Southern Oregon LAND CONSERVANCY

Trees, Snags, and Logs

Part of the Rogue River Preserve Interactive Map for Grades 3-5

Making a case for dead trees

Lesson Synopsis

After filling in a Venn diagram to capture their preexisting ideas about the roles of live and dead trees in an ecosystem, students read an article and watch a video about snags and logs, and then create an argumentative slide or poster to convince an audience of the importance of dead trees.

Learning Outcomes

During this lesson, students will:
- organize their ideas using a Venn diagram
- obtain, combine, and summarize information from two media types
- communicate complex ideas about interrelationships in ecosystems using text and images

NGSS Alignment

Disciplinary Core Ideas: LS2.A: Interdependent Relationships in Ecosystems
Crosscutting Concepts: Cause and Effect; Energy and Matter
Science and Engineering Practices: Engaging in Argument; Communicating Information

Linked & Embedded Resources

When using resources from the Google Drive, please duplicate each resource and then move it to your own Drive to ensure that the original remains intact for other users.
- Google Earth Project: Rogue River Preserve Interactive Map for Grades 3-5 available here
- Video: Snags and Logs (embedded in the map or available on YouTube here)
- PDF: Dead Trees & Living Creatures (link embedded in the map or available here)
- Google Slides: Venn Diagram (master copy available in the Google Drive here)
- Google Slides: Standing Up For Snags (master copy available in the Google Drive here)

Approximate Time Needed

30-50 minutes

Digital Tools

Google Earth
Google Slides

Student Activities

Begin by asking students to navigate to the Trees, Snags, and Logs point on the Interactive Map, either by finding it in the Table of Contents drop-down menu in the lower left-hand corner of the map, or by finding the yellow placemarker with the star. Invite them to make some initial observations about this habitat. Most of them will probably notice that there are a lot of trees! Then, encourage them to zoom in and look a little closer at the satellite imagery. Ask if they can find evidence of dead trees mixed in among the living trees. Explain that these

standing dead trees are called “snags”, and that they’ll be learning more about snags in this lesson.

Share with students the link to the “Venn Diagram” Google Slide that you copied to your own Drive. Direct students to copy the original slide (right click on the topmost slide in the right hand column and select “Duplicate slide”) and then put their name in the lower right corner of the new slide.

Once each student has his or her own slide ready to go, ask them to use text boxes to fill in their Venn diagram with things that they think live trees provide to other organisms in an ecosystem, things that dead trees provide, and things that both live and dead trees provide. Ask students to be as specific as possible: for example, don’t just write “habitat”, write “habitat for birds” or “habitat for ants”. Remind students that this is just to get them thinking and wondering about dead trees, and that it’s alright if they don’t have too many items to add to their diagram.

After the students have had a chance to record their ideas, invite them to explore the resources at the Trees, Snags, and Logs placemarker. These resources include a video that introduces students to a snag and a log in the Rogue River Preserve’s floodplain forest, and linked PDF article about snag ecology from the Idaho Department of Fish and Game. Direct students to read the first few pages, until they get to the heading “Snag users”; information beyond that heading is more detailed than needed for this lesson, but students might find it interesting.

Once the students have watched the video and read the article, send students to the “Standing Up For Snags” Google Slide that you copied into your own Drive. Once there, tell them to go through the same process of duplicating and renaming a slide for themselves.

As directed on the slide, tell the students to create a slide that communicates the importance of snags and logs in a forest ecosystem. Explain to students that their job is to convince someone who thinks that snags are “just dead trees”! Students can use words, shapes, and images, which can be selected by going to Insert > Image > Search the web and then inputting their search terms.

To wrap up this activity, invite students to look at each other’s slides and leave positive or constructive comments using this tool in the top toolbar: 

Then, gather the group back together and invite students to share their favorite thing that they learned about snags and logs during today’s lesson.

Asynchronous Adaptation

For asynchronous work, direct students to make their Venn diagram on paper in their notebook, and ask them to create an argumentative poster or flyer on paper with drawings rather than images from the Web.