

Lesson Guide for Educators: Lesson Two (7-9)		
Lesson Question: What are the most important effects of prescribed fire on ecosystem health?		
Lesson Challenge: Develop an informative public service announcement that explains the most important effects that prescribed fire has on ecosystem health.		
In the detailed lesson plan, you'll find three parts: Start the Thinking , Grow the Thinking , and Reflect on the Thinking . While these parts can be used in order, this lesson is designed to be flexible—use the activities in order as a complete lesson or pick and choose individual activities to fit your needs.		
Start the Thinking: To begin students' thinking about how wildfires affect ecosystem health, consider using at least one of the following activities.		
Possible learning activities	Time	Steps
Invite students to suggest what signs or indicators a doctor would use to help determine whether a person was healthy or ill. As groups share their ideas, briefly explain that there are also signs and indicators that can be used to determine the health of an ecosystem. Prompt students to suggest what indicators might tell us more about the health of an ecosystem. If possible, go outside with students and use their suggested indicators to determine the health of a local ecosystem.	10-30min	1,2
Help students categorize their suggested indicators into four or five key indicators of ecosystem health. Invite students to suggest a key word for each of the indicators.	10 min	2,3
Provide each student with a copy of Activity Sheet A and introduce the lesson question and challenge. If required, introduce the concept or prescribed fire. Direct students' attention to the activity sheet and invite to rate the importance of prescribed fire to the health of ecosystems.	10 min	5,6
Grow the Thinking: To help nurture and deepen students' thinking about how wildfires affect ecosystem health, use at least one of these activities.		
Possible learning activities	Time	Steps
Invite students to share their decisions about the importance of prescribed fire on the health of ecosystems. As they share, use their ideas to co-develop or present the criteria for measuring the impacts of prescribed fire on ecosystem health.	15 min	1
Provide each group with a copy of Activity Sheet B. Ask students to explore online sources (included in the detailed lesson plan) for ideas and information that describe how prescribed fire affects the health of ecosystems. After gathering information, ask groups to rate the significance of different effects using the criteria. Conclude by guiding students with reflection on key findings, encouraging them to suggest words, images, or phrases that best describe the most important impacts of prescribed fire on ecosystem health.	20 min+	2,3
Reflect on the Thinking: To guide students' reflection about how wildfires affect ecosystem health, consider using at least one of the following activities.		
Possible learning activities	Time	Steps
Ask students to revisit Activity Sheet A and their initial decision about prescribed fire's impacts on ecosystem health, this time using their new learning to guide their decision making.	10 min	1
Provide each student with a copy of Activity Sheet C. Ask students to use the activity sheet and information from this lesson to complete a PSA that effectively describes the most important roles prescribed fire plays in improving ecosystem health	15 min+	2,3
Key terms and vocabulary		
Key indicators of ecosystem health	The indicators of ecosystem health can include (more information is included in the detailed lesson plan): biodiversity, resilience, sufficient habitat for native species, clean/healthy water, air, and soil	
Criteria for measuring impacts	The importance of impacts can be measured by examining the following (more information is included in the detailed lesson plan): breadth of effect, depth of effect, and duration of effect.	