



## Mountains to Sound Greenway Trust

### Next Generation Stewards

#### Grow a Decomposer Garden

So far in this video series, we have learned about the four abiotic components that determine what kinds of organisms can thrive in an ecosystem as well as producers and consumers. As we continue talking about how energy flows through an ecosystem, we're going to talk about the next step up the energy chain: decomposers. Decomposers are organisms that break down dead materials. They recycle the nutrients bound up in dead organisms, releasing them back into the ecosystem for the next generation of life to use. We can use the acronym FBI to remember what they are: **F**ungi, **B**acteria, and **I**nvertebrates. As ecosystem stewards, it's our job to recognize the importance of these amazing organisms and teach others that they're not just icky and gross. Watch the video: [mtsgreenway.org/get-involved/education/virtual-education/next-generation-stewards](https://mtsgreenway.org/get-involved/education/virtual-education/next-generation-stewards).

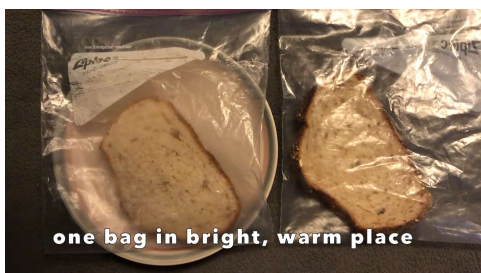
#### Materials:

- Sit spot journal (or piece of paper)
- Something to write with
- A dish (a bowl or plate)
- Bread (one large piece or two small pieces)
- Two resealable plastic bags
- Water (a few teaspoons)



#### How to do grow a decomposer garden:

- 1) Get the bread damp by spraying it with a spray bottle or dipping it quickly in water.
- 2) Put the bread in a resealable plastic bag. If you are using two small slices, put each slice in its own bag. If you are using one large slice of bread, cut it in half and put each half in its own bag. Be sure to seal the bags well so they don't leak!
- 3) Put one bag someplace bright and warm, such as the windowsill. Put the other bag someplace cool and dark, such as the back of a kitchen cabinet.



- 4) Make a hypothesis (and educated guess) about what will happen to each piece of bread. Write your hypothesis down in your sit spot journal (or on a piece of paper).
- 5) Check on your slices of bread every day and see if any decomposers appear. Questions to consider in your sit spot journal:
  - Are the two slices of bread different?
  - Do different decomposers grow on the light slice vs. the dark slice? Or do they do at different rates?
- 6) When you visit your sit spot next, look for decomposers. Draw and/or write about them in your sit spot journal.
- 7) We invite you to send us your observations and photos to [education@mtsgreenway.org](mailto:education@mtsgreenway.org)! We may share them on social media.

