

Generation Restoration

Focus Questions

Discuss the BTN story as a class and record the main points of the discussion. Students will then respond to the following:

- 1. What is the focus of World Environment Day this year?
- 2. What is an example of restoring native environments?
- 3. What do plants take out of the atmosphere?
 - a. Carbon dioxide
 - b. Hydrogen
 - c. Oxygen
- 4. How will planting native trees help the natural environment?
- 5. What is a native plant that can be found in your local area? Name one.

Activity: Note taking

Students will practise their note-taking skills while watching the BTN Generation Restoration story. After watching the story, ask students to reflect on and organise the information

into three categories. What information in the story was...?

- Positive
- Negative or
- Interesting

¥?

Activity: What did you See, Feel and Learn?

As a class ask students to discuss their thoughts and feelings about the BTN Generation Restoration story. Record responses on a mind map. Clarify students' understanding of the following terms: Ecosystem, Vegetation, animals, urbanisation, conservation, and biodiversity. Use the following questions to guide discussion:

- What is an ecosystem? Give an example.
- Why do we need to look after natural ecosystems?
- What things are threatening our natural ecosystems?
- What is an example of restoring our natural enviuronement?
- Why is it important that we protect and conserve living things?

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KEY LEARNING

Students will understand the importance of natural ecosystems, and the human impacts which place ecosystems at risk.

CURRICULUM

Science - Year 4

Living things depend on each other and the environment to survive.

Living things have life cycles.

Science - Year 5

Scientific knowledge is used to solve problems and inform personal and community decisions.

Science - Year 6

The growth and survival of living things are affected by physical conditions of their environment.

Scientific understandings, discoveries and inventions are used to solve problems that directly affect peoples' lives.

Geography - Year 4

The importance of environments, including vegetation and water sources, to people and animals in Australia and on another continent.

Activity: Glossary

Students will brainstorm a list of key words that relate to the BTN Generation Restoration story. Here are some words to get them started.

ECOSYSTEM	BIODIVERSITY	RESTORE
DEGRADED	RECOVERY	URBANISATION

Ask students to write what they think is the meaning of each word (including unfamiliar words). They will swap definitions with a partner and ask them to add to or change the definition. Check these against the dictionary definition.

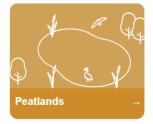
Further activities for students:

• Students will add to their glossary by downloading the transcript for the BTN Generation Restoration story and highlight all the words that relate to the topic.

Activity: Restoring Ecosystems

Students will investigate eight major types of ecosystems that have been degraded. Look at the examples of what can be done to restore critical ecosystems by <u>clicking on each image</u> and looking at the <u>Ecosystem Restoration Playbook</u> to learn more about the challenges and opportunities for each ecosystem.

















Activity: Plant Investigation

Get to know the plants in your area

Provide students with the opportunity to think and behave like ecologists (an ecologist studies the relationship between living things and their habitats). In this activity students will be given the mission to explore a natural ecosystem in their local area, identify a native plant and document what they find. Use the following as a guide. Students may work individually or in small groups.

Plan

Students will plan a visit to a local nature reserve or their own school yard to explore the natural ecosystem and identify native plants. Students will need to write a list of tools they may need for the investigation, for example: pen and paper for taking notes, camera and magnifying glass. Students will predict what plants they might see.

Explore

Students will carry out an exploration of the area. Students will choose a spot in the environment to investigate. Consider exploring the area from different angles, closeup or far away. Look and listen for evidence that animals live in the area.

Collect

Students will choose one native plant to explore in detail. Students will collect as much data as they can about that plant and record what they find. Students may write notes and sketch what they see to help in their investigation. Students may want to record what they see with a stills or video camera.

Share

Students will return to the classroom and share/compare their findings.

Analyse

Students will analyse their findings and write a short summary of their investigation. Students will respond to the following questions:

- Did you find any native plants during your investigation? If yes, identify and describe what you found. Did you find any evidence that insects or other animals live in the area?
- How could you help protect this habitat?

Research

Students will research and respond to the following:

- What does the plant look like? Describe its physical characteristics.
- What is its classification?
- What role does the plant play in the ecosystem?
- Why is this plant important?

Reflect

Students will reflect on the investigation by responding to one or more of the following questions:

- What did you enjoy about this investigation?
- What did you find surprising?
- What would you do differently next time?













Activity: Biodiversity

Restore the biodiversity in your local environment!

Students will work together to help introduce a native plant and/or animal species into their school yard. Ask them to consider the following:

- What kind of plants and animals could you help reintroduce into your school yard? Research the
 species native to your local area. Contact a ranger at a park near your school or the local council to
 learn more about the local species.
- Do you have the right type of ecosystem in your school yard for native animal species to survive? E.g., birds, bees, frogs, butterflies. Describe the climate and identify the plants in your school yard.
- What are some threats to the species that are caused by humans? How can you reduce these threats in your school yard?
- What materials and tools will you need to build the habitat or introduce new species to your area? Consider writing a guide or procedure manual.
- Build the habitat as a class and present the habitat to your school community. Teach students in other classes about the new habitat and involve them in caring for the new habitat.
- Prepare a map of the habitat which highlights key features. Include information labels in the habitat (for example, QR codes) for other students to learn more about the habitat and the biodiversity of your school yard. Include scientific information about the species.



Useful Websites

- World Environment Day
- World Environment Day United Nations
- <u>BECOMING #GENERATIONRESTORATION: Ecosystem restoration for people, nature and climate</u> –
 United Nations