



# Young Birders Club

September 2016

**Pasadena Audubon Society**  
A Chapter of National Audubon Society

*Emmie Clougherty and Celia Goff. Photo: Susan Gilliland*

## Field Day at Bitter Creek

*Teodelina Martelli*

It is May 25th, 2016, and a group of cars trundles over something supposed to be road, stopping upon reaching an imposing, shiny fence topped with barbed wire. The fence, erected only recently, is meant to keep out predators and other large creatures that have been visiting a certain enclosure in the Bitter Creek National Wildlife Refuge, such as curious coyotes and mountain lions. Joseph Brandt, the lead biologist, gets out of the first car and opens the gate. Twenty-one people got out of the vehicle into the chill overcast day and walked into the small brown building. Staring through the tinted one-way windows of the room, the enclosure contains ten enormous dark birds flapping erratically inside – California Condors, all to be checked up, among them Condor #20: AC4. He is just as active as any of the juveniles in the enclosure, and several times he flaps onto a raised wooden scale that takes his weight – 18.9 pounds.

When you're outside that room, you can hear the Condors – a soft medley of whooshing and clacking as they randomly jostle around, interspersed with the occasional hiss, a sound like someone recorded the ocean mixed with static electricity on a broken tape.



*Photo: Susan Gilliland*

Joseph and a couple of other experienced biologists head into the enclosure to capture a Condor. It doesn't matter which one; all of the Condors in the pen were captured to have a health check-up. We all crowd in the room to watch and we see them come boldly but warily into the pen with large nets with long handles, similar to the ones used to pull in a fish, and attempt to capture any bird that doesn't hustle out of their reach. Condors fly back and forth across the enclosure, landing briefly then taking off again. It takes a surprisingly long time, maybe five or six minutes, of three people working together in a 20 x 60 x 40 foot enclosure full of ten huge birds, of which any would do. After what seems like a long time, the chase ends with a Condor clattering onto an extension of the pen, which happens to be the low plywood roof above our heads, and Linda, from the Santa Barbara Zoo, following resolutely after the bird with her net. After great stomping around on both parts, she climbs back down with the netted Condor, and the waiting team help her manage the vulture.

Joseph walks out from the side of the building holding Condor 732, and he sits down at a low classroom chair set up so that everyone may watch while Linda works on the Condor.

Linda cleans 732's leg with an alcohol swab and draws two or three tubes of blood. Most of the blood will go into frozen

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## PAS Young Birder Club Meetings

Eaton Canyon Nature Center

Join us at 6:30 to 7:30 pm.

Bring snacks and beverages to share.

### September 21, 2015

Diego will share his experiences with Camp Colorado and WFO Sierra trip.

### October 18, 2015

Alex will talk about the beauty of Hawaiian birds and how we can help them.

### November 16, 2016

Jasmine will talk about the Taiwanese Blue Magpie and other Taiwanese birds.

### December 17, 2015

Christmas Bird Count

### Interested?

Find more information about the Young Birders Club at:  
[www.pasadenaaudubon.org/?q=kidscorner](http://www.pasadenaaudubon.org/?q=kidscorner)

To sign up, contact Susan Gilliland at  
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storage for future use in research, and a tiny amount—a drop—is deposited onto a designated circle on a slip that goes in a standard blood lead tester, a machine that is primarily used for children. The reading takes about two minutes, so while they wait the biologists replace the wing tag on 732. The tags are attached to the wings of the Condors in the same way that earrings are worn—the biologists cut a small opening in a thin stretch of skin between two bones in the Condor's wing, and the tag, along with a solar-powered signal emitter, is literally screwed into the wing. The biologists always measure the opening with a thick red knitting needle. The opening can't be larger than one or two centimeters in diameter, because then the tag comes off.

Soon, the lead testing machine gives a constant reading of 4.6 micrograms per deciliter for Condor 732. The lead level that decides between go/stay is 35 micrograms per deciliter. 732 can go! We watch Condors 733 and 625 be checked up and released. It seems like a lucky day so far for them, since none have needed to be retained for chelation therapy.

Condor 20, or AC4, is next, made famous in his recent release in December 2015. Some of us come back into the dusty room to watch AC4 be captured. He is also captured with a net, and he bites it angrily as they remove him. A serious biologist, Josh, comes out and sits in the chair, and a solemn silence falls. The visitors stare in sober fascination. The biologists work on AC4 quietly, Josh looking earnestly at the real center of attention: the enormous colorful dark vulture in his arms, a collage of bright pink with orange undertones, the worn gray feet, spiky black shafts spraying off around the Condor's neck, the faded bone beak, and the glaring red irises.

AC4 takes it easy as the biologists replace the radio transmitter on his orange tag and check the growth on his tail feathers. They mark notches on certain tail feathers with floss and slice off a stretch of feather with a penknife, talking to the interns who are scribing: "RR2 is 15 cm..." There are twelve total tail feathers on any California Condor, and they are numbered according to their position relative to the center of the tail. For example, RR2 would mean the second retrice (tail feather) to the right from the center. The feather growth is continuously

measured in notches in order to extrapolate when the feather started growing. This way it is also easier to predict when a feather will fall out and to know when to change the radio tracker on the tail to a newer feather, and thus avoid losing equipment.

AC4 is nearly finished, and Josh and Joseph allow the young birders to touch AC4. His feet radiate surprising heat, as does the rest of him. The average body temperature for an adult Condor is around 104 degrees Fahrenheit. The long feathers constituting the lovely ruff around AC4's neck are strangely stiff and a little dusty. The adults come shyly in too, placing a hand briefly, but reverently, on AC4's warm and powerful wings. One would think the feathers would be dusted blue with so much brushing of Californian skies.

Josh weighs AC4, and the results are: 18.9 pounds—and had a lead content of 2.9 micrograms per deciliters, the lowest yet. The field crew is impressed; it's a surprisingly low reading, given how much AC4 travels, they tell us in surprised voices. Finally, AC4 is released and takes a few flapping bounds forward and launches weightily and with great effort into the sky. He soars off in a slightly more northerly direction, and then, to our surprise and delight, he turns abruptly around and lands on the ground just outside the fence around the kennel, looking comically bewildered and curious.

The field crew tests the six remaining Condors. For each of the last Condors, the biologists let a young birder hold the Condor's feet during the procedure. In the end, no Condors need to be taken in for chelation therapy. The highest lead level is 22.6 micrograms per deciliter, and the lowest is an excellent 2.0 micrograms per deciliter.

It has been an excellent day. Everyone departs gladdened by the fact that all ten of the Condors today are in good health, and especially that AC4 is habituating to his old home range, healthy and free. The zoo vehicles, filled with kennels for sick Condors, drive back empty. The biologists pack up and get into their cars, smiling and joking. All ten Condors rejoin their peers among the cumulus and the sunlight in the California sky. The way it should be.



**Emmie Clougherty. Photo: Susan Gilliland**



**AC4. Photo: Joseph Brandt**