# Additional resources: Does the Cemetery provide the ideal eco-system?

# **Enquiry Question Exploration**

### Below are some concepts which may arise from discussion and activities. You can use the questions to facilitate dialogue.

**Change:** What changes has the ecology in this Cemetery experienced since first opening? How has this affected the ecology? Now that the site has been re-established how will the ecology be affected? What are the positives/negatives of change?

**"Ecological succession is the process by which the mix of species and habitat in an area change over time. Gradually, these communities replace one another until a "climax community"—like a mature forest—is reached, or until a disturbance, like a fire, occurs.** Does or has this Cemetery ever had a "climax community"? How might the Cemetery change over time looking into the future?



**Evolution:** How do evolution and ecology fit together? What are the ecological aspects of evolution? Why is ecological evolution important? How have trees changed over time in Sheffield? What makes a plant a weed?

**Sustainability:** How can we make changes now at the Cemetery which affect the future of the Cemetery in a positive way? What role does sustainability take when making choices in our daily lives? How can we be more sustainable in our day to day lives? What natural resource swaps could we make? E.g. riding a bike to work over taking a car. Consider how much water your family uses in a week, think about ways in which we could all reduce our water consumption?

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This resource was created by Orla Wilson, Primary Teacher and Creative Curriculum Leader.

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## **Online Audio trails**

Winter Activity Trail



Spring Activity Trail





\*Please note if you are accessing the trail via a website, we recommend you download the izi.travel app to receive a better experience. You can do this on any smart phone by visiting the App store and typing in izi.travel and clicking download.



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#### Eco-system game

#### First ask:

- What are the important resources that all living things need?
- What would happen if a part of the eco-system was removed permanently from the eco-system?
- If a plant goes extinct, could this cause some animals to go extinct as well? If so, how?

#### How to play:

- 1. Gather 4 different sized stones or sticks in the cemetery (or bring along 4 jengastyle blocks with a different coloured mark on each)
- 2. Explain that each block represents one component of the eco-system (for example, red animal, green plant, blue water, yellow sun). You could choose any other elements of an eco-system but a larger category works well rather than an individual component as it won't place a disproportionate importance on any single organism.
- 3. Put the blocks on top of each other to create a tower. The tower represents a healthy eco-system.
- 4. Now pick at random a card from the pack and read it out loud. Ask pupils to decide which category it relates to and remove the block.
- 5. Eventually the eco-system will collapse showing how all the different parts of the eco-system are needed and work alongside each other.

#### Questions to think about:

- How do we know if an eco-system is healthy? What would a healthy eco-system look like?
- How do we know if an eco-system is unhealthy? What would an unhealthy ecosystem look like?
- What are some ways in which the nonliving parts of the eco-system can be damaged?
- What does the tower of blocks represent?
- What does each color/size of block represent?
- What does removing a block represent?







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Below are cards to read out: With each card, discuss causes, consequences and resolutions.

Card 1: A drought has hit the eco-system. How is the eco-system effected? What other pieces of the eco-system would be affected?

Card 2: It has been a rough winter - cold with barely any sun. How is the eco-system effected? What other pieces of the eco-system would be affected?

Card 3: Heavy rain has eroded so much soil into the river. How is the eco-system effected? What other pieces of the eco-system would be affected?

Card 4: Builders want to expand and build on our land. How is the eco-system effected? What other pieces of the eco-system would be affected?

Card 5: The bee population has been in decline! How is the eco-system effected? What other pieces of the eco-system would be affected?

Card 6: As the climate changes, seasonal changes in temperatures also change. The seasons have been all out of sync and local birds have migrated south too early in the season. How is the eco-system effected? What other pieces of the eco-system would be affected?

Card 7: Water pollution has poisoned waterways. How is the eco-system effected? What other pieces of the eco-system would be affected?

Feel free to create some scenarios of your own and work out which part of the ecosystem would be affected.



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