

# Unit 1

## Ecosystem Interactions & Dynamics

How do ecosystems work, and how can understanding them help us protect them?

STUDENT WORKBOOK

SAMPLE



SAMPLE

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Community Agreements

<b>Respectful</b> Our classroom is a safe space to share.	
<b>Equitable</b> Everyone's participation and ideas are valuable.	
<b>Committed to our community</b> We learn together.	
<b>Moving our science thinking forward</b> We work together to figure things out.	

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Conservation Home Learning

**PROCEDURE:** Talk with a community member (family member, friend, and/or neighbor) to find out more about an example of places, land, and/or water that has been conserved. Bring a photo, drawing, or video to class if possible. Recall the definition our class used and recorded in our personal glossaries for *conservation* to help your community member. If they cannot think of an example, share some of the examples generated by our class and ask them what they know, want to know, or think about it.

Question to ask community member	Notes based on their response
What examples of lands and waters have been conserved around where you live, in places you have been, or someplace you care about?	
Can you describe as much as possible about that place, land, or water?	
Why do you think that place or land was conserved?	

Who do you think decided to conserve that place or land? How were they able to make it happen?

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Name: \_\_\_\_\_

Date: \_\_\_\_\_

# Conservation Profile Organizer

	Noticings	Wonderings
<b>System</b> <ul style="list-style-type: none"><li>• What <b>places, lands, and waters</b> are included in the ecosystem?</li><li>• What are the boundaries of the system?</li><li>• What unique biomes are within the system?</li><li>• What is outside the system?</li></ul>		
<b>Components</b> <ul style="list-style-type: none"><li>• What <b>species</b> and other kinds of living and nonliving things are found in the ecosystem?</li><li>• What behaviors do these species and kinds exhibit (roles, actions, decisions)?</li></ul>		
<b>Interactions</b> <ul style="list-style-type: none"><li>• What <b>relationships</b> occur between the species and kinds?</li><li>• Why might those relationships be important?</li><li>• Who benefits from the relationships, how, and why?</li><li>• When are the relationships visible (if at all)?</li><li>• What are human relationships to these species and kinds?</li></ul>		

<p><b>Decision-Making</b></p> <ul style="list-style-type: none"> <li>• <i>How have the lands, waters, species, and kinds in the area been affected by human activity and human decision-making, and how are they being affected now?</i></li> <li>• <i>What decisions were made about the land?</i></li> <li>• <i>Will those decisions make the system more stable?</i></li> <li>• <i>Who made those decisions and why?</i></li> <li>• <i>What motivated humans to make those decisions?</i></li> </ul>		
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Please note questions from this framework were adapted from: *Learning in Places Collaborative (2022). Framework: Complex Socio-Ecological Systems*. Bothell, Seattle, WA & Evanston, IL: Learning in Places. Please see <http://learninginplaces.org/frameworks/complex-socio-ecological-systems-framework/> for further information and guidance.

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