

## *Fall in Love with an Endangered Species - the Amazing California Condor!*

*California Condor Ambassador: Emmie, age 13*

*Longfellow Elementary School November 7, 2019*



Emmie has a lot of knowledge about California Condors having spread her wings at two National Wildlife Refuges dedicated to the recovery of the endangered California Condor. As an early member of the PAS Young Birders Club, Emmie has attended several Condor work-ups at Hopper Mountain and Bitter Creek National Wildlife Refuges. For many birders, the first bird that triggers a deep interest in birds and conservation, might be a Western Bluebird or Snowy Plover, but for Emmie the trigger bird was the magnificent California Condor!

Emmie has educated her peers and adults about California Condors for several years. Emmie tells people the incredible story of the Condor, their main threats, engages people so they can understand why Condors are important to all of us, not just birders, and things people can do to help protect California Condors. Emmie has presented to literally hundreds of people through schools, science nights, nature events at Eaton Canyon Nature Center and at the Los Angeles and Santa Barbara Zoos. Emmie is a true California Condor Ambassador!

Emmie was just 10 years old when she gave her first presentation about California Condors to students at Longfellow Elementary School in Pasadena. Today, at a mature 13 years, Emmie, returned to her alma mater, Longfellow, a Pasadena Unified School District Title 1 School, to present to about 80 eager third graders.

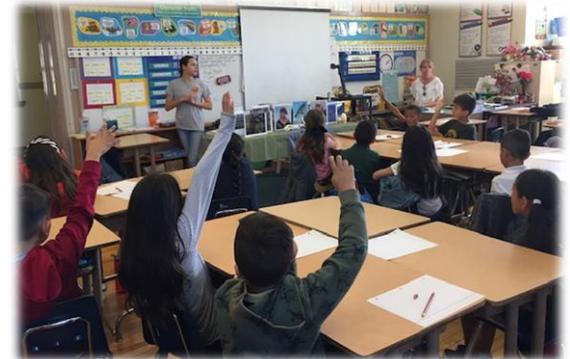
Emmie had the teachers show the award winning *The Condor's Shadow* before she presented. The movie helped the kids understand more about Condors and their history. At Longfellow, Emmie held up photos of California Condors and asked the kids questions about what they were seeing. Some students said they looked like Vultures, and some even said, Turkey Vultures – they were right! Condors are a type of Vulture. Well, make that a very **BIG** Vulture.

Emmie told the kids the history of the California Condor. They used to be free flying nearly everywhere in North America. For tens of thousands of years they flew freely in all the wide open spaces. But by the 1980s the population crashed. By 1987, there were as few as 22



Condors in the entire world. Biologists and scientists decided to remove all the Condors from the wild. All the Condors were placed into either the San Diego, Santa Barbara or Los Angeles Zoos to begin an intensive breeding and, they hoped, a recovery program. The biologists and wildlife experts did not know what was causing the decline of the Condor population. After a lot of scientific investigations, they finally found that there were 3 main threats to California Condors.

- 1) **Lead ammunition** due to ingestion of microscopic pieces of lead bullet left behind from hunter's ammunition. This is the main threat to California Condors. Emmie asked the students what California Condors eat. The kids had definitely watched the Condor's Shadow as they knew that Condors are scavengers, "nature's clean-up crew" and eat dead animals. Condors like to eat pretty big mammal carcasses, like deer. Hunters often leave gut piles that are contaminated with lead ammunition. Emmie asked the students what they knew about lead poisoning. The kids were able to correctly answer that Condors can become exposed to lead when they eat a dead animal that has been shot with lead bullets. The bullets explode into tiny microscopic pieces. These pieces are eaten by the Condors, as well as other scavengers. Every animal who eats the lead pieces becomes poisoned. Many animals become very sick and die. Emmie told them that there was some good news about lead ammunition: as of July 2019, California's law banning the sale and use of lead bullets went into effect. This is good news for all the scavengers!



- 2) **Microtrash impaction of the chicks.** Microtrash is simply small pieces of trash. Adult California Condors unknowingly pick up and feed small pieces of trash, called microtrash, to their growing chicks. Emmie told the students, that adult Condors likely mistake microtrash for bone or shell. Sadly, the chicks are fed microtrash by parents who likely think the small trash items are bones or shells and pick it up and bring it back to the chicks. Bones and shells are the right thing for the chicks as they need it for calcium to grow strong bones and feathers. Emmie showed the students a photo of an X-ray of a California Condor chick with a stomach full of microtrash. Condor parents feed their chicks by regurgitation. Emmie asked for 2 volunteers and had them demonstrate how Condors parents feed their young using the feeding puppets. Then Emmie asked for volunteers to assist in "microtrash removal surgery" on a Condor chick. Together Emmie has the class sort the trash into healthy (bone and shell) and harmful (bottle caps, pop



can lids, etc). Emmie told the students that they could help Condors and other scavengers to never throw trash on the ground and if they see trash, to pick it up. Emmie told the students that when a CACO chick gets too much trash in their stomach, they can no longer digest their food and without help, they will die. Biologists check every chick with a metal detector to determine if they are full of microtrash. If the chick has a microtrash impaction, the chick must be removed from the nest, a biologist must stay in the nest for about 24 hours, while the chick takes a trip to the LA Zoo for surgery. Only then the chick can be returned to their cave and the parents can resume feeding.

- 3) **Habituation.** Emmie told the students that habituation means that because California Condors are naturally curious and inquisitive, they can lose their fear of humans and become quite destructive around homes and ranches. This can result in negative human-condor interactions, and usually ends poorly for the Condor.

To demonstrate the very impressive size of a California Condor, Emmie asked for volunteers.

- 1) **Height:** The kids compared their height with the actual height of a California Condor. The full height of an adult Condor is about 4 feet high.
- 2) **Weight:** To better understand how much a Condor weighs, volunteers hefted up a 20 pound replica of an adult Condor.
- 3) **Wingspan:** Perhaps most impressive is the wingspan of a California Condor – about 9.5 feet! To help kids realize the full meaning of such a large wingspan, Emmie asked the students to pair up and for each student to take one end of a 9.5 foot long ribbon. While one child stayed put and the other walked slowly away, they were able to easily see the full length of the very impressive wingspan. Then Emmie asked for 2 more volunteers to slowly unroll the wing span of the California Condor. Each student took their turn in front of the wingspan to compare their wingspan to the California Condor. Even the teachers took a turn! Emmie talked about how biologists track each California Condor using radio transmitters. Part of taking care of CACO is making sure that all CACO are accounted for. Almost all CACO wear wingtags with radio transmitters. This is so they can be monitored by biologists.
- 4) **Flight feathers:** Emmie let each child hold an impressive California Condor flight feather.
- 5) **Skull and beak:** Emmie showed them a replica of a Condor skull and told them that Condors do not have a raptor, eagle or hawk-type bill with a sharp hook on the end, but rather a blunter end. The bill is still strong,



and Condors rely on it and their very strong neck muscles to grasp onto dead meat and pulling back hard. Emmie passed around food models showing what 3 pounds of meat looks like. The kids were impressed that a Condor could hold all that food in their crop and knew that the Condor likely needed that much food to feed a chick and that they did not find food every day. Condors can travel up to 150 miles in one day looking for food.

- 6) **Feet:** Though they do have pretty big talons, they do not have large grasping talons. Emmie showed them a photo of a Bald Eagle's large hooked talons. Condors don't kill their own food, so they don't need feet like an eagle or a hawk.
- 7) **Egg:** Emmie showed the students a replica of a Condor egg, a Turkey Vulture egg and a chicken egg. The Condor egg is about the size of 5 chicken eggs together! She told them that part of the recovery issue for Condors is that they only lay one egg every other year.

Emmie, concluded that today Condors have made a comeback! With luck there may be a total of 500 California Condors in the wild and Zoos. Emmie told the kids that California Condors are still in need of human intervention from the US Fish and Wildlife National Wildlife Refuge System and the California Condor Recovery Program.

In order to determine what the students learned, Emmie played a Condor game to test their knowledge. Emmie answered a lot questions about her own interest in Condors. Finally, Emmie shared the USFWS CCRP coloring books and tattoos and a special California Condor fortune teller with each student. It was a fun day for everyone!

*Way to go Emmie. We are so proud of you!*



AC-4 (20) Bitter Creek National Wildlife Refuge