8/28/13

I have been slowly amassing figures and photos for individual species on the Caltech bird walk and this has tended to absorb a lot of energy that might otherwise have gone into a discussion of the birds in a more generic sense. Fortunately, bird walks are not all about the numbers and this week I go old school. There can be a singular moment in a passing glance or a special bird. This week it was a special bird. Judging solely by the total species perspective, we had a mediocre walk. We found a sliver above the median of 13 but were in no conceivable way a threat to the record of 21. It terms of singular birds, it was a stellar day.

See the plots at http://birdwalks.caltech.edu/bird_data/species_time.html and http://birdwalks.caltech.edu/bird_data/two_plots.htm

At Arden, Vicky caught a nice view of a Cooper's gliding off to the east but there is little doubt about the highlight of our Arden visit and the Arden highlight was the highlight of the day. Alan, who habitually walks the hedgerow in front of the Health Care Center, now also has a favorite adjacent tree, the recent gift of an orange crowned warbler. This time, a careful scan of the canopy reveals a different small bird. It is browner than an orange crowned warbler and foraging mid canopy. It has a mushy partial eye ring but is too tubby and too deliberate to be a kinglet. We have the first Hutton's vireo of the year, actually the first Hutton's since 2010 and only the fourth ever recorded on a Caltech bird walk. This was also the first summer/fall occurrence; the other three were all winter birds (weeks 51, 3, and 7). Hutton's vireos are not migratory but there is dispersal of juveniles in the summer and fall and some expansion out of breeding zones in winter when a Hutton's will often tag along in mixed flocks with ruby crowned kinglets.

Like the bird we saw in 2010, this vireo was working low to mid canopy and wasn't shy. We all got decent views. However, just to make sure of the id, Alan plays a Hutton's vireo song and our bird almost immediately comes over to check it out, leading to some very close views. He quickly tires of Alan's quackery but I think Alan brought him some luck. He returns to foraging and soon captures a spider, which led to the curious apparition of a vireo beak with spindly legs formed from an upside down spider. It gave an impression of the bones of a shipwrecked hulk rising from the mire in a spring tide. The tide turns and the spider slides from his bedding reef into an acidic abyss. I didn't see the last act but the spider went from terrorizing the local gnats to dead in less than a minute. It's a vicious world out there.

I admit to being a little surprised that we have seen so many (four) Hutton's vireos but perhaps this is a testament to the attractiveness of the neighbors' trees. In the "wild", second growth is fine for a Hutton's but they like their canopies dense and the woodlands thickly forested. They don't do very well in open or fragmented terrain and, at least in the short term, they are losers in the burn and chop world, although there do not seem to be any long term studies concerning how long it takes the population to recover or recolonize a burn or lumber harvested area. If you are a vireo looking at the urban forest in and around Caltech, it must be very hard to be impressed. This is not prime vireo habitat.

Vireos in general are highly vulnerable to nest parasitism by brown headed cowbirds but the Hutton's have fared reasonably well. They work with dense vegetation for nesting and, more importantly, many Hutton's vireos nest earlier in the year (March-April) than do cowbirds (starting late April). There is plenty of an overlap so that nest parasitism does occur but this simple artifice effectively conserves the species against the worst depredations of brown headed cowbirds.

Since Hutton's vireos are a really good example of the practice, I would like to say a few words about fecal matter. If you can fly, you generally don't worry very much about where you defecate. You may choose to off load on a perch, make yourself a little lighter during takeoff from a perch (sitting under a tree full of starlings is a chancy business), or drop some nitrogenous waste during flight, especially if you want to express your general annoyance at a local walker. These are great options for an adult but what do you do in the enclosed environment of a nest, whether in a nesting cavity within a tree or in an open cup bounded by branches such as those produced by vireos? Chicks can't fly and there is a lot of throughput, so you have to make a decision. You could just let your chicks' fecal matter accumulate in the nest but this will attract parasites and disease carrying insects. You are going to lose chicks that way. If you are a prisoner, you may be able to take advantage of indoor plumbing but what bird wants to be a prisoner? So generally, your choices are to eat the fecal matter, carry it away from the nest, or dump it over the side. Hutton's vireos do all three. In the first few days after hatching, the adults will eat all of the fecal matter that the chicks produce. Does that sound gross? Maybe it does sound gross in an anthropomorphic scheme but it isn't gross in an avian theater. The gastrointestinal system of a young chick continues to develop after hatching and, for the first few days, the digestive efficiency is very low. A parent can extract useful energy from the chick's fecal material and this improves his ability to feed the chicks and, therefore the chances of a chick surviving long enough to fledge. After about four days, the energy math shifts enough so that the adults stop eating the fecal pellets and simply carry them away from the nest. They pick up anything the young have produced and will actually peck at a chick's rump to induce the chick to defecate. After about day nine, the chicks have enough dynamic stability to stick their rear ends over the side of the nest and let it "fly".

The date: 8/28/2013
The week number: 35
The walk number: 1210
The weather: 94 F, sunny and humid

The walkers: Alan Cummings, John Beckett, Kent Potter, Vicky Brennan, Viveca Sapin-Areeda

The birds (14):

1 Mourning Dove
1 House Finch
4 Anna's Hummingbird
1 Acorn Woodpecker
3 American Crow
2 Hummingbird, Selasphorus
1 Cooper's Hawk
1 Bewick's Wren
1 Hutton's Vireo
4 Bushtit
3 Red-masked Parakeet
1 Black Phoebe
3 Lesser Goldfinch
2 Black-chinned Hummingbird

--- John Beckett

Respectfully submitted,
Alan Cummings,
9/25/13