

Lesson Plan 12: Microtrash Madness!!!

Unit Question: What role does the California condor play in the California ecosystem, and how do changes in the ecosystem impact condors over time?

Science and Engineering Practices:

- Developing and Using Models
- Obtaining, Evaluating, and Communicating Information

Teacher Prep: Coordinate with FWS Park Ranger for in class, or video visit. If Park Ranger cannot come to class with game, coordinate and prepare materials for [Microtrash Game](#):

- 1 tub/ bucket
- Cover for tub with 1 – 4 slots
- Lots of shell, bone, and microtrash (*pieces: 25, 15, 30*)

Lesson: (*one - two class periods*)

1. Warm Up: [Condor chick nest cam clips](#)

Have students write what they wonder on post it notes for the question board

2. Intro (10-20minutes)

- Questions prepared during previous lesson, top 5 selected
- Q & A with Park Ranger

“You have learned a lot about California condors. You know about their role in the environment, and how they can be impacted by other species, including humans, and how they benefit and impact the environment, and people, like you and me, as well. Lead, the metal chemical, plays a big role in that relationship as we learned from the mortality and population data. But, California condor chicks have an additional threat to be concerned about – MICROTRASH; small bits of glass, metal, and plastic that condors confuse for bone and shell they feed their fast growing chicks. They find the bone using their sense of touch, not sight. Let’s play Microtrash Madness and see what it’s like to be a condor parent, searching for calcium in bones and shells for you newly hatched chick.”

3. [Microtrash Game](#) (25 minutes)

- In groups of 4, have students sit around a prepared and covered game tub
- Explain the goal of the game (raise a condor chick to fledgling)
- Pass out and explain the instructions and [Impact Cards](#)
- Let the students play!

4. Final Revisions to the Preliminary Model

- Add in final revisions, and chick/nesting information
- Recreate the Preliminary Model on a blank worksheet
 - Preliminary models, revisions, and final should all be kept

Microtrash Madness



Your job is to collect bits of shell and bone for your chick. Be careful not to choose microtrash!!! If you fledge, you're a winner!

DIRECTIONS:

1. Take turns choosing 3 objects from the tub. Condors use their sense of touch, not sight, to find the correct materials for their chicks to eat.
2. After "feeding your chick", draw one [Impact Card](#), and follow the directions. Adjust your score as directed. Now it is the next player's turn.
3. Record how many pieces of microtrash you select. Record how many pieces of bone or shell you select. Return bone and shell after each round. Keep microtrash – chicks can't digest it, so it stays in their stomachs.
4. If you collect 5 pieces of microtrash, your condor chick dies - sorry, you are out of the game. All chicks that make it through 6 rounds go on to fledge – learn to fly