

RAPTOR PASSAGE 363

December 2018

The monthly volunteer newsletter of the
Golden Gate Raptor Observatory

IMPORTANT UPDATE TO ANNUAL BANQUET DATE!

Please note corrected banquet date is **SATURDAY JAN 19**. We apologize for any inconvenience. See page 6 for more information.

Winter Updates

PHOTOS NEEDED FOR BANQUET: Please send us your 2018 season photos for the banquet in January. Raptor photos, volunteer photos, scenic photos—we want them all! **Please email photos to ggro@parksconservancy.org** and indicate whether your pictures can be used (with credit) for social media and/or Parks Conservancy publications as well. Thank you!



FROGS CROSSING: The rain is here and with it, an increased presence of local amphibians like the California Red-legged Frog on wet paths and roadways throughout the Headlands. Whether walking, biking, or driving, please remember to slow down and keep an eye out for local wildlife crossing roadways—especially near the lagoon bridge. (Illustration by Ryan Jones, GGNPC)

SKAGGS ISLAND RAPTOR TOURS—SEE PAGE 5!

Shop the Marin

Headlands Visitor Center and save 15%!

You say you have a raptor-fan in your life and don't know what to get them for a holiday gift? Have no FEAR! Just come out to the Marin Headlands Visitor Center to visit the only RAPTOR-pro-centric store in all of California! Open Wednesdays to Mondays, 9:30 am–4:30 pm, with options on warm tea and birding Rodeo Lagoon close at hand. There are literally dozens of raptor items to choose from, but here are some recommendations: the GGRO BASEBALL CAP, the 2018 GGRO VULTURE SHIRT, a traditional GGRO hooded SWEAT-SHIRT; the new Charles Schwab-designed BIRD NOTE-CARDS, including a Red-tailed Hawk; and Brian Wheeler's newest book, the definitive raptor field guide, *Birds of Prey of the West*.

Remember that NPS/GGRO volunteers receive a 15% discount on all Marin Headlands Visitor Center purchases!



Raptor Passage 363 was compiled by Kelsie McInnis, written by Allen Fish, Teresa Ely, and Step Wilson. The GGRO is a proud program of the Golden Gate National Parks Conservancy in cooperation with the National Park Service.

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Masthead photo: Redtail seen from Pt Bonita trail. Photo: Kelsie McInnis.



Director's Note

Allen Fish



A thick haze lingers over the Bay Area as smoke from the Butte County Camp Fire settles over the bay. Photo: Allen Fish

What a crazy month: fire, smoke, airnow.gov, N95 masks, AQI, Roughlegs, Goshawk, arson. Thank you to all GGRO volunteers and staff for maintaining a sense of calm and cool during the smoke days, for watching out for each other. I

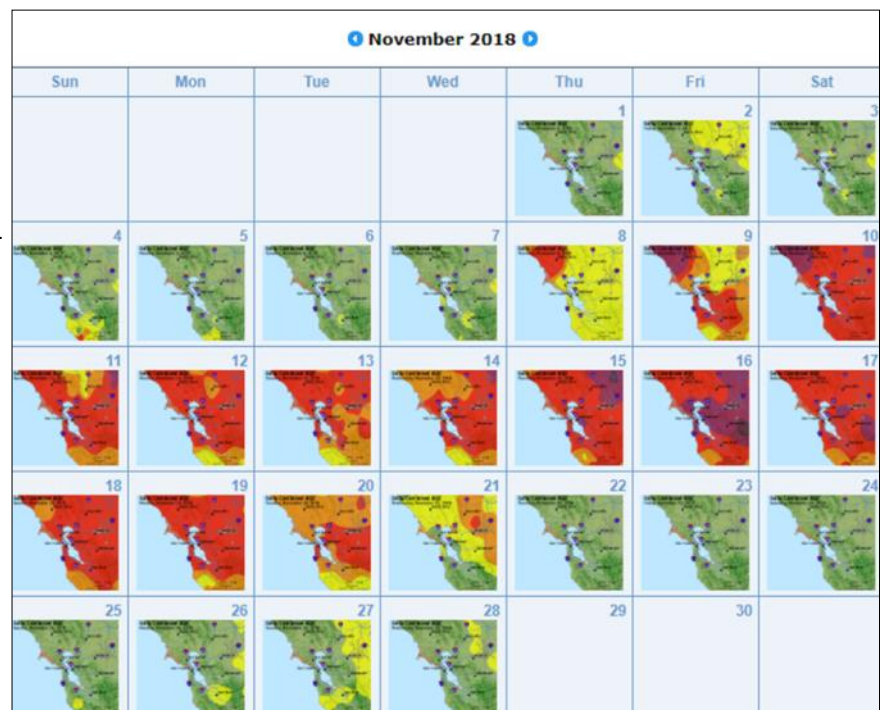
know it wasn't easy to base your whole day's plans on a 6 am phone call, but it gave us some options to count/band hawks if and when possible. Thanks also to all our Conservancy and NPS supervisors and colleagues for the amazing, down-to-the-minute support.

We lost 13 days of banding/counting to smoky skies, Nov 9 to 21, but we kept our staff and volunteers safe. We likely missed the latter half of the second Redtail peak—ouch. Smoke will forever be an asterisk on the end of the 2018 season, but it is nothing like losing a home, a town, or a loved one. For all whom call Paradise or Malibu and the surrounding communities home, our hearts go out to you.

Many of you have been talking to me and each other about birds and smoke this month, and I have had to reach back to my undergraduate bird classes to recall the weird four-step “loop” of respiration in birds. (See https://asknature.org/strategy/air-flow-patterns-facilitate-efficient-gas-exchange/#.W_7AS4tKiUk for a good explanation). It involves a constant flush of fresh air into some part of the lungs, rather than the on-again off-again respiration of mammals. Thus, bird lungs are more complex and more efficient than mammal lungs. But does this make them more or less vulnerable to air pollution?

Before I dig further, I want to introduce you to Olivia Sanderfoot. Olivia is a PhD student at University of Washington who studies bird respiration in response to smoke and to air pollution. Her recently-published masters' research at the University of Wisconsin, Madison was an intensive scientific literature survey on “air pollution impacts on avian species via inhalation exposure and associated outcomes.” The article, published with her major professor Tracey Holloway, is in *Environmental Research Letters* and you can find it here: <http://iopscience.iop.org/article/10.1088/1748-9326/aa8051/pdf>.

(Continued on next page...)



AQI map for San Francisco Bay Area November 2018. from airnow.gov

Director's Note Continued

Sanderfoot and Holloway (2017) offer a great overview of what (little) is known about birds and smoke. For example, they hypothesize that avian lungs, being more complex than mammal lungs, are more susceptible to problems arising from smoke and therefore birds should be good indicators of air pollution. (Aha! You say: canary in the coal mine!) They also note that smoke has a lot of potential ingredients (particulates, ozone, carbon monoxide, nitric, sulfuric, and phosphoric acids, and heavy metals) and each might bring a different physiological response to the bird being studied.

Sanderfoot and Holloway summarize: "Avian responses to air pollution include respiratory distress and illness, increased detoxification effort, elevated stress levels, immunosuppression, behavioral changes, and impaired reproductive success" but they acknowledge that these don't even include the population-level impacts that would take place with sudden changes in local prey populations and habitat structure.

The bottom-line? We have been caught off-guard here by a sudden need to understand the ecological impacts of massive and sudden wildfires in suburban/urban zones, and we need to be proactive about doing new research. Sanderfoot and Holloway conclude "of the roughly 10,000 bird species in the world, only a few have been studied relative to air pollution and in lab settings that may not teach us about the wild birds most at risk. There are limited studies and there are wide knowledge gaps."



Redtails by John Schmitt

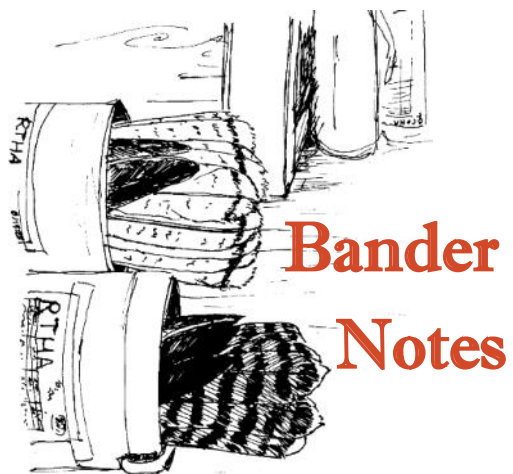


In Memory of Kanani Kauka

It makes me sad to pass on to you the word from Laura Thomas that her wife Kanani Kauka died during the night of November tenth after months of fending off cancer. Sixteen years ago, Laura and Kanani walked into a GGRO recruitment class having recently been bitten by the raptor bug in a big way. Kanani and Laura became beloved backbone members of the Tuesday One Hawkwatch, then the Sunday Two team also. There were field trips, new binoculars, personalized license plates. Kanani was larger than life as she was full of life. She loved raptors as she loved raptor-geeks. The day Kanani showed me her Red-tailed Hawk tattoo, I realized that this raptor thing was deep and personal—and that I too was a raptor-geek. I will miss you dearly my raptor impassionate pal. We all will.

I discovered this raptor poem on Kanani's Facebook:

Redtail, cirrus.



Teresa Ely

HILL88 TAKEDOWN

Hill88 comes down this weekend! Heavy rains will cancel but we will persist if a light drizzle presents itself. Weather is looking positive for the time being!

Hill88 Soft Takedown Fri Nov 30 – Arrive at Bldg 1064 at 8:30 am. Meet in upstairs library.

Hill88 Takedown Sat Dec 2 – Carpentry crew: arrive at Bldg 1064 at 7:45 am. Haulers: arrive at 8:30 am. Meet upstairs in library. **Need more haulers!** Sign-up here: <https://goo.gl/forms/E5duYBqsB9SvXkyO2>

The migration season slowed down as November was filled with smoke and trapping came to a halt for 13.5 days. The rain came shortly after which is great for California, but not so great for banding operations. I am still optimistic though—we have been banding several Redtails and some of those have been adults. We will break the 300!

NOGO banded 11/5/18. Photo: Teresa Ely



Optional cycle starts on Monday, December 3rd and goes until December 16th.

The “Free for All” post-season banding will start on December 17th and the last day to band is January 3rd. The first Site Leader to sign up on that day is the de facto Day Leader. If you are a journey level bander or an apprentice, you need to email the Site Leader who is on that day to ask if they can accommodate you. Please do not show up without contacting them. If no Site Leader signs up, no one will be able to band that day. **We still need volunteer(s) to sign up to at least do Townsley on 12/25.**

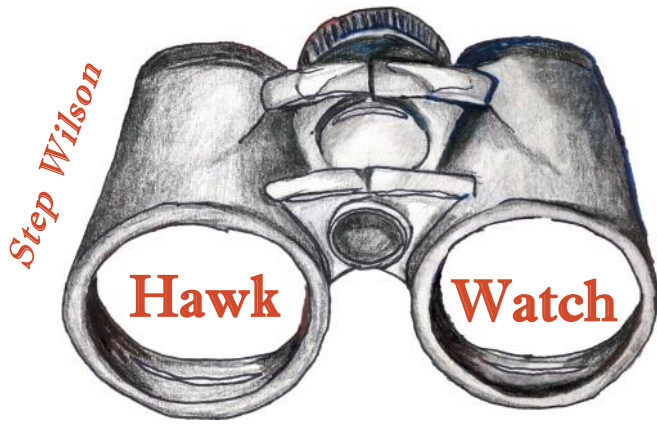
Weekend off-season Townsley will begin starting on January 6th.

Off-Season Townsley – If you haven’t already signed up for at least one day, please do so soon!

Off-Season Townsley Calendar and Post Season Banding: <https://teamup.com/ks2255d0e9b060e4dc>

The annual Site Takedown will be Saturday, January 5th. Rain date will be Sunday January 12th. RSVP using this google form <https://goo.gl/forms/YwmD8UBjfiNXAkZP2>. If you absolutely cannot make it on Saturday, there will be a “soft” takedown on Friday, January 4th.

11/26	RTHA	COHA	SSHA	AMKE	RSHA	NOHA	MERL	PEFA	PRFA	BWHA	NOGO	Total
2018	297	465	408	25	12	6	21	5	1	5	1	1250
2017	150	474	317	19	3	2	36	10	0	1	0	1015
10 yr	200	512	460	50	17	6	41	4.5	2	2	0.1	1295.3



It's very difficult for me to end a season. And ending the 2018 hawk count is one of the strangest. It was complicated by a disruptive two-week shutdown due to the ever-worsening air quality. I know it was difficult for all the teams waiting for the 6 am air quality email update. Every team was dedicated and determined to see the smoke rise and blow out of the area. Unfortunately, it never improved enough to be safely outdoors for 12 long days. It was incredible how the west winds never produced and kept the inverted polluted air in the area.

All of this I know is nothing compared to the devastation experienced by the communities of Paradise and Chico. Again, like we did last year—many thanks to all the personnel, volunteers, and others who helped. Thanks to GGRO volunteers and staff who donated time, money, blood, and items, to the victims in the area. Rains have come to aid firefighters and clean out the air. The same systems have also kept us off the hill and brought low clouds to stop us from counting most of the last cycle. So what do we do collectively to end the season? And again, the Day Leaders and teams have schemed shindigs beyond my wildest notions to help end the hill season and dance me into the office data season for the next month. Happy holidays ahead and hope to see everyone at the annual banquet.



Hawkwatcher Virginia Nowak documents her fading view of Sutro Tower as smoke from the Camp Fire turns blue skies gray in San Francisco.

Skaggs Island Raptor Tours with Tim Behr

When: Regular tours are every Tuesday starting at 12pm, from Jan 8 through Feb 26

Special dates for GGRO volunteers ONLY: the 2nd and 3rd Sat in January (1/12 and 1/19)

Where: Meet at the gate to Skaggs Island Rd just off SR-37

Skaggs Island in San Pablo Bay NWR is one of the best wintering spots for raptors in the Bay area. Tim has been surveying raptors and leading tours of the otherwise off-limits island for many years.

No RSVP needed! Rain cancels and inclement weather such as tule fog or drizzle will be an on-site decision. Bring your own optics. If you can't make a Tuesday, come out for the Flyway festival on Feb 8-10 where Tim will also be leading tours.



GGRO November Calendar

HW = Hawkwatchers; B = Banders; App = Apprentices; DL = Dayleaders; SL = Siteleaders

Who	Date	Program	Location
B	Fri/Sat, Nov 30/Dec 2	Hill 88 takedown; Sign up here: https://goo.gl/forms/nHfIL1ZoFO2w6Y4v2	Ft Cronkhite
HW	Sun, Dec 2	Final day of regular cycle Migration Season 2018	Ft Cronkhite
B	Dec 3 –16	Optional Banding Cycle 2018	Ft Cronkhite
B	Fri/Sat, Jan 4-5	Annual site takedown; Sign up here: https://goo.gl/forms/YwmD8UBjfiNXAkZP2	Ft Cronkhite
ALL	Sat, Jan 19	Annual Celebration/Potluck for 2018 Season	San Rafael Comm Center

2018 Season Annual Banquet

What: The 2018 Season Volunteer Appreciation Banquet

When: Saturday, January 19, 2019

3:30 pm for science talks; 5pm for dinner & awards only

Where: San Rafael Community Center @ 618 B St, San Rafael

For new volunteers or those who've just never had the chance to attend—the most important tradition of the GGRO banquet is that it's a **POTLUCK!** You are welcome to bring whatever you choose—a favorite childhood treat, an old family recipe, or a store bought indulgence—but if you're having trouble figuring out what exactly what to contribute and want a suggestion, you can use this chart to get you headed in the right direction:

If your last name begins with:	Suggested Contribution:
A-C	Side dish—Appetizer, Veggie, Soup, Salad, etc.
D-L	Carbs—Pasta, potatoes, bread, etc.
M-O	Main dish—Chicken, casserole, tofu etc.
P-Z	Sweet tooth—Dessert, fruit dish, etc.

Don't forget to send your photos to ggro@parksconservancy.org!



White-tailed Kite by Caitlin Morrow

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Hawkwatch Mgr—Step Wilson, swilson@parksconservancy.org, 415-426-5271

Operations Mgr—Kelsie McInnis, kmcinnis@parksconservancy.org, 415-426-5291



Hawkwatchers by Siobhan Ruck