Last year on week 49, we had three straight days of rain, followed by a morning opening to kiss the sun. The birds were hungry, beyond hungry, and we were absent Alan, which made for a long walk. The freak combination led to the only 30+ day ever in December. This year we didn't have a freak rain storm or any rain and we did have Alan, so we were not destined for a super high totals walk. We acquire a perfectly respectable 20 species. This was far below the record 31 set last year but that was a clear freakish anomaly on the high side. Without that 31, the record for the day would have been 25, substantially higher than our 20. So, the string of records or ties obtained every other week, which we have been doing since week 37, is now officially broken at six.

See the plots at http://birdwalks.caltech.edu/bird data/species time.html and

http://birdwalks.caltech.edu/bird data/two plots.htm

Twenty species is above the median of 17 and was enough to easily heave us over a grand total of 1000 for the year (1011). This is just the fourth time we have hit 1000 species. Four in 28 sounds impressive but it has been every year for the last four years (i.e., 2010 - 2014). "Why has this happened," you ask. Well, I'm not sure. There is likely a Station Fire (2006) effect that has driven birds we might not otherwise have seen onto campus. The nuthatches and chickadees of the last four years are likely related at least in part to the Station fire. After a big fire, there is a forest succession that leads to major pulses in food and opportunity for certain species. However, great success in breeding leads to a subsequent irruption as the newly minted birds look for viable habitat. So, we see nuthatches for a few years. There are also losers in a big fire and some of the migrating birds that might otherwise have stopped for the winter at Switzer Creek, instead move south into the warm, if not welcoming, embrace of Caltech. We see more warblers. There are additional avian independent factors associated with the walkers. If I stare at a tree for a while (let's leave my hearing out of this for a moment), I may pick up a bird foraging in the canopy but, perhaps, the bird is perched quietly behind the foliage or not yet in my tree. It remains undetected. If two people stare at the same tree, the probability rises that one of us will pick up that key motion or unscramble a key pattern recognition problem, leading to the bird. If another person wanders by the same tree after I and my imaginary companion have departed, the probability of seeing that bird increases again. You get the idea. More eyes spread out over even slightly more time will lead to more birds. You will also get more birds if someone in the group has an unusually good visual or aural acuity. Viveca sees specks in the sky without binoculars. I only see specks in the sky if there is something in my eye or I fortuitously flash over the soaring bird while looking for something much closer (it does happen). Some people, like myself, have terrible hearing. I can usually identify a bird if I can actually hear it but this is not saying much as I can't hear most birds. Some people have good hearing, which alerts them to birds for which I would have to have some visual indication and then there are the Darren Dowell's of the world. They combine excellent hearing with finely tuned internal identification software (i.e., if you just had Darren's ears, you would probably be overwhelmed and confused; you need the software to go along with the hardware). We do not keep track of the time it takes to do a walk (probably a useful metric) but, anecdotally, the walks are taking significantly longer than they used to. When Alan Cummings and Ernie Franzgrote first started in 1986, they were back at work by 1:00 PM. It really was a lunchtime affair. By 2010, when I joined (I actually started at the tail end of 2009), walks were taking up to an hour and a quarter. Now, they consistently take an hour and a half, even when Alan is present, and a bit more if he is absent. At the risk of sounding pretentious, I will call this the Beckett effect. So, my primary contribution to better birding on the Caltech bird walk seems to have been to contribute to a more leisurely walk. I don't think this deters walkers because it's just

fine to drop out of a walk part way through if that's what you have the time for or to join the group half way through. On the merits, the best birding is usually in the first half of the walk but the second half is certainly not without amenities.

I think I am not talking about the birds, so I want to say something about the actual birding of the week. The western bluebird was a deconstructed form appearing and disappearing from the top of one of the orange panels sluicing out from the top of Cahill. Something has hatched behind the panel. He awakes to find gossamer wings. Glistening for a hardening moment, he hears the call of the sky in his sunlit patch, and one by one, he and his siblings take to flight but it is too cool and too cloudy. Not enough are rising quickly enough to overwhelm the waiting gape. Today was not a good day to be a hatching gnat. Each of them rises, gaining a few glorious seconds in a warming column of sunlit air and each is snapped up by the waiting bluebird. They all die very young. It reminded me a little of the Carrousel in Logan's Run, though crushed and acidified rather than vaporized.

Sometimes a highlight is dynamic. We occasionally see crows mobbing a hawk. On this walk, we come to the north parking lot near the Recycling Center and we could see a juvenile red-tail being harassed by a tag team pair of crows. They are half-hearted about the exercise and, lacking the numbers for a good mob, they soon let the hawk escape.

Acorn woodpeckers seem to come and go on campus. At present, we have a family near the northeastern corner of campus. You are most likely to see one of them on a telephone pole (acorn woodpeckers sometimes nest in telephone poles, much to the chagrin of SCE, and favor them as anvils



where they can pummel acorns or insects), or on one of the palm trees you can see from the recycling center east to Avery. The photo to the left is of a palm tree just west of Michigan Avenue and shows one of this week's birds thinking about where to store an acorn. You can tell immediately that this is an acorn woodpecker, rather than a downy of Nuttall's, because there is no patterning of white on the back. You might think that this is not a great photo for sex typing but it is actually more than good enough. Notice that the red cap goes from the back of the head all the way across to the front and that the red appears to

be truncated on the front by off-white (i.e., not black). This is a male. If he had been a she, the red would have been truncated by black in the front (i.e., there would be a continuous band of black wrapping around the red cap), the cap would be half the size that you see here, and you would have the sense that the red was sensibly perched towards the back of the head, like a Catholic cardinal's cap.

The date: 12/4/2013 The week number: 49 The walk number: 1224

The weather: 60 F, partly cloudy

The walkers: Alan Cummings, Vicky Brennan, Kent Potter, John Beckett

The birds (20):

- 2 Northern Mockingbird
- 1 Mourning Dove
- 10 House Finch
- 2 Anna's Hummingbird
- 4 Acorn Woodpecker
- 1 Western Bluebird
- 40 Yellow-rumped Warbler
- 1 Hermit Thrush
- 10 Lesser Goldfinch
- 2 Ruby-crowned Kinglet
- 20 Bushtit
- 2 Bewick's Wren
- 1 Dark-eyed Junco
- 2 Black Phoebe
- 1 Common Raven
- 1 Red-whiskered Bulbul
- 1 Nuttall's Woodpecker
- 1 Red-tailed Hawk
- 6 Band-tailed Pigeon
- 4 American Crow