samples for invisible nutrient pollution using rapid colour change kits. Discuss what students expect the results to be.
- Record and discuss results. Are they what they expected to find?

Part 4: Conclusion and Reflection (10 minutes)

8. Review and Discussion

- Lead a discussion about what students learned during the lesson.
- Example questions: What are the key contributors to water pollution? What can we do to help prevent water pollution? Why is wetland plant propagation important for conservation?

10 minute tidy up

Optional homework activity (preparation for session)

In advance, students can be supplied with cups to collect water samples that can be tested in class during the school session. Samples could be collected from tap or rain water, or (with supervision) a garden or school pond, a local stream or river.

60
minutes

Field trip to an important local wetland to plant out adult GroWet plants

Duration: 2 hours 

Learning objectives:

- Students will learn how to plant grown plants into a wetland habitat.
- Students will explore a pond ecosystem, observe and identify different organisms, and understand the importance of biodiversity.

Equipment provided:



Gloves



Shovels and trowels



Adult GroWet Plant



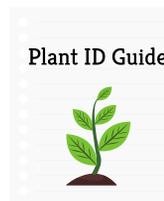
Pond dipping nets



Pond dipping trays



Magnifying glass



ID guides



Pots for invertebrates



Activity sheets

Schools and students need to provide



Wellies or other outdoor shoes

Part 1: Introduction (15 minutes)

1. Welcome and Introduction

- GroWet project officer to greet the students and provide a brief overview of the lesson.

2. Discussion on Wetland Planting

- Introduce the concept of planting grown wetland plants in their natural habitat.
- Discuss the benefits of using native plants for wetland restoration and conservation efforts.

Part 2: Planting out (45 minutes)

3. Demonstration of Planting

- Demonstrate the steps of planting grown plants in a wetland habitat.
- Emphasize proper planting depth and spacing.

4. Hands-on Activity: Planting in Wetland Habitat

- Provide grown wetland plants, shovels/trowels, and watering cans for each small group.
- Supervise students as they plant the grown plants in the wetland habitat.

5 minute tidy up



Part 3: Pond Dipping (40mins)

5. Introduction and demonstration:

- Provide a brief overview of the importance of pond ecosystems.
- Explain safety guidelines, emphasizing the need to be gentle with the organisms and respect the environment.
- Demonstrate good pond dipping technique.

7. Activity:

- Divide students into small groups, providing each group with a net, observation tray, clipboard, and identification materials.
- Instruct students to dip their nets into the pond, gently sweep through the water, and carefully inspect the collected specimens.
- Encourage students to use field guides or identification sheets to identify the organisms they find.
- Have students record their observations, including the name of the organism, its size, and any notable characteristics.
- Ask students to share their findings and observations as a group.

Part 4: Conclusion and Reflection (10mins)

9. Review and Discussion

- Discussion about what students learned during the lesson.
- Ask the questions: Why is it important to plant native plants in wetland habitats? What are some examples of wetland species? What factors enable a good quality wetland?

5 minute tidy up



55

minutes