

# PACIFIC RAPTOR

GOLDEN GATE RAPTOR OBSERVATORY



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# PACIFIC RAPTOR 42

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Front cover: Female and Male American Kestrels. Painting: Olivia Wang, 2018 GGRO intern and Master's student, University of Hawai'i, Manoa

Artist's note: The GGRO internship was my first job out of college back in 2018, and I say this without hyperbole: the experience

changed my life. Beyond developing my professional skills as a wildlife biologist, GGRO allowed me to meet amazing, likeminded, passionate people who became friends for life. I have always used art to express my love and appreciation for people, and I wanted to do something for my incredible mentor, raptor biologist Teresa

Ely. Shortly after wrapping up my GGRO internship, before I left for my next field job, I spent a morning painting a pair of American Kestrels for Teresa. Kestrels seemed fitting since they were the subject of Teresa's Master's research.



## INTRODUCTION

Dear Friend of the Golden Gate Raptor Observatory,

As across the planet, the COVID-19 pandemic shook the Parks Conservancy to its core in 2020, and as a result, we had to carve back our programming across the organization. This included suspending raptor banding at the Golden Gate Raptor Observatory (GGRO) for the first time in 37 years and reducing our 2020 hawk count participation from 140 to just 15 volunteers. Many of us, in times of stress and unpredictability, look to community and nature to be resilient, to gather our strength, and to remember our best selves. With reduced programming, what was there to do? A lot, it turned out.

The 2020 season became a year of possibility rather than one of despair with leadership from throughout the GGRO volunteer community, and from Parks Conservancy staff. Some examples included starting a new volunteer-run Diversity, Equity and Inclusion committee; creating monthly online raptor programs led by former GGRO interns, now professional biologists; rewriting all our safety practices and contingency plans; collecting hawkwatch data on an online platform allowing for real-time data delivery; and bringing in more donations (300% more!) than in any single year prior.

Although the past year has changed everything, and 2020 will reverberate in our lives for generations, the Parks Conservancy will continue to nurture Conservation and Community Science programming like the GGRO. We must keep a pulse on the planet, especially during times of change. And we will continue to connect with one another, and the spectacular lands around us, as we build knowledge together.

Thank you so much for your longtime support of the GGRO and the Parks Conservancy, and for matching our commitment to Conservation and Community Science in the Golden Gate National Parks.

**Christine Lehnertz** 

Upter Lelley

President & CEO,

Golden Gate National Parks Conservancy

Allen Fish

duator

Director, Golden Gate Raptor Observatory
Associate Director, Conservation & Community
Science, Golden Gate National Parks Conservancy

## GGRO ANNOUNCEMENTS

#### **PEOPLE**

COVID-19 impacted the Parks Conservancy community like many organizations in 2020, and it was difficult to reduce our team by two amazing and hardworking professional staff last year.

Hawkwatch Manager Step Wilson returned to the GGRO in 2016 after starting here as a volunteer bander in the

mid-1990s, after which he spent two decades as a practicing raptor biologist around the world. From studying migration in Italy and Mexico, to monitoring eagle nesting in Montana, Step spread his wings wide to gather more bird experience. Step brought many key changes to the GGRO, from the development of a Dayleader Manual to the use of flight videos in volunteer training. During the high stress of the pandemic in 2020, Step strategized COVID-19 precautions for 15 stalwart hawkwatchers, and he introduced the first use of real-time data collection with the Dunkadoo system.

Kelsie McInnis jumped sideways from working with the Parks Conservancy's development department to run GGRO operations in 2019. A passionate science educator at heart, with roots at California Academy of Sciences and the Marine Mammal Center, Kelsie was a natural at juggling the million details of the GGRO, including the needs of four staff, six interns, 250 volunteers, and a steady parade of enthusiastic members of the public with raptor questions via email and phone. Kelsie also created efficient, connected systems for the GGRO.

We are deeply grateful to Step and Kelsie for their over-the-top dedication to the Parks community and to our work, and we wish them both well in their future adventures.



Kelsie McInnis holding a juvenile Cooper's Hawk. Photo courtesy Kelsie McInnis

#### **PUBLICATIONS**

Although scientific conferences were largely shelved in 2020, GGRO colleagues, staff, and volunteers all had a role in producing four scientific articles for publication. These articles can be accessed in full at parksconservancy.org/our-work/ggro-publications.

Our great thanks to the authors for their dedication to producing them.

- Briggs, CW, AC Hull, JM Hull, PH Bloom, & AM Fish. 2020. Natal dispersal and population origins of migrant Red-tailed Hawks and Cooper's Hawks. Journal of Raptor Research 54 (1): 47-56. doi 10.3356/0892-1016-54.1.47
- Capitolo, PJ, LJ Jesus, AB Harper, AM Fish, & AC Hull. 2020. Fall migration of radio-tagged Broad-winged Hawks (*Buteo platypterus*) in California. Wilson Journal of Ornithology 132 (1): 15-21. doi 10.1676/1559-4491-132.1.15
- Pericoli, RV, EL Karsten, AM Fish, & CW Briggs. 2020. Nesting biology of urban Cooper's Hawks in Alameda County, California. Western Birds 51 (4): 307–317. doi 10.21199/WB51.4.3
- Wommack, E., L. Marrack, S. Mambelli, JM Hull, & TE Dawson. 2020. Using oxygen and hydrogen stable isotopes to track the migratory movement of Sharp-shinned Hawks (Accipiter striatus) along Western flyways of North America. PLoS ONE 15 (11): e0226318. doi 10.1371/journal.pone.0226318



# VULTURE ECOLOGY STUDY: 2020 UPDATE

Teresa Ely

have a fondness for Turkey Vultures that a lot of people do not have. You can almost feel the warmth of the sun when you see them perched with their wings outstretched in the morning. I like the way they seem to effortlessly soar through the sky, the fact that their gut can handle decomposing food, and if you watch them for long enough, they show natural curiosity. Simply put, they are cool.

When I took over the GGRO Vulture Ecology project from Chris Briggs, there was a steep learning curve in how to catch these birds. Over a couple of seasons, with the help of interns, a small volunteer support team, and collaboration with local rehabbers, we went from operating an unproductive chickencarcass bow net at an active banding station, to a high-functioning cow-carcass-buffet walk-in trap located near Sausalito.

As we described in *Pacific Raptor 39* and *41*, our goal is to study Turkey Vulture movement ecology as well



Two Turkey Vultures, one bearing the GGRO blue wing-tag 368R, bask on the outcropping below Hawk Hill. Photo: George Eade

as rodenticide exposure. In addition to trapping vultures in the Marin Headlands, we have collaborated with two Bay Area rehabilitation centers, WildCare in San Rafael and Lindsay Wildlife Hospital in Walnut Creek. I have tagged some of their rehabbed vultures before they were released. Working with these two organizations has helped me to keep up my tagging skills (you must create a small puncture in the patagium to place the tag, similar to condors), as well as to provide information on vulture rehab success.

#### **WILDCARE VULTURES**

We started working with WildCare in 2017, and they generously donated a taxidermied vulture to the GGRO—named "Beatrice Bones"—to use as a decoy to attract vultures. This technique turned out to have a low success rate, but it was useful in the early stages of operating the walk-in trap. Below are the tagged vulture sightings by number.

**362:** The first vulture we tagged, 362, was initially found on May 16, 2017, in Marshall, CA: "feathers everywhere, not on the road but found in the grass near a power pole, lethargic." It was a possible collision. 362 was tagged and released on July 18, 2017, and resighted by former GGRO bander Galen Leeds on January 2, 2018. Resightings: 1

**364:** Found grounded near Danville, CA, in November 2019, 364 had an injured right wing due to a broken digit. This vulture was also suffering from lead poisoning due to a gunshot wound. 364 was released in February 2020, and was resighted in December 2020 flying over the hills of surrounding Alameda



Creek, and at Sulphur Creek with about 30 other vultures. Resightings: 2

**369:** In February of 2018, WildCare received a vulture that had been hit by a car and had a fractured right scapula and clavicle. It was rehabbed successfully and released in Tiburon, CA, in March 2018. We had a handful of resighting reports for 369 over the next year from Bel Aire and Tiburon. In August 2019, 369 was picked up on the side of the road, taken to WildCare, and unfortunately did not survive. The California Department Fish and Wildlife report determined that the cause of death was anticoagulant rodenticide toxicosis. Resightings: 7

**370:** This vulture was found on the ground, exhausted and not fully stable in Novato, CA in March 2018, with head trauma and abrasion on the face. 370 recovered shortly after being brought in and we released it near Olompali State Park in April 2018. Resightings: 0

#### **LINDSAY WILDLIFE HOSPITAL VULTURES**

In early 2019, GGRO volunteer bander Lindsey Blessing was working with Lindsay Wildlife Hospital and helped us start tagging their rehabbed vultures in early 2019. After some modifications on our state and federal permits, we were able to borrow a live vulture decoy to hang out in our vulture walk-in trap. "Borrowing" is exactly what it sounds like. They loan us a Turkey Vulture just before it is ready to be released. The vulture sits in the large cage trap for a couple of days under close supervision, attracts vultures into the trap, then is returned for a check-up, receives its own tag, and is released.

**373:** This vulture was brought to Lindsay Wildlife Hospital in October 2018 after it was found in Clayton, CA, with a gunshot wound that caused broken wing bones. It underwent surgery and spent 107 days healing from its injury before it was released in February 2019. Resightings: 4

**470:** This orphaned vulture was found in San Ramon, CA, and brought to Lindsay Wildlife Hospital at about 38 days old. It was treated at University of California, Davis before being tagged and released. 470 was first resighted in Napa, then moved south and was resighted in Milpitas, Santa Clara, and Palo Alto. Resightings: 4

**473:** This vulture was found in April 2020, grounded due to a gunshot wound and lead poisoning in Richmond, CA. 473 was tagged and released in June 2020. Resightings: 2

**474:** In July 2020 this juvenile vulture, found in Pittsburg, CA was admitted to Lindsay Wildlife Hospital with an injured foot. It underwent surgery to fix a broken right leg. Resightings: 2

# Turkey Vulture. Illustration: Emma Regnier

#### MARIN HEADLANDS VULTURES

With the help of more "borrowed" vultures in the late winter of 2020, the Marin Headlands trap began to attract more vultures than we had previously been able to tempt. Just as we started attracting up to 10 vultures at once, but before the vultures figured out how to walk into the trap, the pandemic shut down our operations for most of 2020. The following vultures were trapped between 2017 and 2020.

363: Resightings: 6

365: Resightings: 2

**366:** Resightings: 1

**367:** Resightings: 20

**368:** Featured in *Pacific Raptor 41*, this vulture started showing signs of possible lead poisoning. The bird was taken to WildCare, rehabbed, and released with a transmitter in January 2018. Resightings: Numerous. This is the most resighted vulture from Hawk Hill.

371: Resightings: 0

372: Resightings: 0

**471:** This vulture started to become "trap happy" which means it started hanging out at the walk-in trap because it knew this was a good source of food. We originally tagged the bird in January 2020. When it walked into our trap again a few weeks later, we placed a transmitter on it to follow its movements more closely. Granted, a lot of what the transmitter was picking up was the vulture's locations around the trap. When it reentered the trap yet again, we took the opportunity to check on the transmitter fit and operation. Everything looked good and now 471 regularly moves between Sausalito and Novato. Resightings: 5

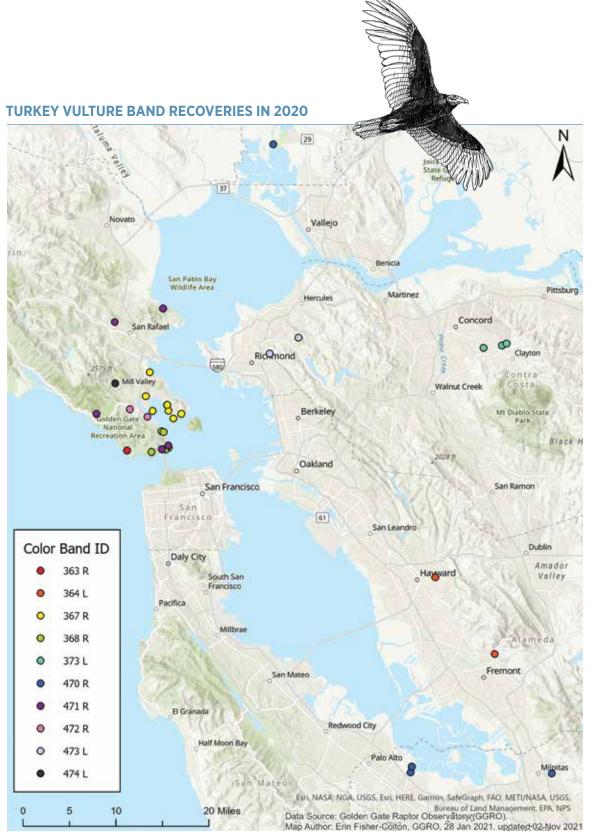
#### **472:** Resightings: 2

When we were told that we had to shut down trapping operations in 2020, it was a huge disappointment, but this was necessary for safety. Along with the Bay Area shelter-in-place orders, there was a noticeable trend that began—birdwatching became more popular. I believe one reason that we've seen an uptick in our vulture resightings is because more people are out looking at birds.

The map that follows, made by GGRO volunteer Erin Fisher-Colton, shows the vultures that were resighted and reported to Bird Banding Laboratory in 2020. We'd hoped to see more movement for these birds, but it is not entirely unexpected that they remain "local." During peak vulture migration times, we have had to close the trap due to smoke from nearby fires causing poor air quality in the Bay Area. The vultures we have tagged are outside the fall migration window, which might explain why we see these more local birds.

Our next steps include testing the blood samples for rodenticides and heavy metal presence. If conditions allow us to run the trap in the upcoming autumn, we hope to trap some birds that will migrate farther than Palo Alto. We also plan to continue working with WildCare and Lindsay Wildlife Hospital, and deeply appreciate the collaboration and skills of our colleagues at both institutions.

Biologist Teresa Ely has been GGRO's Banding Manager and resident vulture expert since 2016.



Map Author: Erin Fisher-Colton

Turkey Vulture. Illustration: Emma Regnier

# COUNTING DURING COVID

#### Allen Fish

n 2020, National Park Service and Parks
Conservancy managers came together to create
new safety protocols to ensure that skilled teams
of GGRO counters could monitor the largest autumn
raptor migration in the Pacific states for the 38th
consecutive year.

Changes to the 2020 hawkwatch program included:

- Reducing participation from 140 to 19 counters, including staff
- Masking and social distancing of counters
- Distancing the public from the immediate location of the counters using fencing
- Reducing number of count-hours each day from six hours to five hours
- Reducing count-days across the autumn to exclude weekends
- Hosting a daily morning safety tailgate for the team to review current COVID-19 status of the region, as well as prevention techniques
- Lastly, and most difficult, suspending GGRO's banding program for the first time since its start in 1983

Overall, the count teams tallied 7,326 raptor sightings during 160 hours of counting, a rate of just over 45 raptors per hour (rph), not far from the previous ten-year average of 61 rph. The 2020 count was conducted from September 9 to November 20,

shortened from the usual 16 weeks to 12 weeks. Because a short season could result in lower-thanaverage total counts, we looked specifically at the matched hours for 2020 and the previous ten years, and a few coarse patterns emerged. The lowest 2020 rph rates, relative to previous ten-year average rates, were observed for White-tailed Kites, Cooper's and Sharp-shinned Hawks. The greatest increase in rates were seen in Broad-winged Hawks (almost twice their ten-year average rate), and Bald Eagles (nearly three times their ten-year average rate). Bald Eagle numbers are still very low in the Golden Gate migration, however. The 2020 count was 18 sightings, but the previous ten-year average was 11 sightings per season. This count increase is reflected locally in a slowly increasing nesting population in the San Francisco Bay Area, as well as up the coast to the north.



GGRO volunteer Jane Rudebusch keeps the count data. In 2020, for the first time, we used tablets to stream data directly to the Internet via the Dunkadoo app. Photo: Allen Fish

# RAPTOR SIGHTINGS - MARIN HEADLANDS

	Autumn 2020 160.4 hours		10-Yr Average ('08-'19)* 130.3 matched hours*	
	Sightings	Raptors/hr	Sightings	Raptors/hr
Turkey Vulture	2514	15.65	2267	17.39
Osprey	22	0.14	12	0.09
White-tailed Kite	11	0.07	27	0.21
Bald Eagle	18	0.11	5	0.04
Northern Harrier	255	1.59	212	1.63
Sharp-shinned Hawk	865	5.39	1323	10.15
Cooper's Hawk	420	2.62	831	6.37
Northern Goshawk	0	0	0	0
Red-shouldered Hawk	124	0.77	178	1.37
Broad-winged Hawk	189	1.18	84	0.65
Swainson's Hawk	1	0.01	2	0.02
Red-tailed Hawk	2456	15.31	2487	19.08
Ferruginous Hawk	8	0.05	11	0.08
Rough-legged Hawk	0	0	2	0.02
Golden Eagle	10	0.06	6	0.05
American Kestrel	99	0.62	92	0.70
Merlin	72	0.45	84	0.65
Peregrine Falcon	76	0.47	78	0.60
Prairie Falcon	0	0	1	0.01
Unidentified	186	1.16	341	2.62
Total	7326	45.67	8043	61.73

<sup>\*&</sup>quot;Matched hours" is a way of comparing raptors sighted per hour between years more accurately than simply averaging the counts across years. We matched up hours of raptor counting recorded over the previous ten seasons by date and time as closely as possible to the dates and times recorded in the 2020 season. The 2020 season saw about a third of the hours counted in a typical hawkwatch year (usually about 470 hours per season versus 160.4 hours in 2020), and only 130.3 hours from the previous ten seasons could be matched for the ten-year average. In addition, data from 2010 and 2013 were not included due to partial count seasons. Thanks to Elizabeth Edson/Parks Conservancy & National Park Service who created this method.

Autumn counts are sometimes interrupted by other safety and weather concerns, many of which have been increasing. In 2020, in addition to the COVID-19 pandemic, 14 days of counting were lost as follows: unsafe air quality from wildfire smoke (seven days), high-wind wildfire risk (two days), rain (two days), fog (one day), and no visibility due to smoke (one day). This last day mentioned here was our first potential day of counting, September 9, when a thick layer of wildfire smoke in the upper atmosphere rendered the entire day an eerie, orange-brown color, as if the sun never rose past 6:00 AM.

The 2020 GGRO hawkwatch team was Michaela Figari, Bob Power, Nancy Elliot, Christine Carino, Cheryl Lentini, Robert Blumberg, James McDermott, Janet Rudebusch, Linda Schneider, Sam Hontalas, Dan Foldes, Erica Harris, George Eade, Mary Kenney, and Deborah Crooks. The counters were coordinated by the very hardworking GGRO staff at the Golden Gate National Parks Conservancy: Step Wilson, Teresa Ely, Kelsie McInnis, and Janet Klein. Thanks are also due to the many experienced GGRO counters who were not able to participate in 2020 due to the safety restrictions. The lion's share of the credit for developing safety protocols, for implementation, for training and troubleshooting the 2020 season goes to GGRO Hawkwatch Manager Step Wilson. Without Step's dedication to this undertaking, the 2020 GGRO hawkwatch simply would not have happened. Thank you, Step.

GGRO Director Allen Fish marked his 35th year at the Parks Conservancy in 2020.



Operations Manager Kelsie McInnis surveys Slacker Hill for buteos. Photo: Allen Fish

# EXCERPTS FROM THE VOLUNTEERS' HAWKWATCH JOURNAL

#### Wednesday, September 9

There are a few conditions that can thwart a day on Hawk Hill. Too much fog, too much heat, persistent rain, and in recent years air quality, to name some. For the first count day of 2020, which turned out to be Wednesday, September 9, it turned out to be midnight conditions at high noon. At the time, everyone on the team was checking airnow.gov and purpleair.com as often as they were taking a breath. We knew that air quality might become an issue but expected nothing like what developed that day. Previous freak lightning strikes had set many areas ablaze in California. The smoke patterns from these fires both near and far converged to completely block out the sun. When I say completely, I mean, well, completely, middle-of-the-night dark. Headlamps and headlights required. I'm sure many of you remember. Needless to say, no hawkwatching for Team B on that dark day, but our spirits were not dimmed. - Mary Kenney

#### **Thursday, October 8**

The fog was rolling through the Headlands as if on a tide schedule all day, never so much that we packed it in early, but enough to make for a closed-in view and a slow-going count.

If you stare at the Marin Headlands long enough you start to see all kinds of patterns in the grass and trees and rocks. It can a be a lot like cloud-watching: Some people see that dragon eating the starfish, while others see an amorphous blob. Enough vegetation patterns here have endured through the seasons long enough to reach official GGRO landmark status, points of reference we use to tell eachother where the birds are flying. A typical yell on Hawk Hill might be "Buteo, moving left over Sleeping Elvis" (a swatch of hillside that looks a bit like the King lying on his back), or "Juv harrier over the Petri Dish" (a patch of greenery in the west quadrant that looks like a giant cell-culture dish).

#### HAWKWATCH 2020

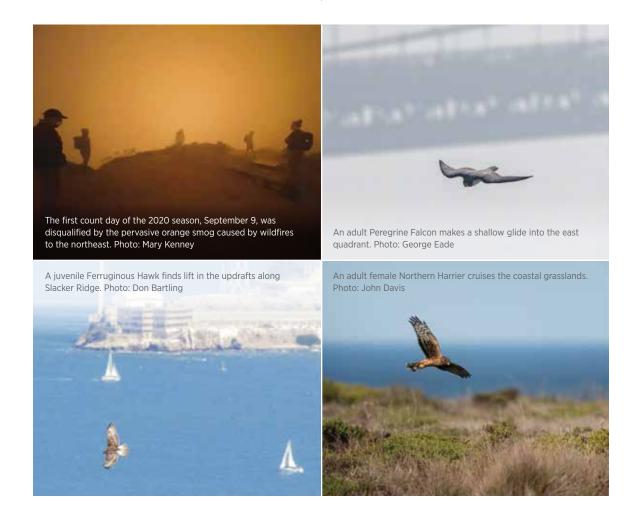
Named for our GGRO Director Allen Fish, Fish Rock is a craggy outcrop of lichen-covered rocks not far beyond the north viewing platform. Ravens, Flickers and a great assortment of passerines, as well as the occasional raptor, will land on Fish Rock.

When it was my turn in the north quadrant, most of the potential view was obscured by low-hanging clouds and wisps of drifting fog. I could just see Fish Rock, weathering the winds and dampness as it has done for millions of years, impassive.

Then I saw it move. I blinked. Now I was awake! I lifted my binocs, and saw the hide of a Mule Deer, grazing just on the other side of the rock. Then

another patch of rock moved and became two ears twitching from the middle of the outcrop. A second deer was grazing down the middle of the rock formation (which I only then realized was two ridges side by side). Both animals were perfectly camouflaged. I called Nancy and Cheryl over from their equally slow quadrants to marvel. One of the deer lifted its head and gazed at us with dark eyes for one, very still moment. Then it resumed its grazing and disappeared back into the rock.

- Deborah Crooks



#### Friday, October 9

This was a seasonably cool day, starting out with clear light and beautiful clouds. Now, it has nothing to do with Merlins or wing-tagged Turkey Vultures, but just enough rain fell overnight to trigger swarming behavior in the subterranean termites that inhabit Hawk Hill. This meant that thousands of alates (the winged reproductive caste of the termite colony) covered the ground and filled the air around us as they swarmed out of their nests in search of mates and new nesting sites. The sky teemed with White-throated Swifts gorging on termites on the fly, while all around us on the ground the Western Bluebirds, Bewick's Wrens, and Western Fence Lizards were also busily stuffing themselves with termites, apparently oblivious to our proximity during their feeding frenzy. Raptor highlights included a dozen Broad-winged Hawks and two Peregrine Falcons that hung around at close range for several minutes. We were fogged out early, at 2:00 PM, but what a day! - Linda Schneider



Christine Cariño tallies up a kettle of mixed raptor species, while Linda Schneider captures the data on the tablet. Photo: Allen Fish

#### Thursday, October 15

Today brought the most unique sighting any of us have had of a Red-shouldered Hawk on Hawk Hill. JJ Harris, long-time volunteer for the GGRO, had just arrived on the Hill to "hawkwatch from a distance" as many of our volunteers have done during this season. A Red-shouldered Hawk presented itself in the west, flying over the Rodeo Lagoon, and began circling and moving towards Hawk Hill. We alerted JJ so that she could enjoy whatever view this particular hawk might present.

Being a juvenile Redshoulder, in retrospect, it was not as shy as adults are. It approached Hawk Hill, and approached, and then approached some more. And much to our surprise it looked like it might pass right below where JJ was standing. I pointed my camera and started clicking, not actually knowing if I had the hawk or not. And then it was in view between the protective railings where visitors often stand or gaze toward San Francisco. And then the hawk approached some more. And then it landed on the railing next to JJ. I've never seen any wild hawk land that close to a human. That Red-shouldered Hawk had some innate sense that it was in the wrong space, and a few seconds later, it was gone. Another golden moment on Hawk Hill. JJ is now known as the Red-shouldered Hawk whisperer. - Bob Power

#### Friday, October 16

I started the morning in the south quadrant overlooking the Golden Gate when around 10:00 AM a large *buteo* rose up, gradually gaining altitude and moving in the direction of Hawk Hill—a flight pattern we would expect for a Redtail, perhaps a local resident. However, this bird looked different and I started thinking, could this be a Ferruginous Hawk? Not wanting to display too much ignorance to my teammates, I delayed calling out anything as I watched it get closer, trying to be certain. Just when I was about convinced, Allen cried out "Ferrug overhead!" There are two lessons here—one, that any raptor can arise from any quadrant and fly in any



direction, and the second, we who hesitate will never get any credit! A further treat that day was one of the few Short-eared Owls to ever be seen from Hawk Hill passed overhead, giving us nice views on its journey south. – Robert Blumberg

#### Friday, November 6

Our hawkwatch team struggled against the torpor of warm days and idle raptors up until the first week of November, when the clouds of late autumn finally began tumbling south from Alaska. However, any excitement provided by the change in weather was tempered by the residually slow migration and blustery Northwest winds. The cloud-filled sky from the North Saddle to South Slacker Hill was a pleasant change, even if it was barren of raptors. A pair of large birds spotted soaring over Angel Island revealed themselves to be Brown Pelicans, and even the Powerline Poles below Conzelman Road—a popular perch for Redtails—remained vacant. Then

something flashed in the north. Was that a Peregrine diving toward prey? The bird disappeared below Fish Rock and I called out in anticipation. "I think we might have something here!"

With everyone excited to spot a falcon, a Raven floated up instead. As my teammates turned back to their quadrants, I noticed the Raven was holding something. "Is that a stick?" I wondered.

The Raven glided carefree on unseen currents until a dark shape streaked into view. It was another Raven, and then another. The three birds began tumbling through the sky, fighting without an intent to injure, seemingly to their shared enjoyment. When the piece of wood slipped from the talons of the first Raven, the other two dove after it. It looked like they were playing with a stick. Indeed, a second Raven floated up triumphantly clutching the tiny branch with both feet as if trying to surf the breeze. It was fascinating.

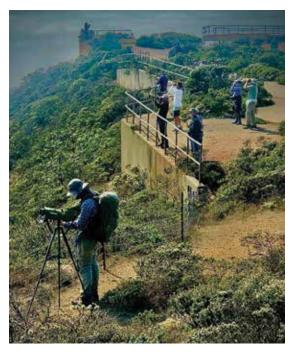
I hunkered down behind some coyote brush in an attempt to shield myself from the wind and watched as the Ravens continued to spar over the twig, which alternated possession a number of times before it was ultimately lost back to the landscape. Yet the Ravens' felicity remained unaltered, as one of them soon ascended from the chaparral holding a piece of radiolarian chert. The Raven barrel-rolled its way through the others like a running-back shaking off tacklers, clutching the rock for only one purpose I could discern: fun.

There's a natural tendency for people to anthropomorphize animals, but sometimes they don't need our help. Maybe "anthropomorphize" isn't even the right term. Instead of attributing human characteristics to animals, perhaps we've mistakenly been attributing animal characteristics to humans from the beginning. – James McDermott

#### Monday, November 16

With only 107 raptor sightings, this might have qualified as a slow day for the middle of November. But early in the day somebody hollered "Eagle!" and

it only took a second for everyone to get their binoculars on the bird. It was a stunning adult Bald Eagle, coming from the direction of Rodeo Lagoon and flying low up the valley. Then we saw the second one. It was a pair of adult Bald Eagles, and we all were able to get excellent, long looks at them as they flew past below us and disappeared somewhere off in the direction of the Volcano. Normally our eagle sightings on the Hill are of quite distant birds, so it was extraordinary to get such a long, close look at the pair of them, and that moment cast a warm glow over the whole day. – *Linda Schneider* 



We used fences around the 2020 hawk count area to keep the count teams safe from casual COVID contact. Inactive GGRO colleagues were still able to enjoy spotting hawks on their own time beyond the fence, soon dubbed "The Wingspan Gallery." Photo: Allen Fish



Adult Bald Eagle. Illustration: Emma Regnier



# THE BIRDS STILL COME:

#### A BANDER REFLECTS ON A YEAR WITHOUT BANDING

Carmen DeLeon

o matter where we are in our busy lives, the hawks come each fall, and eager raptor lovers willingly sit in a wooden box for hours on end to gather valuable data for conservation. On paper, the GGRO banding program is a community science collaboration of professional scientists alongside dedicated

volunteers compelled to make a difference in the protection of California's migratory raptors. What's more, it is a family united in endless curiosity about the cycle of migration, where we feel deeply rooted belonging on this planet as stewards of the birds we love.

We all have an inherent desire to belong and feel connected to a sphere of influence bigger than ourselves. Some people find this at work, social clubs, or school, but none of those will do for us raptor lovers. The sense of belonging amongst our raptorfanatic family arises from our yearly tradition of flocking to the craggy, fog-drenched hillsides of the Marin Headlands. As we join our daily teams, each



Carmen DeLeon, Teresa Ely, and Lynn Schofield are three-quarters of the amazing 2007 GGRO intern class, still active leaders at GGRO fifteen years later. Photo: GGRO

dedicated to recording the observations that help advocate for the protection of migratory raptors, we find connection not only with the birds, but with each other and the cycles of our Earth.

I am driven to share this here because my sense of belonging with the Golden Gate Raptor

Observatory (GGRO) has felt more important than ever. Like many citizens of our planet, I found myself grieving, distressing, and feeling disoriented in a year that reached a boiling point of multiple human rights crises intersecting with racism, climate change, and public health. When I learned that the GGRO banding season was cancelled, I tried to remind myself of all the worse things happening in the world to put it into perspective. I closed my eyes to take a deep breath and digest this news as I wondered how a year would feel without the constant camaraderie of our banding family and our 37-year-long tradition interrupted.

On August 17, 2020, I woke up, packed my field bag, and drove to the Marin Headlands, savoring the sensation of crunchy gravel beneath my boots. It

#### **BANDING 2020**

didn't matter that this was the beginning of migration season and I had no role in the field to play. I knew that my sense of belonging as a raptor bander was a strength I could tap into by just being in our park, and it was a place I needed to tap into to feel like I could survive that day and all the days after. With the wind washing across my face, tangling my hair around my eyes, I felt a closeness to the birds and to my team. I watched the same breeze rippling across the wingtips of a Red-tailed Hawk, sailing into the skies for its first-year trip along the coast with an unclear destination, and thought of our own uncertainty of when we would be together banding again.

Whether we band or not, the birds still come. As we mourn our lost field time, we have proven that our team bond is strong and ready to take on novel challenges. Over the past year, banders rose to the challenge of scouting the skies and local parks to resight color-banded hawks on their own, and to continue to support the program by connecting online for various projects. As I reflect on our last year apart, I see that our team has survived with all of the strength, connection, family, and learning that was always there, and that will continue. As everything in the world flows with a breeze of uncertainty, there are two things I find comfort in: the hawks will come again, and the belonging fostered by the GGRO bander family will persist.

Part of the team of 2008 GGRO interns, Carmen DeLeon never left the GGRO family and for that we are grateful. She earned her MS in Natural Resources at University of Idaho, and has worked for NatureBridge, Lindsay Wildlife Experience, and CuriOdyssey, where she is currently a STEM Education Specialist. A biologist, naturalist, teacher, leader, counselor, and raptor-bander, Carmen has brought her amazing talents, kindness, and strengths to GGRO for more than 14 years.



# BAND RECOVERIES & ENCOUNTERS

#### Marion Weeks

irector's Note: Hawk lives are quite secretive, and as conservation biologists, it is critical for us to understand what their lives (and deaths) entail, whether they flew into a car or window, or whether they chased a chicken or harbored a parasite. These small stories, however depressing, collectively give us tons of information about the lives of hawks, and how we might work to protect them.

You may notice that there are lots of records for juvenile hawks here, that is, hawks in their first year of life. This happens for at least two reasons. First, we see far more juvenile than adult hawks at the Golden Gate. Juvenile hawks have a proclivity to fly along the coasts (east and west), versus their adult counterparts who are happy to fly inland routes. Second, young hawks are less likely to survive their first year of life than subsequent years. Juvenile hawks tend to suffer about 70% annual mortality; for adults it's closer to 20%.

So, although many of these reported sightings read like obituaries for birds of prey, as you scan the stories below, try to see beyond just the apparent cause of death. Look for the signs of life. Where did that raptor travel? What kind of habitat was it in? What caused its human encounter? Think like a conservation biologist and imagine the full world of the migrating hawk.

- Allen Fish

**1412-B** Juvenile female Red-tailed Hawk banded and fitted with a transmitter 8/30/15 by Buzz Hull. Brought to the Peninsula Humane Society (PHS) on 8/7/16 due to being grounded, and her transmitter was removed to enable treatment before being released. Brought to PHS a second time from San Francisco, San Francisco (SF) Co., CA, on 5/1/2020 and described as "very alert...but with blood in her mouth." The hawk died an hour later; reported by Tani Meyers of PHS.

**1460** Juvenile female Red-tailed Hawk banded 8/17/16 by Mary Malec; found dead 3/10/20 holding uneaten gopher in right talon with no visible injuries at Marin Headlands, Marin Co., CA; reported by Yi-Chaun Luk. Previously she was observed at the Marin Headlands 10/16/17 sitting and hunting from a pole.

**1564** Juvenile male Red-tailed Hawk banded with color and metal bands 9/8/18 by Catherine Fisher; sighted 12/2/18 at Buena Vista Park, San Francisco, SF Co., CA; sighted again 10/15/19 at Upper Terrace, Buena Vista Park, San Francisco, SF Co., CA, reported by GGRO bander Robert Martin; sighted 1/31/20 at Corona Heights Park, San Francisco, SF Co., CA, reported by Benjamin Byerly; sighted again on 7/16/20 hunting at Buena Vista Park, San Francisco, SF Co., CA; reported by Robert Martin.

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Juvenile female Red-tailed Hawk banded with color and metal bands 8/16/19 by Misty Cain; found dead 9/28/19 on roadside at Daly City, San Mateo Co., CA; reported by Daniel Delasarte.

Juvenile female Cooper's Hawk banded 9/24/10 by Chris Nikitas; found 10/27/19 alive after storm winds blew it into phone/electrical wires at Bakersfield, Kern Co., CA; rescued by rehabilitator William Payne, who cared for it, but found it dead the next morning.

Juvenile female Cooper's Hawk banded 10/4/19 by Robert Martin; found dead 11/3/19 in backyard at Carpinteria, Santa Barbara Co., CA; reported by Joe Tamony.

Juvenile male Red-tailed Hawk banded with color and metal bands 9/24/19 by Marc Blumberg; found recently dead 11/6/19 at South San Francisco, San Mateo Co., CA; reported by Stephen Holtzclaw.

▶ 1598 Juvenile female Red-tailed Hawk band with color and metal bands 8/19/19 by Crystal Dolis; sighted 10/6/19 eating a squirrel at the Don Edwards San Francisco Bay National Wildlife Refuge Center, Santa Clara Co., CA, reported by Carl Erlandsson; sighted 3/15/20 at the New Chicago Marsh at Don Edwards San Francisco Bay National Wildlife Refuge, CA; reported by Philip Yang.

Juvenile male Cooper's Hawk banded 9/24/15 by John Keane; banded leg and pelvis of bird found being pecked by chickens 11/20/19 at Petaluma, Sonoma Co., CA; reported by Teresa King.

Adult female Sharp-shinned Hawk banded 12/11/18 by Olivia Wang; found dead 11/19/19 in the middle of a street at San Francisco, SF Co., CA; reported by Corey Olson.

Juvenile male Red-tailed Hawk banded with color and metal bands 9/22/17 by Marc Blumberg; photographed 10/24/19 flying over Hawk Hill, Marin Headlands, Marin Co., CA; reported by John Davis.

Juvenile male Red-tailed Hawk banded with color and metal bands 9/25/19 by Eric Jepsen; photographed 10/23/19 at White Slough wetlands area, Vallejo, Solano Co., CA; reported by Sally Mack.

Juvenile female Red-tailed Hawk banded with color and metal bands 8/22/19 by Lindsey Blessing; found dead, bloody breast and wing, on sidewalk at a construction area 11/21/19 in San Francisco, SF Co., CA; reported by Animal Control Officer Stephanie Pone.

Juvenile male Red-tailed Hawk banded with color and metal bands 8/15/19 by Marion Weeks; photographed 8/16/19 flying over Hawk Hill, Marin Headlands, Marin Co., CA; reported by John Davis; sighted 12/23/19 in bushes at SF General Hospital, San Francisco, SF Co., CA; reported by Earl Butler; sighted 8/8/20 in a Monterey Pine at Corona Heights Park, San Francisco, SF Co., CA; reported by Andrew Reckers.



Encounter 1598. Photo: Carl Erlandsson.

Juvenile male Cooper's Hawk banded 10/1/19 by Maggie Brown; found dead 12/7/19 at the Dickson Ranch, Woodacre, Marin Co., CA; reported by Mario Hernandez.

Juvenile male Red-tailed Hawk banded with color and metal bands 9/13/18 by Erin Barry; sighted 10/13/19 sitting on the railing of a high-rise building at San Francisco, SF Co., CA; reported by Renee Artigues.

Juvenile female Cooper's Hawk banded 10/6/19 by Robyn Boothby; died 12/12/19 after flying into a window at Yorkville, Mendocino Co., CA; reported by Mark Egan.

Juvenile female Red-tailed Hawk banded with color and metal bands 11/21/19 by Calvin Hom; carcass found 12/8/19 on beach at Fort Funston, San Francisco, SF Co., CA; reported by Erika Parrino.

Juvenile female Sharp-shinned Hawk banded 11/11/19 by Kirsti Carr; found alive 11/24/19 in neighbor's garbage bin at East Palo Alto, San Mateo Co., CA, after neighbor thought his cat had killed it; died shortly after; reported by James Bridges.

▼ **1610** Juvenile male Red-tailed Hawk banded with color and metal bands 9/15/19 by Michael Voeltz; photographed with two other Redtails 1/8/20 at Las



Encounter 1610. Photo: Elliot Janca

Gallinas Sewage Ponds, San Rafael, Marin Co., CA, reported by Krissa Klein; photographed 1/9/20 at Las Gallinas Sewage Ponds, San Rafael, Marin Co. CA, while being harassed by a couple of Red-shouldered Hawks; reported by Elliot Janka and GGRO bander Siobhan Ruck. Photographs revealed that this bird exhibited Long Bill Syndrome which was not evident when banded.

Juvenile female Red-tailed Hawk banded with color and metal bands 11/25/19 by Paul Romanak; found 1/6/20 dead, no lacerations or wounds noted, under a tree at Brisbane, San Mateo Co., CA; reported by Cassie Padilla.

Juvenile female Sharp-shinned Hawk banded on 11/18/19 by Sean Parnell; found dead 1/21/20 in rural habitat between two fence panels near chickens, pistachio trees, and wheat fields near Dos Palos, Merced Co., CA; reported by William Lawrence.

Juvenile male Red-tailed Hawk banded with color and metal bands on 12/16/19 by Hailey Pexton; found grounded in backyard 1/15/20; taken to a vet who would not offer treatment; returned home to Los Altos, Santa Clara Co., CA, she placed hawk near a heat source, found it dead later that night; reported by Bunsiri Frazier.

Juvenile male Red-tailed Hawk banded 11/5/15 by Bill Prochnow; finder reported witnessing hawk struck by a car 1/17/20 on Highway 101 near Benbow, Humboldt Co., CA; by an anonymous reporter.

Juvenile male Cooper's Hawk banded 8/31/19 by Taylor Barnes; photographed 9/4/19 while hunting near Rodeo Beach at Fort Cronkhite, Marin Headlands, Marin Co., CA; reported by John Davis; found headless 2/9/20 under pine-cypress grove at Fort Cronkhite, Marin Co., CA; reported by GGRO intern Paula Eberle.



Encounter 1616. Photo: Juan Sanchez

▲ 1616 Juvenile male Red-tailed Hawk banded with color and metal bands 10/5/19 by Nancy Mori; has been observed many times at the Botanical Gardens at San Francisco's Golden Gate Park, San Francisco, SF Co., CA, and are as follows:

- 12/31/19 photographed or observed five times between 12/21/19 to 1/8/20 in trees, on the lawn eating, and bathing in the Moon Viewing Garden; reported by Deborah Underwood;
- 1/4/20 observed by Grace Ruth eating earthworms;
- 1/14/20 photographed by Bob Gunderson while perched in a tree;
- 1/26/20 photographed eating worms off lawn by GGRO intern Paula Eberle who noted it did not seem wary of people;
- 1/28/20 photographed five times by Juan Sanchez from 12/22/19 to 1/28/20 perched in pine trees, diving on prey, and hunting on the lawn;
- 2/29/20 photographed as it caught and ate a vole; reported by Jenna Stirling;
- 3/13/20 photographed sitting in a tree and looking for prey; reported by Robert Martin.

**1617** Juvenile male Red-tailed Hawk banded with color and metal bands 9/27/19 by Ben Dudek; injured and caught 1/29/20 by Animal Control Officer on a railing high up in building at San Francisco, SF Co., CA; bird had old wound on lower part of body and died soon after capture; reported by Officer Rebecca Fensen.

**1618** Juvenile male Red-tailed Hawk banded with color and metal bands 11/24/19 by Jessica Schlarbaum; band found 1/25/20 on skeleton with a few feathers at El Polin Springs in the Presidio, San Francisco, SF Co., CA; reported by Jonathan Young of the Presidio Trust.

**1619** Juvenile female Red-tailed Hawk banded 8/15/19 by Claire O'Neil; photographed 11/2/19 by artists working on mural of a giant Monarch butterfly near Hyde and O'Farrell streets in San Francisco, SF Co., CA; reported by GGRO intern Emma Regnier; photographed again 12/15/19, often landing on building roof or swing stage very close to the team of muralists at same San Francisco location; again reported by Emma Regnier for the Ink Dwell muralist team.

**1621** Juvenile male Cooper's Hawk banded 10/30/19 by Teresa Ely; found dead on driveway 12/19/19 at San Francisco, SF Co., CA; reported by Norman Furuta.

**1622** Juvenile female Sharp-shinned Hawk banded 11/11/19 by Brad Valentine; fresh remains found 12/29/19 at Soquel, Santa Cruz Co., CA; reported by former GGRO bander Jeff Walls.

**1623** Juvenile male Red-tailed Hawk banded with color and metal bands 11/8/19 by John Ungar; killed by "predator other than a cat" 12/27/19 at Jalama Beach County Park, Santa Barbara Co., CA; reported by Collin Del Bonis.

**1624** Juvenile male Red-tailed Hawk banded 10/23/19 by Veronica Pedraza; banded foot found 2/10/20 at Atlas Peak, Napa, Napa Co., CA and brought to Napa Wildlife Rescue Center (NWRC); reported by Linnaea Furlong of NWRC.

**1626** Juvenile female Red-tailed Hawk banded 9/14/18 by Josh Hull; leg bones with band found along the Bayside Trail 2/16/20 at Burlingame, San Mateo Co., CA; reported by Tim Divine.

**1627** Juvenile female Red-tailed Hawk banded with color and metal bands 9/6/19 by Will Rose; dead bird brought to Wildlife Rescue Center 1/11/20; found in backyard near Main Street in Napa, Napa Co., CA; necropsy revealed it had been shot; reported by Linnaea Furlong (NWRC) who also reported it to US Fish and Wildlife Service Law Enforcement.

**1628** Juvenile male Red-tailed Hawk banded with color and metal bands 8/30/19 by Misty Cain; found injured, lying in a backyard at Campbell, Santa Clara Co., CA, 2/23/20; Animal Control took it to Wildlife Center of Silicon Valley (WCSV) and died within 24 hours; reported by Ashley Damm of WCSV.

**1629** Juvenile female Sharp-shinned Hawk banded 9/18/15 by Jean Perata; died 3/18/20 after crashing into an office window, still holding a smaller bird in its talons at Santa Maria, Santa Barbara Co., CA; reported by Santiago Lopez.

**1630** Juvenile female Sharp-shinned Hawk banded 9/24/19 by Wayne Woodbury; found 3/4/20 on patio, dead of unknown cause at Los Angeles, Los Angeles Co., CA; reported by Ken Nakai.

**1631** Juvenile male Red-tailed Hawk banded with color and metal bands 10/31/19 by Michaela Figari; found injured 12/30/19 at Napa, Napa Co., CA, brought to NWRC, the bird died in two days; autopsy revealed a right lung puncture wound that had become necrotic, also a "huge" tapeworm and a lot of parasitic infestation; reported by Juliana Viera or NWRC.

▼ 1632 Juvenile male Red-tailed Hawk banded with color and metal bands 9/4/19 by Paula Eberle; photographed 1/14/20 and seen frequently at Mussel Rock Park, Daly City, San Mateo Co., CA; reported by Esther Crandall; found running on sidewalk 3/28/20 with wing askew and unable to take flight at downtown San Francisco, SF Co., CA; watched by paramedics and bystanders to keep hawk safe until picked up by SF Animal Control and taken to PHS. The hawk was diagnosed with only a potential soft tissue injury, thus the wing droop; hawk released 4/18/20; reported by Kendra Jabin (PHS).



Encounter 1632. Photo: Esther Crandall

**1633** Juvenile female Cooper's Hawk banded 9/29/19 by Shannon Skalos; found 2/2/20 inside family chicken coop (no chickens hurt) and captured with a fishing net; reported by Garrett Stephenson.

**1634** Juvenile female Cooper's Hawk banded 10/26/19 by Daniel Mestizo; severely decomposed and headless carcass found 3/26/20 near Derby Acres, Kern Co., CA; reported by Jim Jones of South Valley Biology.

**1635** Juvenile female Red-tailed Hawk banded with color and metal bands 11/6/19 by Jeremy Pallant; found 11/7/19 at Mill Valley, Marin Co., CA, on roadside and brought to Wildcare due to emaciation and neurological symptoms; rehabbed and released

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12/10/19; reported by Lindsay Blessing. Found again grounded 3/8/20 at Sausalito, Marin Co., CA, due to starvation, severe emaciation, dehydration and anemia, the bird died in care at Wildcare; reported by Juliana Sorem of Wildcare.

Juvenile female Sharp-shinned Hawk banded 9/28/29 by Daniel Mestizo; found 1/3/20 being predated by a Red-tailed Hawk in a rice field at Pleasant Grove, Sutter Co., CA; reported by Richard Franklin.

Juvenile male Red-tailed Hawk banded with color and metal bands 11/22/19 by Zeka Kuspa; found dead 2/9/20 at base of eucalyptus tree at Birds Landing, Solano Co., CA; reported by Steven Leutholtz.

Juvenile female Cooper's Hawk banded 11/18/17 by Steve O'Neill; found dead with neck wound 4/12/20 hanging by talons on a cypress tree at Soquel, Santa Cruz Co., CA; reported by Dave Osterhoudt.

Juvenile female Cooper's Hawk banded 9/16/19 by Mamiko Kawaguchi; injured as it flew into a window on 1/6/20; died in care at Albion, Mendocino Co., CA; reported by Village Veterinary Clinic.

**1648** Juvenile male Red-tailed Hawk banded 11/27/17 by Jeff Robinson; reported 3/10/20 as killed "by a predator other than a cat" near Monroe, Benton Co., OR; reported by Dan Rietman.

Juvenile female Red-tailed Hawk banded with color and metal bands 9/5/19 by Veronica Pedraza; hit by a car 10/7/19 and wedged between roof and storage unit; found DOA at Pacific Manor, San Mateo Co., CA; the driver was unaware when the vehicle struck the hawk; reported by Tani Meyers of PHS.

Juvenile female Cooper's Hawk banded 8/23/19 by Michelle Unger; found freshly dead 2/3/20 with no apparent injuries at San Mateo Central Park, San Mateo, San Mateo Co., CA; reported by Mark Cooper.

Juvenile female Sharp-shinned Hawk banded 10/3/19 by Candace Davenport; found 4/23/20 freshly dead and headless on sundeck in District of North Vancouver, British Columbia, Canada; reported by Jim Loree who said his wife and two boys (eight and ten years of age) found it; his wife encouraged them to write about this in their journals as they were being home-schooled during Covid-19 isolation; one son did a class project on the Sharp-shinned Hawk.

Juvenile male Red-tailed Hawk banded with color and metal bands 8/22/19 by Candace Davenport; found on the grill of the car when a driver parked in Sunnyvale on 11/25/19; believed to have been hit in San Francisco; was taken to Wildlife Center of Silicon Valley (WCSV) in San Jose and euthanized on arrival due to severity of injuries; reported by Jenny Liu of WCSV.

**1653** Juvenile male Red-tailed Hawk banded with color and metal bands on 12/3/19 by Wayne Woodbury; found dead 3/14/20 on Highway 1 near Gordola, Santa Cruz Co., CA; reported by Diana Walsworth.

**1654** Juvenile female Red-tailed Hawk banded 8/15/19 by Bill Prochnow; sighted 5/9/20 as it took a dive at a heron at Sunset Reservoir, San Francisco, SF Co., CA; reported by Eliot Janka and Siobhan Ruck.

Juvenile male Red-tailed Hawk banded 9/19/10 by Diane Horn; found dead on 8/26/19, likely hit by a car, at Petaluma, Sonoma Co., CA; reported by Kerry Ross.

Juvenile male Red-tailed Hawk banded with color and metal bands 8/30/19 by Josh Hull; hawk photographed 5/16/20 while sitting on a railing, described as very tame or possibly ill at Alameda Island near the former Naval Base, Alameda Co., CA; reported by Andrew Cummings; found dead 5/18/20 in a backyard at Oakland, Alameda Co., CA; reported by Animal Control Officer Jennifer Soggie.

**1657** Juvenile female Red-tailed Hawk banded with color and metal bands 8/23/19 by Maggie Brown; photographed 5/25/20 at Buena Vista Park, San Francisco, SF Co., CA; reported by Robert Martin.

1658 Juvenile male Red-tailed Hawk banded with color and metal bands 9/10/19 by Eddie Bartley; hawk sighted in trees 5/29/20 at San Pedro Valley Park, Pacifica, San Mateo Co., CA; reported by Sharron Walker; hawk sighted perched in a tree 5/31/20 at San Pedro Valley Park, Pacifica, San Mateo Co., CA, reported by GGRO bander Ben Dudek; photographed 6/1/20 atop restroom building eating a mouse at San Pedro Valley Park, Pacifica, San Mateo Co., CA; reported by GGRO hawkwatcher Alane Gray.

**1659** Juvenile female Cooper's Hawk banded 8/26/19 by Emma Regnier; found dead 12/20/19 in a barn at Bolinas, Marin Co., CA; taken by Keith Hansen to California Academy of Sciences (CAS) to become a specimen; reported by Martha Velez of CAS.

**1660** Juvenile male Red-tailed Hawk banded with color and metal bands 9/12/19 by Steve Rock; photographed 1/14/20 at Hillpoint Park, San Francisco, SF Co., CA; reported by Russ Bright; found dead on road 6/10/20 at Powell Butte, Crook Co., OR, previously observed perching on rolling irrigation sprinklers; reported by Marie Simovich.

**1661** Juvenile female Red-tailed Hawk banded 9/21/19 by Catherine Fisher; caught 1/2/20 due to open wounds on both wings at Buena Vista Park, San Francisco, SF Co., CA; euthanized on arrival at PHS per Tani Meyers of PHS.

**1662** Juvenile female Cooper's Hawk banded 8/24/18 by Robert Martin; found dead 1/29/20 close to river frontage at Rio Vista, Solano Co., CA; reported by Vicky Nelson.

**1663** Juvenile male Cooper's Hawk banded 10/20/19 by Veronica Pedraza; found dead 12/16/19 at Tiburon,

Marin Co., CA; reported by Rhonda Beraun.

**1664** Juvenile female Cooper's Hawk banded 10/14/19 by Traci Tsukida; found dead 1/6/20 near Salinas, Monterey Co., CA; reported by Ryan Bunker.

**1665** Juvenile male Red-tailed Hawk banded with color and metal bands 10/13/19 by Breanna Martinico; brought to PHS 3/17/20 after being observed for two days unable to fly in San Francisco, SF Co., CA; was very thin and had an old wound and mass in mouth; died two days later; reported by Tani Meyers of PHS.

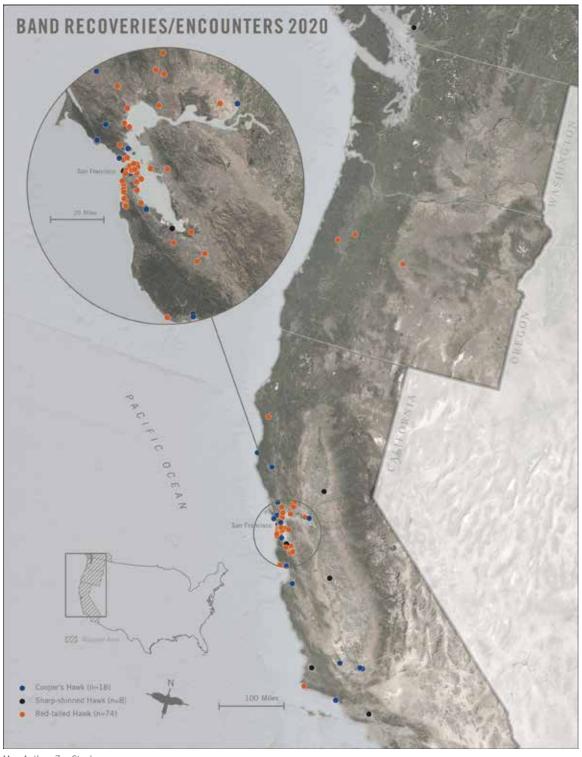
**1666** Juvenile male Red-tailed Hawk banded with color and metal bands 9/10/19 by Maggie Brown; discovered on ground with Turkey Vulture eating carcass on 1/3/20 at Black Point, Novato, Marin Co., CA; reported by Colleen Lenihan.

**1667** Juvenile female Red-tailed Hawk banded with color and metal bands 11/25/14 by Rachel Miller; leg with band found 6/20/20 in shed on rural property at Lebanon, Linn Co., OR; reported by Wendy Marshall.

1668 Juvenile male Red-tailed Hawk banded 10/23/18 by Noreen Weeden; suspected car-strike 1/19/20; was taken to PHS where injuries deemed unrepairable and was euthanized; reported by Sedef Aksoy Tekin and Tani Meyers of PHS.

**1669** Juvenile male Red-tailed Hawk banded with color and metal bands 9/3/19 by Buzz Hull; found 7/15/20 on a roof at San Jose State University at San Jose, Santa Clara Co., CA, with a 3-inch wound, bones showing, on left side and unable to use left wing and foot, now dead; reported by Larry Young.

Retired RN, and GGRO bander for nearly 30 years, Marion Weeks has kept our Band Recovery files and correspondence in order for four Redtail generations. Thank you, Marion!



Map Author: Zac Stanley

he need for donated dollars for health and healing, for people and planet, were as high in 2020 as any time in history. We also asked our donors and volunteers to do what they could, to reach out to friends and families, and to help us get the Parks Conservancy's GGRO operations through this difficult time. And you were amazing. Stirring, even. You increased our average donation year by fourfold, and you reached hundreds of new donors who share our love for birds of prey. Saying thank you here cannot capture the full expression of our appreciation for all you have done and continue to do. Your support was crucial for our preparing to band and hawkwatch in 2021, to do our critically important work now and ahead. May raptors fill your skies.



Steven Fields

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Il volunteers listed here committed to volunteering in the 2020 season. Many individuals were not able to participate this year due to program suspensions and reductions caused by the COVID-19 pandemic. Volunteers whose names are bold participated in Hawkwatch, Bird Care, or a Volunteer Think Tank, but everyone listed here continued to support GGRO in various ways throughout 2020. Heartfelt thanks to our whole community.

#### **2020 VOLUNTEERS**

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# IN MEMORY OF RUSSELL DELONG 1937-2020

#### **Buzz Hull**

Director's note: Among the many changes in 2020 for the GGRO community was the passing of our longesttenured volunteer, bander Russ DeLong, Alongside his immense passion for raptor banding, for storytelling, and for his fellow volunteers. Russ was a larger-than-life personality who helped create many GGRO traditions over 38 years. Thanks to Buzz Hull, Russ's frequent banding partner and occasional straight man, for this reflection. I also want to acknowledge the Thursday banding team, who cared for Russ during his final year like a wool blanket in a cold winter. - Allen Fish

Russ DeLong was a fascinating complex of competitive nature and warm, compassionate feelings for his acquaintances. I first knew him in the earliest days of the Golden Gate Raptor Observatory, when I saw him as a person who wanted to be in charge, both of the banding activities and of his fellow volunteers, and yes, even of the



© Dan Suzio Photography

newly hired staff. As I got to know him, it became clear that he had a deep, caring nature.

Perhaps Russ was most thought of by his fellow GGRO volunteers as someone who really knew how to tell a good story. His stories were not limited to the experiences he gained through the GGRO. He would suddenly tell of listening to Russian tank commanders while assigned to a listening post in Germany during the Cold War era. Or he would talk about his travels to Australia, a continent he dearly loved, and about climbing Ayres Rock in the Outback or cuddling a wombat at the Sydney Zoo.

Russ also loved singing, especially his time as a bass with Slavyanka, the men's acapella chorus, with whom he traveled to eastern Europe and Russia on a concert tour. He would also break out unexpectedly into songs from the role he had played on stage as the Mikado of Japan in the Gilbert and Sullivan operetta, "The Mikado".

His love of the outdoors, and particularly his passion for being in the wilderness by himself, was somewhat unexpected in such a people-oriented social individual. I think this started while he was at the military language school in Monterey, when he would pack up his camping gear and head for Big Sur, spending a couple of days hiking, reading, and using time alone to recover from the forced togetherness of military life.

Buzz Hull was among GGRO's first volunteers, starting in 1984 and shouldering responsibility for turning the Observatory into a world-class raptor research institution for NPS and the Parks Conservancy. He served as GGRO's Banding Manager, Research Director, and now Emeritus Research Director from 1991 to the present.

# SUPPORT THE GOLDEN GATE RAPTOR OBSERVATORY

Nineteen species of hawks, kites, osprey, falcons, eagles, and vultures travel over the Marin Headlands each year, and your support allows us to keep a pulse on their population changes, monitor their health, and track their movements throughout the Pacific region. Make a gift to the GGRO today and do your part to keep Bay Area raptors flying.

Donate online at parksconservancy.org/programs/ golden-gate-raptor-observatory

To donate by mail, send your check—written out to the Golden Gate Raptor Observatory—or credit card information with donation amount to GGRO at 201 Fort Mason, San Francisco, CA 94123.

The Golden Gate Raptor Observatory is a program of the Golden Gate National Parks Conservancy in cooperation with the National Park Service and our work would not be possible without their support. You can further support the GGRO and other Parks Conservancy programs by becoming a Parks Conservancy member today.

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## The Golden Gate Raptor Observatory is a program of the Golden Gate National Parks Conservancy, in cooperation with the National Park Service

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**Back cover:** Sharp-shinned Hawk over the Golden Gate. Photo: John Davis

Photographer's note: The south quadrant is usually a quiet place on Hawk Hill, for raptors and for humans. When a low fog moves in over the Golden Gate, only raptors flying up high are visible, and many have probably already been counted and passed from

another quadrant. On clear days, the harsh light of the hazy sky compounds as it reflects up from the Pacific, and anything will be a silhouette through squinted eyes. During just these conditions, this first-year Sharp-shinned Hawk appeared dark with a twinkling in flight over the water, which twinkled back in a surprisingly similar fashion.

I imagined this was the moment this young hawk first saw the Golden Gate, spurring course corrections, elevation gains, aggressive and defensive maneuvers—all reactions founded on millions of years of evolution and the successes of countless prior generations. Cheers to the south quadrant—quiet, finicky, and astounding.

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