

Lesson 2

Title Of Lesson: Trail Cam Technology, Applications, & Installation	Grade Level: Middle	Time: 60-75 minutes
Subject Matter Areas: Technology, Habitat Analysis, Critical Thinking, Career Exploration, Industry Connections		
Preparation: Obtain (1-2) Game Cams Understand the functions, uses, settings, mechanics of the Game Cam. Ensure Game Cam is operational and ready to deploy. Invite a guest speaker proficient and experienced with Game Cams. Alternate: Internet resource, recorded presentation. Consider doing lesson outside.		
Materials/Resources: Game Cam, lithium batteries, cables, guest speaker, pencils and clipboards for students, non-latex gloves for Scat exploration.		

Learning Objectives

<p>Students will be able:</p> <ul style="list-style-type: none"> • To view, manipulate and understand components of Game Cam • Speculate optimal settings and location for Cam installation • Generate Hypothesis for animals and behaviour they will capture • Understand how Game Cams are used professionally and/or recreationally • Engage in conversation with field experts • Introduce concept of Citizen Science

Lesson Structure

Time	Introduction	Teaching Approaches
5	Ice Breaker: Animal Name Game (Anna- Armadillo) Are we going to see all the animals you just stated? Why not? Right, animals found in the Klamath Basin live in a specific habitat.	Recap of last session: Animal Species of the Klamath, Habitat, Biodiversity
Time	Lesson Content	Teaching Approaches
15	Guest Speaker Presentation: Find a guest speaker who works in the wildlife field. Ask them to talk about the tools they use in their career to monitor animals. No matter what tools are used, understanding animal habitat is most important to monitor animals. We need	Understanding real life applications of equipment used in their career Group Discussion Critical Thinking

	<p>to understand: Season Food sources Water Shelter</p>	Utilizing the Design Process
20	<p>Trail Cam Technology and Skill Development</p> <ul style="list-style-type: none"> ● Settings: Etc. Video vs Photo. Operating Times. ● Security, Maintenance <p>Discuss connection to habitat and placement of cam</p> <ul style="list-style-type: none"> ● Indicators of animal activity <ul style="list-style-type: none"> ○ Scat, Trails, Bones, Tracks. ● Identify 1-2 camera locations ● Discuss Lab notebook entries ● Hand out gloves (for scat dissection) and clipboards 	Classroom Discussion
15	<p>Head Outside. While being out, ask students to make an animal observation and enter into their lab book centerfold page. While the Instructor is placing the Camera at a determined location, have students do an “I See, Think, Wonder” Activity in Lab Book based on the animal observation and/or camera placement.</p>	Deploy Cameras on Campus at predetermined location
Time	Wrap Up	Teaching Approaches
5	<p>Our thinking and action today are rooted in concepts known as community science or place based learning. The idea is that we use our own backyard to gather, collect, and analyse data that we can use to better understand ourselves, our environments, and to share with others.</p>	Integration of content into a larger world.

Evaluation

Extra Resources: The STEM Teacher Podcast Episode 14: Animal S.T.E.M. on Castbox. Check out this episode! <https://castbox.fm/vb/72440209>