Group Story

Objective Participants prepare and deliver a creative presentation about relevant vocabulary words, that are woven into a larger story.

Audience 15 or more participants; ages 12+

Duration 15-20 minutes

Materials
- Presentation prompts (*see example prompt below – the underlined words are vocabulary words; each group would be assigned one*)
- Larger story about an event or place, or both (*example provided on last page*)
- *Optional* – Invasive plant factsheets (found at VTinvasives.org)

Background Stories can connect people to a place. This activity is a great companion for invasive plant workdays. Tailor the story (*see example on last page*) to be plant and site specific to the program you are running. This is especially fun to present early in the day on a workday, giving the participants the day to think about their presentation.

Procedure
1. Explain that we are going to read a story together, and that each group is going to be presenting a vocabulary word to everyone else. They can present their word however they would like (a skit, a song, a demonstration), as long as everyone takes part.
2. Pass out a word to each work group. Provide them with a definition as appropriate. Have them think about their presentation throughout the day and give them 10 minutes just before the group presentation to work intently on it.
3. At the end of the day, gather the participants. You read the story aloud. At the end of each sentence, the group whose vocabulary word appeared in the sentence should step forward and present their word.
4. Participants should hold their applause until all the groups have gone.

Glossary

- Biodiversity: The variety of species in a given place at a given time.
- Decomposers: Organisms that obtain energy by breaking down dead and dying organisms.
- Food chains: The order in which organisms depend on each other for food; steps in an ecosystem in which organisms transfer energy by eating and being eaten. A group of food chains can form a food web.
- Primary consumer: An organism, aka an herbivore, that obtains energy by eating plants or algae.
- Producers: Organisms that make their own food, usually by using the energy from sunlight to make sugar (example: plants & algae).
- Restoration: The practice of rehabilitating degraded, damaged, or destroyed ecosystems and habitats in the environment by active human intervention.
- Secondary consumers: An organism that obtains energy by eating plants and primary consumers (aka an omnivore).
- Specialists: A species that can thrive only in a narrow range of environmental conditions or has a limited/very specific diet.

- Trophic level: Categories within a food chain that describe how an organism gets its energy based on what it consumes. The first trophic level is made of producers, like plants and algae. The second trophic level consists of primary consumers, generally herbivores. The third trophic level is secondary consumers, usually omnivores. The fourth trophic level is tertiary consumers, or carnivores.
- Ecosystem: An ecosystem is made up of all the living and nonliving things in an area. This includes all the plants, animals, and other living things, and also the nonliving materials—for example, water, rocks, soil, and sand. A swamp, a prairie, an ocean, and a forest are examples of ecosystems.

EXAMPLE STORY

The Story of Invasive Plants at Ethan Allen Homestead

Ethan Allen Homestead is home to many wonderful and unique plants and animals. If you look around, you will see beautiful producers such as red-osier dogwood and sugar maple trees growing in the sunlight.

Look closely at one of the red osier dogwood leaves and you might find bite marks - evidence of a primary consumer, such as a caterpillar, having a snack.

Listen, and you might hear the warbling song of a yellow warbler, one of our many secondary consumers, as it forages for caterpillars to eat.

Look up and you might see a tertiary consumer such as the Cooper's hawk soaring over head as it looks for its next meal. Look down, and you're likely to see colorful decomposers like the chanterelle mushroom poking up through the leaf litter on the forest floor.

All these living things depend on each other for their survival and form a vibrant and complex food web. When invasive plants are introduced to the area, this intricate system of interconnected food chains is disrupted.

Since all organisms are interconnected, disturbing one trophic level has a cascading impact on all organisms in the community.

For example, when invasive shrub honeysuckle was introduced to the Ethan Allen Homestead, it displaced locally evolved plants such as red-osier dogwood. Many of our locally evolved insects are specialists and do not eat invasive shrub honeysuckle, so the diversity and number of insects found at the homestead decreased.

This, in turn, had a negative impact on the small songbirds that depend on these insects for food for themselves and their babies. When there are fewer small songbirds in the area, there is less food available for bigger birds of prey. As you can see, the impact from the displacement of locally evolved plants goes far beyond just plants – it decreases the overall biodiversity of the area.

But there is hope! Over the past 2 years students from Williston Central School have been involved in restoration efforts at Ethan Allen Homestead.

As a result, there are fewer invasive plants, and the homestead is becoming a healthy ecosystem once again!

You all are making such a big difference!!! THANK YOU!!!! Give yourselves a round of applause!

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