

7/2/14

A great leap forward can be a very bad thing for hundreds of millions but ours was not a mistake but the reflection of a difficult natural niche. Our leap came within a bird walk by acquiring 20 species. This exceeds the old record high of 18 set in 2009, which was matched in 2010 and again last year. So, we finally break out of the 18-bird paradigm of week 27. Naturally, we exceeded the record low of 8 and the median of 13. It also means that we have a new record for the second week in a row. As sauce on the meal, we also brought a new walker, Michel Dusselier, Caltech walker number 151.

See the plots at

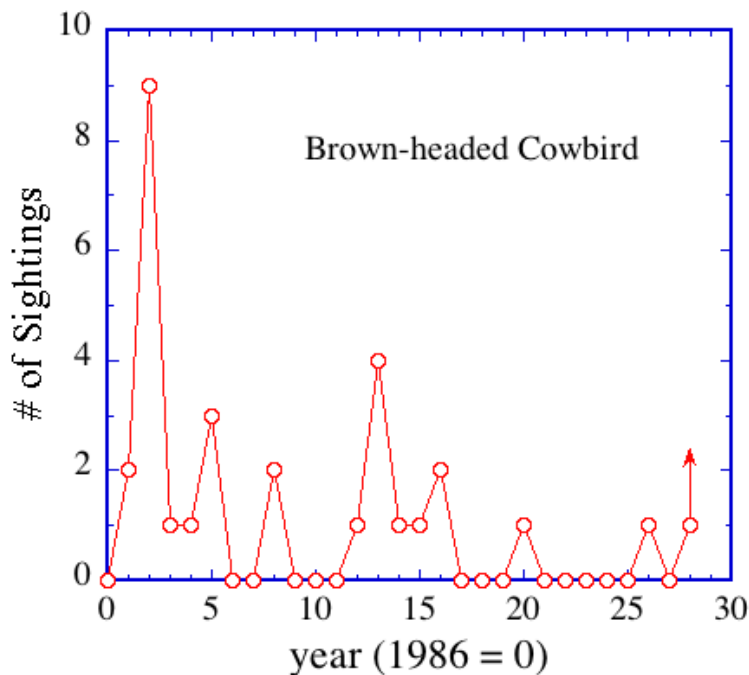
http://birdwalks.caltech.edu/bird_data/species_time.html and
http://birdwalks.caltech.edu/bird_data/two_plots.htm

Sometimes a walk will have such an easy highlight bird that you lose sight of the rest of the walk. How can I not? We walk up to the entrance of the parking garage under the North Athletic field. At first, we see little of avian interest but then a medium sized bird appears, foraging along the interface between mown and rough grass along the north end of the field. I offer two different views of the bird, so that you can have a sense for the look. This was a new life bird for at least one of us.



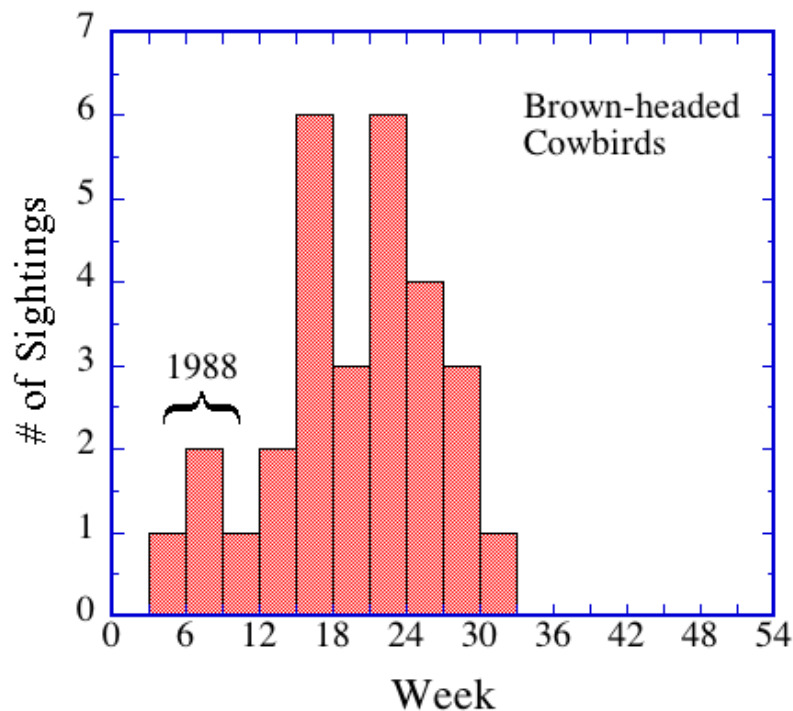


Rather than maintain a synthetic suspense, I will tell you that we were looking at a juvenile brown-headed cowbird (the name is a homage to the adult male and completely misleading if you are looking at an adult female or, as in this case, a juvenile).



Our cowbird is the first of the year, the first since 2012 and the 30th all-time. That might sound like a once a year bird but this would give a wrong impression. Twelve of those 30 sightings happened before 1990, more than a third of the total, and only three in the last decade, so in the present paradigm, a cowbird is a roughly once every three year phenomenon on the walk. If you ignore the sightings from 1988, where we apparently had a short-term winter residency (a local feed-lot being plowed under?), brown-headed cowbirds are a spring-summer

phenomenon for us. I don't know what the sex or adult/juvenile ratios are (the sighting in 2012 was a juvenile) but the expectation is that female cowbirds would scout and parasitize nests on campus during April through June and juveniles will fledge and disperse in May through July.



Before we start mourning the lack of cowbirds over the last decade, it is important to remember that every environmental niche carries both risk and reward. The niche comes at the expense of someone or something and it carries a living dependency. If the squirrel population drops due to plague, the local red-tailed hawks will starve. If there are too few insects or the available insects are toxin delivery systems, the black phoebes will die. If the seed crop fails or changes, finches and/or sparrows leave or die. If the acorn crop fails, so will the acorn woodpeckers. For a nest parasite like a brown-headed cowbird, you carry a suite of problems. First, you have to

acquire food sites like feedlots for cattle. If the ranchers all sell out to track house developers and move to New Mexico, which is an ongoing process across southern California, you are going to starve. Farm acreage dropped by 15% in LA County between 2007 and 2012, continuing a long-term slide in in southern California. To give you an idea of the scale of the problem for a local cowbird, in 1949, LA was the most productive farming county in the state. In 2012, it was 27th. That's very bad news for our cowbird's mother but it's not her only problem. Being a nest parasite is not all roses and you have to get someone else to raise your chicks. If you manage to find enough to eat and you are an adult female, you must still locate a suitable host and then another and another and another, perhaps dozens in a given breeding season. You have to fly long distances between food and nest. Laying an egg every day or so for a month or more consumes a lot of energy. Even that effort is no guarantee. Once you locate a nest and you manage to lay an egg in it, the hosts may abandon the nest, puncture the egg, dump it over the side, or build another nest over it. You have some weapons. You choose smaller birds that won't have the strength to push your egg over the side. You make thick eggs that are hard to puncture. You wait until a potential host female has started laying her own eggs, making nest abandonment more expensive. You terrorize birds that spoil your egg. You lay lots of eggs. However, it is still a tough way to keep a species going. If you are an adult female cowbird, you are likely to be dead by this time next year (60% mortality each year). A male does better (40% mortality) but, given a low male female ratio and a propensity for mate guarding, it might not be much fun.

Just to make things interesting, I will throw out a query. Let us say that you are a newly fledged brown-headed cowbird. The only parents you know are dark-eyed juncos. The only siblings you know are dark-eyed juncos (let's assume your mother only laid one egg in your nest as the average is only a little higher than one). Yet, you know you are a cowbird. A male cowbird that has never heard another cowbird will sing a cowbird song (a red-winged blackbird raised in isolation won't sound anything like a red-winged

blackbird). A female cowbird that has never heard another cowbird will be attracted to cowbird calls and songs (versus those of other species). You are clearly hard-wired to know the vocalizations of your species. You will recognize them if you run into them. So, my question is this. How do you know where to go? Does your egg mother imprint a trail? Is our bird about to engage in a random fly or a highway



drive?

The date: 7/2/2014

The week number: 27

The walk number: 1254

The weather: 80 F, sunny

The walkers: Alan Cummings, John Beckett, Viveca Sapin-Areeda, Deborah Vane, Vicky Brennan, Michel Dusselier

The birds (20):

- 2 Northern Mockingbird
- 4 House Sparrow
- 4 Mourning Dove
- 8 House Finch
- 3 Anna's Hummingbird

2 Acorn Woodpecker
17 American Crow
6 Lesser Goldfinch
4 Bushtit
1 Common Raven
1 Brown-headed Cowbird
1 Dark-eyed Junco
1 House Wren
5 Black Phoebe
1 Nuttall's Woodpecker
2 Hummingbird, Selasphorus
2 Red-whiskered Bulbul
2 Yellow-chevroned Parakeet
1 Band-tailed Pigeon
1 California Towhee

--- John Beckett

Respectfully submitted,
Alan Cummings,
11/7/14