On October 24-25, 2009, we threw ourselves a 25th birthday party at Fort Cronkhite, complete with research exhibits, a scientific symposium, a radiotracking demo, live raptors from Native Bird Connections, an art show, and a room full of kids activities. More than 30 people put together our Raptor Fest 2009, and more than 500 attended.
As many of you know, Hawk Hill is slated for a face change—a change of physiognomy. Physiognomy is a great word as it means both “face” as in human face, and also “the botanical landscape.” And in this case, both apply. Sometime in the next few years, Hawk Hill’s seven-acre forest of Monterey Pines and Monterey Cypress will be cut down, cut up, and taken away. Golden Gate National Recreation Area ecologists will then begin restoring the site to its original, pre-European physiognomy, a mix of wind-shorn grasses and shrubs known by the uncharismatic name of “Coastal Prairie and Scrub.”

I’VE GOT THE MISSION BLUES

Why should this be done? Most simply, to conform to the requirements of the U.S. Endangered Species Act and to give the best shot at long-term survival to an endangered butterfly with a one-inch wingspan, the Mission Blue, found only in coastal prairies on 690-foot to 1200-foot hilltops on the west side of San Francisco Bay and not too far from the Golden Gate. By restoring Hawk Hill’s western face to its native coastal prairie state, the Mission Blue Butterfly (MBB) gets seven more acres of available habitat than it previously inhabited.

What does this acreage add-on mean for the MBB? I haven’t been able to obtain an acreage total for all of the other MBB sites, but they amount to five patches in the Marin Headlands (Hawk Hill, Slacker Hill, Fort Barry, Fort Baker, and Oakwood Valley) plus two sites in San Francisco (Twin Peaks and McLaren Park), plus four in San Mateo County (San Bruno Mountain, Laurelwood Park, Sugarloaf, and Skyline Ridge). All the MBB sites are stretched out along a 50-mile north-to-south line. One of the problems posed by this mosaic of habitat islands is that adult MBBs don’t fly very far in their one-week lifetime as a butterfly, so small geographic distances—and even small forests—are formidable obstacles to genetic mixing.

MBB is scientifically called *Icaricia icarioides missionensis*, and is technically a subspecies of the Boisduval’s Blue. Wikipedia carries a description of MBB that would embarrass the most colorful poet, and has to be read to be believed. It begins: “the wing color carries no hint of green or purple, strictly capturing an enthralling spectrum of purpest, clearest, richest, brightest blue, and exhibiting a dazzling iridescent fluctuation under full sunlight…” You get the picture.

It may seem odd to some readers that the U.S. Endangered Species Act (ESA) should protect subspecies. This comes from a careful and far-reaching understanding that because many biologists cannot agree on what constitutes a species versus a subspecies in certain plants and animals, we better protect species conservatively and err on the side of caution. It also recognizes that a more genetically diverse species may be more resilient over time, and so we ought to protect even distinct populations within a subspecies. And yes, the ESA does that also.

CONFERRING WITH THE CONIFERS

Back to the Hawk Hill forest. If the Monterey Cypress and Pines weren’t on Hawk Hill in 1972, when did they show up? And how did they get there? Judging from aerial photos found by John Martini, a park historian, there were conifers on...
Hawk Hill in 1972, just not as many as today and much, much shorter. In the 1972 photo, there seems to be a small patch in the north slope gully below Hawk Hill (trees that may be 40 feet tall), and then much smaller trees near the two west-facing bunker openings. Between the two bunker openings are perhaps 30 conifer saplings, mostly under four feet tall.

In Hawk Hill aerial photos from 1959 and 1962, there are no visible trees from the southern or western views, so most of this coniferous growth seems to have started in the mid 1960s. But how did these trees, not native to Marin or to San Francisco, arrive on Hawk Hill?

The standard park interpreter’s response, until recently, was that the trees were planted after the construction of the bunkers on Hawk Hill in 1942-1943 specifically to hide the bunkers. This is false. John Martini recently found a 1939 memo documenting explicit instructions for concealing the Headlands bunkers from Major R.C. Hunter, U.S. Army Corps of Engineers: “Planting and transplanting of vegetation [should be] indigenous to the locality . . . a coarse grass with patches of low scrub bushes.”

So, if the trees weren’t intentionally planted by the Army, one has to wonder where the Army obtained the soil for recontouring Hawk Hill, and how much seed came with it. It appears from photos that the upper stretch of Conzelman Road was carved out and graded during this same period of time (early 1940s), so perhaps that was one source of soil. Also, aerial photos back to the 1940s show extensive conifer forests in Kirby Cove, barely a half-mile east of the summit of Hawk Hill, so maybe some soil was driven up from this canyon as well.

Why did it take twenty years, until the late 1960s, for these seeds to start turning into pine and cypress saplings? At least one source, a soldier at Fort Cronkhite in the 1950s, recalled being assigned to tree-pulling duty to keep the bunkers’ view of the Pacific Ocean as wide as possible. Perhaps this practice diminished in the 1960s, as the gun batteries became less important, and as Hawk Hill became more important as a command center for the Nike Missile Base near Rodeo Lagoon.

**HAWK HILL FOREST AND ITS BIRDS**

So, we have this seven-acre hillside of some 160 coniferous trees. If we take it away do we disrupt some kind of critical bird use? Is it a necessary migratory stopover for conifer-loving birds in the fall and spring migrations? During autumn hawk count days, GGRO volunteers have kept tabs on all birds flying by Hawk Hill, not just raptors, and many birders have contributed to a master list of birds seen in or on the Hawk Hill forest.

Steve Bauer, Herb Brandt, and I compiled that 25-year bird list for the National Park Service, which totaled 112 species and included at least eight species with some kind of special Federal or State status: Peregrine Falcon, Northern Goshawk, Spotted Owl, Long-eared Owl, Common Yellowthroat, Yellow Warbler, Tricolored Blackbird, and Olive-sided Flycatcher. The raptors noted have only been seen in the forest once or twice per season at best, except for the Peregrine, which is now a year-round resident as well as a regular migrant through the Marin Headlands.

Most of the songbirds above were also once-a-year sightings at most, except for the Yellow Warbler, an annual fall migrant, and the Olive-sided, an occasional breeder and migrant in the Headlands. Although the latter has not been recorded nesting in the Hawk Hill forest, male Olive-siders are heard singing each spring in the Kirby Cove forest, indicating that they may be nesting nearby.

According to surveys done in 2009 by Point Reyes Bird Observatory biologists, 11 bird species were found nesting or likely nesting in the grove: Anna’s and Allen’s Hummingbirds, Western Scrub-Jay, Common Raven, Chestnut-backed Chickadee, Bushtit, Pygmy Nuthatch, Wilson’s Warbler, Spotted Towhee, Song Sparrow, and Purple Finch. Of these, the nuthatch, chickadee, and finch are primarily tree-nesters,
and may be forced to shift their nesting sites to other local groves with the removal of the conifers. The other species will be able to nest in the coastal scrub, or in the case of the ravens, in the nearby cliffs.

**HAWK COUNTS AFTER THE FOREST IS GONE**

So, how will this loss of trees affect the hawk flight? We’ve all seen a Sharp-shinned or Cooper’s Hawk rip past the North Platform at eye-level, swoop low, and barnstorm the Hawk Hill conifers. It’s pretty exciting to watch, especially when it yields a few chickadees or crossbills, or 200 Band-tailed Pigeons that rise up like muffled thunder.

But consider this: when Dr. Laurence Binford first walked up to this migration site in September 1972, there were only a handful of trees on Hawk Hill, none taller than you or me. So, as bird habitat goes, the trees are a very new phenomenon; they’ve been here for 40 of the last 10,000 years. The hawk migration will be okay without this forest.

How about the hawk count? Will we see more hawks as a result of the tree removal opening up the western sky viewshed? Will this compensate for the loss of the attractive force of the trees for some accipiters? No one can say. As far as viewshed goes, the trees have grown through the 1980s and 1990s. At some point in the late 1980s we first lost our view of the Farallon Islands from Hawk Hill’s summit. Interestingly, in the last five years, the tree trend was toward thinning. Several winter windstorms in the mid 2000s blew out large limbs and dramatically opened up sightlines of the Pacific horizon not seen in the previous decade.

So, I suspect that the hawk counts will be impacted by the tree loss, but I am just not certain how. There are several cases to make that the counts could be sent in different directions. Perhaps the most obvious statement is that the tree removal will cause changes in Hawk Hill’s microclimate: we hawk counters will lose shade and protection from the west winds. As a place to watch birds and measure the daily migration, Hawk Hill may not be as comfortable.
I have been alone on Hawk Hill just after dawn when the sunrise on my back cast my shadow into the foggy mist of the pines and my shadow was edged in refracted rainbow light. I have seen an eastern Palm Warbler tail-wag its way up a cypress bough looking for bugs. I have seen a pair of Clark’s Nutcrackers fly out of a pine, and a flock of over 50 Red Crossbills alight on the very tippy-tops of the tallest trees... great Hawk Hill moments that will always stay with me. But should my comfort while watching hawks—or my love of cool birds and mist-in-the-trees sunrises—be put ahead of an endangered butterfly’s chances of long-term survival?

A great person, name forgotten, wrote that the US Endangered Species Act may be the “greatest single law ever enacted in protection of life on Earth.” I would never want to weaken the ESA by acting as though it could be turned on or off at will. There are too many who would love to see it disappear entirely. Although I personally am a little sad to lose this lichen-dripping fog forest that I’ve known for a quarter-century, I am happier to be living in a land where endangered insects are given the same regard as the most charismatic of furred predators.

GGRO Director since 1985, Allen would like to take a minute to thank the hard-working and inspirational GGRO community, and the insightful and supportive NPS and Conservancy staffs for their unflagging enthusiasm all these years. Thank you.
and knowledge validated through formal recognition of the expertise they had gained over years of field work.

As the preseason planning and work progressed, it soon became apparent what an enormous task we had undertaken. We had to write a brand new manual, documenting the whole range of needed skills and knowledge. We had to design and administer three evaluation exercises. We had to identify and train evaluators for the field practicum. And we had to somehow nurture almost 50 current site-leaders through the recertification process within the time limits of the 2009 banding season, about a four-month period.

FIELD-TESTING WHILE BANDING

The field practicum was especially demanding for us all. The requirements for a successful exercise required each candidate to identify and then correct several mis-rigged traps, nets, and lines. The candidate had to demonstrate skill at repairing damaged nets and at properly rigging a dho-gaza in the field.

The evaluator also needed to observe the candidate with a minimum of three raptors. With the first, the candidate demonstrated proper handling, banding, and processing. The second raptor was used for the candidate to teach an apprentice proper handling and processing. Finally, with the third raptor the candidate observed and corrected a beginner handling, processing, and banding. The candidate also had to show proficiency in extracting a raptor from a mist net or dho-gaza. This field exercise took place in the context of a banding blind in normal operation, with the typical three to six simultaneous ongoing activities while the four banders in the blind attempt to maximize birds banded during the day.

CHANGING THE CULTURE

For me personally, I enjoyed one of the most rewarding periods of my association with the GGRO. I watched attitudes move from apprehension and resistance, through acceptance, and finally arriving at a sense of fulfillment and accomplishment. I like to believe that the process has created a change in the institutional culture of the GGRO banders, from a strong focus on individual approaches to support of agreed-upon standards and consistency. Site-leaders have individually identified areas where they need to improve their skills or their fund of knowledge. I anticipate that these identified needs for improving field procedure will produce better, more consistently-collected data that will lead to more meaningful analyses.

In addition to recognizing the good will and acceptance of the recertification process by site-leaders and banders, I want to acknowledge the hard work of the Recertification Committee. They undertook the job of producing the new manual; of identifying, recruiting, and training evaluators; and of scheduling, tracking and nurturing the progress of more than 40 site-leaders through this complicated series of steps.

Recertification Committee: Dick Horn, Nancy Brink, Jean Perata, Dian Langlois

Field evaluators: Anne Ardillo, Marc Blumberg, Randy Breaux, Julia Camp, Russ DeLong, Dick Horn, Diane Horn, Buzz Hull, Josh Hull, Craig Nikitas, Steve Rock, and Siobhan Ruck.

Buzz Hull completes his 20th year as a Parks Conservancy staff member in 2010.
The 2009 Hawkwatch season started with the usual foggy summer days, keeping teams off the hill for six of the first 14 days. Fog closed Hawk Hill for a total of 15 days for the season, with rain preventing counts on an additional 5 days.

The peak migration season is usually mid-September, but this year both fog and fire intervened. September 18 started out beautifully with 223 hawks sighted in the first 2½ hours. Then the team noticed smoke rising to the south of Hawk Hill at Point Diablo. They relayed this information to GGRO Headquarters, where staff called the fire department. By noon, Conzelman Road was closed and both the Hawkwatch and Hawk Blind banding teams were evacuated.

With 99 hawks per hour in the time spent on the Hawk Hill, this fire day could have been a record-breaker, and both counters and trappers grumbled about the loss. However, the wrong wind, from the south, could have put volunteers and public in great danger, so we consider ourselves lucky. The fire was attended to swiftly by Marin County and park crews, and was put out by 2 pm. Bravo to the crews and to Kim Meyer’s Hawkwatch team for putting their binoculars on the early smoke plumes—just one of the side benefits of having a team of hawk counters in your national park.

And then in late September and October, the heat came. Several teams spent their mid-days with temperatures hovering at 100. Allen brought jugs of water and ice to the hill to keep hawkwatchers from becoming heatstroke watchers. At the end of November, the Saturday I team was blown off Hawk Hill at 12:30 by 50 mph winds. Despite these extremes, several volunteers noted the relaxed teams in the journal, and the fun and pleasure of the field experiences.

HIGH COUNTS FOR PEREGRINES AND BALD EAGLES

Despite the fewer hours of observation, the totals were not bad for the year. We counted 24,731 hawk-sightings, slightly down from last year, with Peregrines (259) and Bald Eagle counts (10) higher than usual. Roughleg counts were down (2). One Goshawk came through on October 29, to the delight of the Thursday I team. Other counts were average or slightly below average.

NEW RAPTOR ID TEST

From the initiation of the study in 1994 through 2007, we conducted a cooperative accipiter identification test with GGRO banders, who were located in Hawk Blind just ¼-mile northeast of the Hawkwatch count site. Starting in 2008, banders released any species they had in hand for hawkwatchers to ID. Starting in 2009, we modified the protocol to make the identification tests more like actual hawk flybys. And test raptors were released from both Poison Oak Blind (about ¾-mile away) and Hawk Blind.

Hawkwatch dayleader Julian Hyde called the new raptor ID protocol a “more natural and relevant” system of identification testing. The team members watched quietly, identified on their own, then discussed their observations with the team and came to a consensus on the ID. With birds being released from two different blinds, the teams were able to observe raptors flying at varying distances and with differing
backgrounds, making ID a little more difficult but certainly more representative of reality on Hawk Hill.

The best part was watching the differing flight patterns of a Merlin, a Redtail, and an Accipiter as they were each released, rather than the generic “flap, flap, glide” of one accipiter after another. This was a great expanded educational opportunity for us. The sight of the first Merlin release, the stall as the falcon assesses what just happened, the speed as it leaves—amazing.

**PEREGRINE BATTLES**

Several teams noted more encounters between the local Golden Gate Peregrine pair and migrating Peregrines than ever before. Some of these conferences lasted a long time with spectacular stoops and twisting dives to evade the hit. We are so fortunate to be able to routinely observe this action. The Peregrine’s recovery from the years of DDT exposure is a wonderful example of a group effort with a positive outcome, readily observed from Hawk Hill.

*Photographer Mary Malec has been hawkwatching for GGRO since 2005, and falcon-watching for at least as long. In 2009, she presented her observations on non-breeding season Peregrine behavior at the Western Field Ornithologists’ Meeting in Boise, ID.*

## RAPTOR-SIGHTINGS IN THE MARIN HEADLANDS DURING AUTUMN*

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*2009 data still under review.

## RADIOTELEMETRY 2009

**Jim Shea and Lynn Jesus**

**Cruising the Coast Range**

In 2009 GGRO’s radiotelemetry team once again focused on tracking juvenile Red-tailed Hawks. This species’ fall movement through the Marin Headlands has puzzled us due to its bimodal pattern of occurrence. Speculation regarding the causes of this pattern was ripe in the early days of the migration study. Maybe the first peak consists of locally dispersing juveniles, while the second peak is a population of northern Redtails that take longer to get here. Or perhaps the second peak is a population that starts later than the locals.

Initially we weren’t smart enough or sophisticated enough to ask whether some individuals might go north first and then reverse direction and go south, eventually spending the rest of the winter to the south of us. Nor did we realize that since the central and northern California coast is a great place for raptors to make a living in the winter, that Redtails might be nomadic here, moving fairly readily to different locations.

Teasing apart these factors using radiotelemetry techniques has become a years-long study due to both the huge volunteer commitment required, and the complexity of the hawks’ movements. Volunteers must commit to multiple dawn-to-dusk days in the field, many hundreds of miles of driving, meals on the run, and uncertain sleeping conditions. The small number of folks who can meet these rigorous demands also limits the number of hawks we can track in a season to two or three.

Volunteers who participate in the radiotelemetry program enjoy the intellectual and physical challenge of trying to track a hawk that is “on the move.” “Tracking” a raptor which becomes stationary for several days becomes very tedious, and results in no new data about flight
paths away from the Headlands. If a raptor remains stationary for four days, we may decide to move on to a new subject, although an effort is made to periodically check on the location of the previous hawk. Such was the case this season—with interesting results.

**YOSEMITE**

*A juvenile, male Red-tailed Hawk*

**ACTIVE TRACKING, OCT. 30—NOV. 3, 2009**

OCT. 30: Yosemite, the juvenile male Redtail was trapped at Hawk Blind near midday. One telemetry team remained in the Marin Headlands to apply the transmitter to the hawk, while the other two teams were dispatched to San Pablo Ridge and San Bruno Mountain. Upon his release near Rodeo Lagoon, Yosemite immediately flew to a tree near the firehouse and was subsequently attacked by a flock of ravens. He then headed east, spent the rest of the day on the eastern side of Wolfback Ridge, and ended the day near the Spencer Avenue exit of Highway 101 in Sausalito.

OCT. 31—NOV. 3: Yosemite remained in Sausalito, close to the freeway, between the Spencer and Rodeo exits, with telemetrists getting many visuals as he moved around. At mid-day on Nov. 3, active tracking of Yosemite was suspended and transferred to a new juvenile Redtail, named Zephyr. Yosemite was still monitored on a less intense basis by hawkwatch and telemetry volunteers.

**POST-SEASON TRACKING, NOV. 4, 2009—JAN. 7, 2010**

NOV. 4: Telemetrists on Hawk Hill for hawkwatch carried a set of telemetry equipment with them to support the teams tracking Zephyr. At the same time they could also check on any changes to Yosemite’s behavior. From mid-morning to mid-afternoon there was little change in Yosemite’s bearings (in the direction of Sausalito).

NOV. 5: After beginning the day in Sausalito, Yosemite’s bearings shifted south approximately 100 degrees and then the signal was lost. Apparently, Yosemite had flown across the Bay from Sausalito, over the Berkeley hills, and then dropped down behind them.

NOV. 6—11: Bill James and Phil Capitolo successfully detected the signal on the antenna from Highway 680 near Alamo. For the next few days telemetrists had signals in the Danville and San Ramon areas until they lost the signal after the 7th. Phil Capitolo had a brief signal pointing toward Castro Valley on Nov. 11, and by 4 pm had pinpointed Yosemite east of and overlooking Highway 580 just north of the junction with Highway 238. Phil was able to see Yosemite in a eucalyptus tree on the hill above the freeway; his notes make the astute observation, “This bird likes to overlook freeways!!!”

NOV. 12—19: Yosemite stayed in the same area and was monitored from Hawk Hill by interns and other telemetrists on Hawk Hill. Simultaneously, from Nov. 12 to Dec. 5, the Castro Valley area was checked almost daily, and in all instances it was certain that Yosemite was close to the freeway. David and Lynn Jesus identified Yosemite on three occasions—all sightings by the freeway, of course. They returned to the prime freeway area to check on Yosemite throughout December, and usually were able to see him.

JAN. 4: David and Lynn located the strongest signal on the east side of the freeway at the intersection of Miramonte and Foothill Boulevards. The signal was unusually steady, even though pedestrians walked within 10 feet of the indicated area. Thinking this probably meant either serious trouble for Yosemite, or that the transmitter was on the ground, they moved closer to inspect the area. With guidance from the Yagi antenna, they located Yosemite’s tail feather—with the transmitter still attached—on the ground near a tree on the freeway berm.

JAN. 7: David and Lynn tried to spot Yosemite by tracing his favorite hangouts along the freeway. Approaching 164th Street, Lynn spotted a Redtail in a eucalyptus tree on the northeast side of the intersection—perched overlooking the freeway. When the hawk flew, they saw a notch in the center of its tail, confirming Yosemite’s identification.
The end result is that we tracked a juvenile Redtail from the Marin Headlands to Castro Valley, covering a span of 69 days. Many volunteers contributed to this success, but much credit goes to the post-season efforts and skills of Phil Capitolo and David and Lynn Jesus.

ZEPHYR
A juvenile, female Red-tailed Hawk

ACTIVE TRACKING, NOV. 3—10, 2009

NOV. 3: With Yosemite still hanging out in Sausalito, we started tracking our 26th juvenile Redtail—Zephyr (meaning “West Wind”), trapped at Hawk Blind. Larry Beard applied the transmitter and released her from Hawk Hill in the early afternoon. The team near the FM Towers recorded bearings to the east-northeast until her signal disappeared. Believing that she was down in one of the coastal ravines along the southern Marin shoreline, two teams covered southern Marin while the third headed north up Highway 1 to Stinson Beach and then covered the west side of Mount Tamalpais, with no luck.

NOV. 4—6: Shortly after 9 am Zephyr’s signal was picked up by the team on Mount Vision; Zephyr was located near Tomales Bay. The tracking conditions were miserable along the coast, with rain, wind, and fog making it difficult just to take bearings. The teams often sheltered in their cars, getting out every 15 minutes to take bearings. They tried to zero in on Zephyr’s location, but signal bounce off the water and hills frustrated their attempts. Generally, Zephyr was believed to be on the east side of Tomales Bay across from Inverness, near Millerton Gulch. The teams recorded their frustrations, once noting “Looks like tomorrow’s teams will have to solve this mystery.”

NOV. 7: The team notes read, “We arrived at 7:50 on Mount Vision to glorious clear skies with only a bit of fog below on Tomales Bay.” Unfortunately, only two tracking teams were in the field when the skies cleared and Zephyr decided to move. Team 1 continued to get bearings from Mount Vision until 2:45.

Team 2 began the day south of Marshall and first detected movement at 9:00, losing the signal by 10:07. After searching all morning for a cross-bearing they picked up a signal at 2:15 from English Hill in the direction of Mount St. Helena, and maintained that signal until 2:45 when both teams lost the signal. Zephyr had finally moved inland!

NOV. 8: The teams were again short-staffed, but even with two teams of solo telemetrists, all three teams had bearings by 10:15 am placing Zephyr east of Healdsburg. That day she flew north to the watershed area of Little Sulphur Creek, east of Geyserville.

NOV. 9—10: For the last two days of the planned tracking season, the teams recorded only local, short flights for Zephyr, who remained in the narrow canyon watershed of Little Sulphur Creek. On the afternoon of the 10th, with Zephyr still in the Little Sulphur Creek watershed, the teams packed up their gear and returned to the Marin Headlands. The planned “active” tracking season was over.

POST-SEASON TRACKING, NOV. 21—30, 2009

NOV. 21: Curious about Zephyr’s location, Bill James and Lynn Jesus returned to the Little Sulphur Creek watershed area and scoured the region until they picked up her signal south of Ukiah. The bearing pointed up the valley to the north, west of Highway 101. Since Galen Leeds was returning to the area the following day to continue the search, they headed back to Marin knowing Zephyr was in the hills just to the west of Ukiah. (It was three weeks after active tracking began with Yosemite on Oct. 30, and we were pleased to know where both birds were located.)

NOV. 22: Galen returned to the area and monitored Zephyr’s signal for several hours. Galen watched as a series of raptors flew along the ridgeline near his location, and waited for one special raptor to appear. Finally, at 12:46, Galen watched as Zephyr flew directly overhead, “close enough to hit with a rock”—but, of course, he didn’t try. It was the first visual sighting of Zephyr since she had been released in the Marin Headlands on Nov. 3.

NOV. 30: Larry Beard and Steve Rock returned to Ukiah and searched Orr Springs Road and the surrounding areas, but were unable to pick up Zephyr’s signal.

Last year, teams tracked XXIV (another juvenile Redtail), as he flew northward to Ukiah, and some of the last recorded bearings were taken along Orr Springs Road. While XXIV took the Highway 101 route, Zephyr chose to begin along the coastal route. Their final known locations were in the same region, more than 110 miles north of the Headlands.

Now in his 15th year of hawkwatching, retired physicist Jim Shea splits his time between hawks, telemetry, butterflies, running, photography, hawks, and his family. GGRO’s long-time Telemetry Coordinator Lynn Jesus carries the torch for quality not quantity of data.
The GGRO banding numbers were down for the second year in a row, and in fact were the lowest since 2003. The early Redtail peak failed to materialize and the second peak of Redtails was modest, bringing our season total to only 226, well below our average since 1992 (327.7). We banded a disappointing four adult Redtails this season, equaling our lowest ever for these magnificent birds.

We did capture a few species in slightly larger numbers than in 2008—notably Northern Harriers (8), Broad-winged Hawks (2), and American Kestrels (73)—and even set a new GGRO capture high for Merlins (62).

The weather alternated between hot, windless days and foggy, windy days and was the most likely culprit for the particularly slow pace of the early-season trapping. This was especially difficult for our apprentice banders, most of whom had been looking forward to consolidating their skills with busy days in the blinds. The paucity of early season birds also made the siteleader recertification process somewhat unwieldy, as we had to schedule make-up field sessions for many of the candidates.

A personal highlight for me was the day that one of the GGRO founders, Judd Howell, visited the Hill 88 Blind with Craig Nikitas, Nathan Elliott, and me. This seemed particularly appropriate in our 25th year. On that day in early October, Judd was able to add a Merlin to his list of GGRO banding experiences.

Recently retired from directing the Patuxent Wildlife Research Center, Judd Howell returned to California last year. Judd now directs research for the American Wind Wildlife Institute (www.awwi.org).

### RAPTORS BANDED IN THE MARIN HEADLANDS DURING AUTUMN

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<thead>
<tr>
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<tbody>
<tr>
<td>Northern Harrier</td>
<td>8</td>
<td>11</td>
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<tr>
<td>Sharp-shinned Hawk</td>
<td>558</td>
<td>479</td>
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<td>Cooper’s Hawk</td>
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<td>Broad-winged Hawk</td>
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<tr>
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<tr>
<td>Red-tailed Hawk</td>
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<td>340</td>
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<tr>
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<tr>
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<td>53</td>
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<td>Merlin</td>
<td>62**</td>
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<tr>
<td>Peregrine Falcon</td>
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<td>4</td>
<td>75</td>
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<tr>
<td>Prairie Falcon</td>
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<td>2</td>
<td>35</td>
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<tr>
<td>Eurasian Kestrel</td>
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<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td>1,399</td>
<td>1,503</td>
<td>30,960</td>
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* 1992 through 2008 are used for this comparison due to similar methods and effort between those years and 2009.

** New GGRO season high!
Setting Records One Tough Old Bird at a Time

As the GGRO celebrated its 25th anniversary this year, its banding program has reached some rather impressive milestones. With 30,960 raptors banded in the last 25 years, we have hit 1,000 band recoveries. We are always excited when we receive band recovery reports from the Bird Banding Laboratory (BBL). Each report sheds light on the fate of the hawks we have banded. Unfortunately 51 of the 84 recoveries reported here provide minimally useful information. Codes for “found dead” or “unknown cause” or “band only” do not help us understand what leads to the demise of these birds.

Eighty-four band recoveries may sound like a lot, but you can see how small the subcategories are. Are raptors banded at the GGRO more likely to fly into a window or be hit by a car? With such a small number of data points, we cannot say anything conclusive. It is when we include these 84 data points with the larger data set that we can start to identify statistically significant trends.

Already this impressive data set is helping us answer our questions about where raptors go and when. For example, band recovery data—along with genetic analysis—were used in a 2009 study (Hull et al. 2009) to show that the two Red-tailed Hawk peaks of migration consist of two genetically different populations. The more data we have, the more comprehensive our understanding of raptor migration becomes.

Not only are we getting more recoveries, we are also getting recoveries of older birds. Our most amazing band recovery of the year was that of a Red-tailed Hawk banded by Bill Prochnow on December 8, 1988—at the time an “after hatch year” adult bird (#964). The bird was found in Milpitas on January 23, 2009 and brought to the Wildlife Center of Silicon Valley where rehabbers found it underweight and with a cracked beak. Best of all, this Red-tailed Hawk is not done yet. The bird’s beak was superglued back together and then allowed to grow out for several months. She was released back to the wild on May 10, 2009. Lisa Konie, the rehabilitator who worked with this bird, said: “It was a true delight to realize that we had a 22+ year old Redtail!” This bird now

BAND RECOVERIES 2008-2009

UPDATE:

900 Juvenile female Cooper’s Hawk banded on 9/22/06 by Claire O’Neil; found dead 7/11/08 due to striking a stationary object other than wires or towers in Ukiah, Mendocino Co., CA; reported by Kayla Hammond.

CURRENT BAND RECOVERIES:

901 Juvenile female Cooper’s Hawk banded on 9/17/05 by Marc Blumberg; band number only reported to the Bird Banding Laboratory (BBL) by Darrell Rohan; condition of bird unknown; found 8/8/08 five miles south of Escondido, San Diego Co., CA.

902 Juvenile Red-tailed Hawk banded on 11/11/07 by Salomon Martinez; found dead 2/24/08; “lying on sidewalk already dead, but not yet stiff…one of the talons…still gripping a pigeon thru its heart” at the Flower Market in San Francisco, San Francisco Co., CA; reported by Wolf Thurmeier.


904 Juvenile Red-tailed Hawk banded on 12/14/07 by Jill Harley; “just feathers and bones…(found)…off Line Ridge and Shell Ridge trail(s)” in Walnut Creek, Contra Costa Co., CA on 4/21/08; reported by Daniel Sinosky.

905 Juvenile Red-tailed Hawk banded on 8/17/06 by Nancy Brink; found dead 8/5/08 “on an Al-tamont Pass Wind Farm,” northeast of Livermore, Alameda Co., CA, and “most likely died from a wind turbine strike;” reported by Loan Tran.

906 Juvenile Red-tailed Hawk banded on 11/28/06 by Ann Ruffer; partial remains found 8/6/08 at side of a busy highway “under the large power lines that come off the Moss Landing power plant” near Aromas, Santa Cruz Co., CA; reported by Sunny Smith.

907 Juvenile Red-tailed Hawk banded on 9/9/07 by Buzz Hull; reported as found dead 5/13/08 in San Francisco, San Francisco Co., CA, by unnamed person.

908 Juvenile Red-tailed Hawk banded on 11/12/07 by David Jesus; found dead 2/6/08 “hanging/lying in tree on low branch-es” in El Dorado Regional Park in Long Beach, Los Angeles Co., CA; reported by Jeff Lorenz of KABC-AM.

909 Juvenile Red-tailed Hawk banded on 9/2/07 by Dian Langlois; found 9/21/08 on train tracks in Palo Alto, Santa Clara Co., CA; “believed to have been
holds the GGRO record for oldest raptor. The BBL has had band recoveries of Red-tailed Hawks 29 years after banding and the BBL’s record in California was a recovery 26 years after banding. Hopefully in the next few years the GGRO will match and surpass these records.

Of course the downside of more recoveries is the increased work load. Processing each band recovery file is a time-consuming endeavor—you will probably notice that we have only reported recoveries #900-983 in this issue. The BBL notifies the GGRO of recoveries via e-mail every two weeks. After that, it is up to GGRO volunteer and band recovery guru Marion Weeks to translate the BBL’s cryptic “Report to Bander,” which presents information on the banded bird and circumstances of the recovery as a baffling series of codes and abbreviations. Then Marion does as much fact checking as possible: contacting the finder by phone, letter, or e-mail and inspecting maps to pin-point locations and determine counties. If the finder is anonymous or cannot be contacted, we are unable to confirm the information provided by the BBL. Thank you, Marion, for your hard work and dedication!

Literature cited:
“found dead” on 1/21/08 in Laguna Hills, Orange Co., CA.

919 Juvenile Red-shouldered Hawk banded 9/30/07 by Dian Langlois; first observed “cowering under a lavender bush in my garden...it seemed to be okay” 5/31/08 in backyard in Atherton, San Mateo Co., CA; found dead 6/1/08 by Deborah Wilson near fruit trees still “clinging to the grass [which] I had to cut in order to lift the bird.” Debor rah stated, “The hawk was beautiful...these birds are a treasure.”

920 Juvenile Red-tailed Hawk banded on 9/20/04 by Mike Armer; found 9/26/08 dead in yard in Belmont, San Mateo Co., CA; tested for WNV and believed to be negative (see #911); reported by the Peninsula Humane Society.

921 Juvenile Red-tailed Hawk banded on 12/2/07 by Ron DeLeon; found on 1/3/08 in commercial area; was euthanized upon arrival at the Peninsula Humane Society due to extreme emaciation and weakness; reported by the PHS.

922 Juvenile Red-shouldered Hawk banded on 9/25/07 by Marion Weeks; found 3/14/08 on east side of north abut ment to Richardson Bay Bridge, Mill Valley, Marin Co., CA; reported by John Graybill who believes it “may have been after a pigeon” when it was hit by a car.

923 Juvenile male Red-tailed Hawk banded on 10/24/07 by Ralph Perich; found dead of unknown cause on 10/27/08 in Portland, Multnomah Co., OR. While building a fence, Gary Elston saw the dead hawk just off the property line, then noticed the band and reported it. “Looked like it had been a healthy bird—not shot.”

NOTE: The following two reports originally reported to the GGRO by the BBL in June 1988 were lost but found 21 years later at the GGRO offices...

924 Juvenile female Cooper’s Hawk banded on 9/7/1984 by Buzz Hull; found 3/5/1985 in Foun tain Valley, Orange Co., CA; reported by Marge Gibson. After so many years, we were unable to locate the finder.

925 Juvenile Red-tailed Hawk banded on 9/15/1987 by Russ DeLong; found 4/19/1988 at Oceanside Airport, Oceanside, San Diego Co., CA; reported by Oceanside Humane Society (now known as North County Humane Society).

926 Juvenile female Cooper’s Hawk banded on 9/19/07 by Marc Blumberg; found and reported by Sue Smith 12/24/08 on the ground at her ranch seven miles south of Sonoma, Sonoma Co., CA. Sue put the hawk in a cage and “it flopped about...sort of used its wings like paddles.” She contacted Santa Rosa Bird Rescue but the hawk died in transit to their facility.

927 Adult male Cooper’s Hawk banded on 10/22/08 by Anne Ardillo; found dead 1/28/09 in Pajaro, Santa Cruz Co., CA and reported by Mark Riofrío.

928 Juvenile female Cooper’s Hawk banded 10/26/08 by Craig Niki tas; found 11/2/08 dead at the curb “perfectly intact” in Petaluma, Sonoma Co., CA; reported by Lynn Lesaux.

929 Juvenile female Cooper’s Hawk banded 9/21/08 by Jean Perata; caught inside Jeffrey Bertch’s pigeon loft 10/20/08 at Bodega Bay, Sonoma Co., CA. “She’s still here,” Jeff stated. “She catches the pigeons when they come and go from the loft” and she has stayed in his neighbor hood. As of a 3/1/09 e-mail, he estimates she has killed “at least 30 or so” of his pigeons. “I could say that my flock is faster now as well as smarter,” he said.

930 Juvenile female Cooper’s Hawk banded 9/18/08 by Nancy Brink; found 10/8/08 in Central Park in San Mateo, San Mateo Co., CA and was “DOA” at the Peninsula Humane Society. Upon examination, Patrick Hogan found the hawk had a fractured knee and was emaciated. He believes the bird probably starved to death due to the injury.

931 Juvenile Red-tailed Hawk banded 8/28/08 by Carmen DeLeon; found 12/12/08 dead or injured on a highway seven miles south of Zamora, Yolo Co., CA; reported by Jean Fisher. The BBL reports the bird’s final status as dead.

932 Juvenile Red-tailed Hawk banded 9/4/07 by Jason Laffer; found dead 10/24/08 in Palo Alto, Santa Clara Co., CA; reported anonymously.

933 Juvenile male Sharp-shinned Hawk banded 10/24/08 by Lynn Schofield; found 11/3/08 “grounded” in Ross, Marin Co., CA; reported by Ed McKee of Wildcare in San Rafael, CA. The bird had an “una fracture, seemed like a poor prognosis, but healed, was able to fly.” Released 12/3/09.

934 Juvenile female Sharp-shinned Hawk banded 9/25/08 by Russ DeLong; reported as “caught due to striking stationary object other than wires or towers,” usually windows or glass doors, on 11/29/08 in Santa Rosa, Sonoma Co., CA. Reported anonymously. Hawk’s status listed as dead by the BBL.

935 Juvenile female Sharp-shinned Hawk banded 9/5/08 by David Fix; reported as “found dead” 9/12/08 five miles south of Novato, Marin Co., CA; reported anonymously.

936 Juvenile female Sharp-shinned Hawk banded 9/22/08 by Eddie Bartley; found dead 10/29/08 “on my patio—apparently flew after birds I have at my feeder—hit patio (glass) door” in Salinas, Monterey Co., CA; reported by Patricia Rosskilley.

937 Juvenile female Sharp-shinned Hawk banded 9/24/08 by Steve O’Neill; found in Santa Maria, Santa Barbara Co., CA on 10/27/08. John Suda reported seeing it perch at many sites in the yard, and then finding it lying on the ground, dead, the next day. John sees many hawks; he has many feeders and “the hawks dive and hit the house sometimes.”

938 Juvenile female Sharp-shinned Hawk banded 10/1/08 by Buzz Hull; found “freshly dead” 10/14/08 under a deck near China Camp, San Rafael, Marin Co., CA, thought to have “run into something.” Reported by Susan Nunez.

939 Juvenile Red-tailed Hawk banded 12/11/07 by John Ungar; found 1/28/08 with fractured elbow and emaciated under interstate highway at San Francisco, San Francisco Co., CA. Glenda Niven of Peninsula Humane Society reported the bird was euthanized.

940 Juvenile Red-tailed Hawk banded 9/24/08 by Siobhan Ruck; found dead 10/5/08 in street at bottom of power pole in Point Richmond, Contra Costa Co., CA. Carol Craine reported that no obvious burns were seen.

941 Juvenile female Cooper’s Hawk banded 9/25/08 by Buzz Hull; found 2/11/09 in Elk, Mendocino Co., CA, dead, still warm “at edge of pathway at margin with vegetation—talons clenched around ground vegetation.” Reported by Geoffrey Carter, who wrote: “It seemed in good condition, apart from having no pulse.”

942 Juvenile female Cooper’s Hawk banded 10/9/08 by Calvin Hom; found dead 2/8/09 “in my creek outside of my barn” in Lagunitas, Marin Co., CA. Cynthia Fetherston also reported: “We buried the bird in a beautiful spot near our creek—very sad.”

943 Juvenile Red-tailed Hawk banded 11/4/08 by Helen Davis; became our telemetry bird named Wingding, and had a
BAND RECOVERY BY SPECIES

- ▼ Red-tailed Hawks
- ▲ Sharp-shinned Hawks
- ■ Cooper's Hawks
- ◆ Red-shouldered Hawk

See page 18 for detail
Red-tailed Hawks
Sharp-shinned Hawks
Cooper’s Hawks
Red-shouldered Hawk
transmitter applied to a central tailfeather. Winging was found beside a road near southern Hanford, Kings Co., CA on 1/21/09 and taken to Critter Creek Wildlife Station. The bird died within a couple of days; the vet thought it might have had head injuries that led to starvation. Reported by Heidi Arroyes of CCWS. Louise Culver, Director of CCWS, returned the transmitter to the GGR so it can be reused.

**Birds of Prey**

944 Second year Red-tailed Hawk banded 1/4/09 by Marion Weeks; found 1/11/09 in the Marin Headlands, Marin Co., CA, "grounded, reason unknown, non-responsive, listless, nothing very wrong, given fluids and put in incubator... to no avail." Reported by Paulette of Wildcare, San Rafael, CA.

945 Juvenile female Sharp-shinned Hawk banded on 9/30/08 by Nancy Mori; found dead in Danville, Contra Costa Co., CA on 2/12/09; reported by Teresa Long.

946 Juvenile Red-tailed Hawk banded on 8/26/08 by Mark Sutherland; was picked up on 9/25/08 by Justin Barrett, Regional Biologist for Idaho Fish and Game, just west of intersection of two highways near the Jerome Airport, four miles east of Jerome, Jerome Co., Idaho. "The bird had a compound fracture of its left wing and was euthanized," reported Justin.

947 Juvenile Red-tailed Hawk banded 10/12/08 by Joe Medley; found dead on 2/24/09 in Stockton, San Joaquin Co., CA; reported by Jeremy Crickenberger.

948 Juvenile Red-tailed Hawk banded on 9/29/08 by Diane Bahr; found dead on 3/5/09 two miles east of Redwood Valley, Mendocino Co., CA; reported by Chad Ramsey. Chad saw the bird on the bird on Highway 20 at Road A and believes the hawk was hit by a car.

949 Juvenile male Cooper’s Hawk banded on 9/19/07 by Natalya Blumenfeld; found dead 3/27/09 in Reedsport, Douglas Co., OR; reported by Brandie Jonas.

950 Juvenile female Sharp-shinned Hawk banded on 9/13/08 by Steve Rock; found dead 3/4/09 in a field off Highway 101, Santa Barbara, Santa Barbara Co., CA by homeless man, Mike, and reported by Gene Lichtgarn, who has befriended him. Coded by the BBL as “band or number only,” Mike sent the band and a tail feather to the GGR along with a note stating, "I am working on my hunting skills.... I do not have your address and any more bands I will send in...." Addendum: Marion Weeks received a Christmas card in 2009 from Mike in which he mentioned "...finding no tags."

951 Juvenile female Cooper’s Hawk banded on 10/20/02 by John Ungar; found almost seven years later on 3/13/09 in Concord, Contra Costa Co., CA, "grounded, reason unknown, non-responsive, listless, nothing very wrong, given fluids and put in incubator... to no avail." Reported by Paulette of Wildcare, San Rafael, CA.

952 Juvenile female Cooper’s Hawk banded 9/14/08 by Buzz Hull; reported by Louise Culver, Director of Critter Creek Wildlife Station, as shot on 10/4/08 in Woodville, Tulare Co., CA. A resident “heard a shot, went outside, and saw the bird hit the ground. It had been shot through the chest, shattering the shoulder,” and was euthanized on arrival at their facility.

953 Juvenile Red-tailed hawk banded on 11/19/08 by Jan Talbert; was trapped and released 2/22/09 in Chino, San Bernardino Co., CA, by Jeff Kidd who was trapping for Bill Clark while he was leading a raptor ID course. “The bird supported tons of feather mites and keel was quite sharp... Bill Clark and I both felt there were some things leading us to believe this was a Harlan’s.”

954 Juvenile female Cooper’s Hawk banded on 9/20/06 by Craig Nikitas; found dead 3/27/09 in Reedsport, Douglas Co., OR; reported by Brandie Jonas.

955 Juvenile Red-tailed Hawk banded on 10/22/07 by Marion Weeks; found 4/5/08 shot and unable to fly in a suburban backyard near foothills in San Jose, Santa Clara Co., CA, Jeanne Fouts, who works with Injured and Orphaned Wildlife and the Wildwood Veterinary Clinic, cared for this cantankerous bird until her release 6/12/08. Jeanne stated, “She wasn’t the easiest bird to rehabilitate but she was definitely one of my successes.”

956 Juvenile female Sharp-shinned Hawk banded on 10/25/08 by Carmen DeLeon; found dead 11/5/08—“beneath a transformer...no clear cause of death...scavengers had apparently begun to feed on it” in Saratoga, Santa Clara Co., CA. Reported by Dave Lemire who also wrote, "I am puzzled as to how this bird [wound] up in a residential neighborhood in Saratoga all the way from Sausalito."

957 Juvenile Red-tailed Hawk banded 8/17/06 by Maggie Edwards; found dead 2/18/09 “one mile north of San Francisco,” San Francisco Co., CA, per the BBL report, which puts it in the SF Bay; reported by Nakiesha Brown. Unable to reach Nakiesha Brown, therefore recovery location could not be refined.

958 Juvenile female Sharp-shinned Hawk banded on 10/25/08 by Carmen DeLeon; found dead 10/26/08 in Mill Valley, Marin Co., CA. Ed McKee of Wildcare in San Rafael felt it was a “probable car hit” with a possible left wing fracture. She was treated and released 11/15/08.

959 Juvenile male Cooper’s Hawk banded on 9/30/1997 by Mark McAustland; found in stockton, San Joaquin Co., CA on 2/24/09; reported by Jeremy Crickenberger.

Bander Jenn Cutler releases a juvenile Red-tailed Hawk. (Photos by Mike Armer)
“fairly freshly dead” 11 years later in a barn on 12/28/08, two miles west of Pope Valley, Napa Co., CA; reported by Phil Burton.

960 Juvenile male Cooper’s Hawk banded on 9/14/08 by Ron DeLeon; found on 9/21/08 seven miles east of Oceanside, San Diego Co., CA. Nancy Bernardi reported: “Our front door was open and he flew in straight through to the back of our house into our sunroom and smashed right into the window at full speed. We tried to save him, but he died about two minutes later... He was beautiful and perfect—no defects... I now make sure my front door stays closed...”

961 Juvenile male Sharp-shinned Hawk banded 9/14/06 by Allison Levin; found dead 2/11/09 in San Francisco, San Francisco Co., CA, underweight and with a cracked beak. The necropsy revealed, in addition to recent and old healed injuries, a BB pellet which released the bird on 11/22/08.

962 Juvenile female Cooper’s Hawk banded 9/16/06 by Joshua Hull; leg bone with band found 4/25/09 in debris during backyard clean-up by church volunteers in Compton, Los Angeles Co., CA; reported by Merlyn Haase.

963 Juvenile female Cooper’s Hawk banded 9/16/06 by Josh Hull; leg bone with band found 4/25/09 in debris during backyard clean-up by church volunteers in Compton, Los Angeles Co., CA; reported by Merlyn Haase.

964 Adult Red-tailed Hawk banded 12/8/1988 by Bill Prochnow; found 1/23/09 in Milpitas, Santa Clara Co., CA, underweight and with a cracked beak. She was taken to the Wildlife Center of Silicon Valley where her beak was superglued and allowed to grow out. Upon completion of her rehabilitation, she was released back into the wild on 5/10/09. “It was a true delight to realize that we had a 22+ year old Redtail,” reported Lisa Konie of the Wildlife Center.

965 Juvenile Red-tailed Hawk banded 8/17/1999 by Nick Villa; found almost 10 years later on 4/29/09 emaciated and dehydrated standing alongside Highway 29 in Lake County, CA in Clearlake area. The hawk was released “strong and healthy” 5/6/09 from atop Cobb Mountain. “The hawk was not as beautiful in color as some, but it more than made up for it in attitude. Fabulous killing machine!” Reported by Sandie Elliott, director of SpiritWild Rehabilitation Center.

966 Juvenile male Cooper’s Hawk banded 9/18/06 by Nancy Brink; found alive but died a few minutes later on 9/30/08 two miles west of Buellton, Santa Barbara Co., CA; reported by Bill Stevenson.

967 Juvenile Red-tailed Hawk banded on 8/13/08 by Helen Davis; found dead 2/11/09 in San Francisco, San Francisco Co., CA; reported by Laurie Stiles.

968 Juvenile Red-tailed Hawk banded 11/19/04 by Craig Nikitas; caught due to injury just north of Point Cabrillo Light Station and south of Caspar, Mendocino Co., CA on 11/4/08; Ronnie James of Woodland Wildlife reported that it was “some-what stunned and quiet... slightly underweight,” and without any physical injuries; she transferred the hawk to Sonoma Wildlife, which released the bird on 11/22/08.

969 Adult female Cooper’s Hawk banded 10/22/07 by Buzz Hull; found 6/1/09 six miles west of Sanger, Fresno Co., CA; “band or number only—no further information available” per BBL; finder did not give name.

970 Juvenile female Cooper’s Hawk banded 8/31/08 by Ron DeLeon; found 6/2/09 dead and decomposing in San Jose, Santa Clara Co., CA; reported by an office worker to Michael Stephenson who does vector control and responds to dead bird calls.

971 Juvenile Red-tailed Hawk banded 9/5/08 by Ann Ruffer; found 1/19/09 and reported to be “wan-dering on sidewalk” in San Francisco, San Francisco Co., CA. The Redtail was taken to an emergency clinic where it died. Reported by Judy Choy of San Francisco Animal Control.

972 Juvenile Red-tailed Hawk banded on 11/21/07 by Bill Barnaby; reported by Jon Carney as “caught by hand” on 12/9/07 and now “dead” at Richmond, Contra Costa Co., CA.

973 Juvenile Red-tailed Hawk banded on 9/15/08 by Claire O’Neil; found on 10/17/08 dead and “two weeks decayed” after striking a transformer or electrical wire at a 420-acre research farm located two miles east of Pullman, Whitman Co., WA. Reported by Terry Schell, who wrote, “We have too many mice out here, we need the hawks and...I am so amazed by their flight and glide routine even when it is zero degrees in 40 mph winds or pouring down rains and nasty winters... how do they survive this type of Palouse [weather]?”

974 Juvenile Red-tailed Hawk banded 10/22/07 by Diane Bahr; carcass found 5/6/09 on coastal terrace at Spanish Flat about 10 miles west of Honeydew, Humboldt Co., CA; reported by Gary Prichard-Peterson.

975 Juvenile Red-tailed Hawk banded on 9/11/07 by Mike Armer; found 6/7/09 electrocuted on pole-top equipment in Healdsburg, Sonoma Co., CA. Reported by Mike Best of PG&E who added, “This pole and ten other nearby poles will be retrofitted as bird safe as a result of this incident. USFWS will also be notified per our Avian Protection Plan.”

976 Juvenile Red-tailed Hawk banded on 11/5/08 by Jan Talbert; caught due to injury in San Francisco, San Francisco Co., CA on 12/15/08 and taken by S.F. Animal Control to Peninsula Humane Society where it was euthanized a day later. Reported by Rebecca Ryan of PHS. The necropsy revealed, in addition to recent and old healed injuries, a BB pellet lodged in its right wing.

977 Juvenile Red-tailed Hawk banded on 8/20/07 by Mark Jasper; found dead 1/24/09 alongside of road under power lines seven miles southwest of Yuba City, Sutter Co., CA; reported by Nathan Stebbins.

978 Juvenile Red-tailed Hawk banded on 10/1/08 by Galen Leeds; caught due to injury 5/28/09 in San Francisco, San Francisco Co., CA by SF Animal Control. Reported by Rebecca Ryan of Peninsula Humane Society where records reveal the hawk had a low body weight, was fed and then released 6/19/09.

979 Juvenile Red-tailed Hawk banded on 9/16/08 by Teresa Ely; caught due to injuries 11/19/08 in Milpitas, Santa Clara Co., CA; Ashley Kinney of Wildlife Center of Silicon Valley reported that the hawk was dead on arrival at their facility.

980 Juvenile Red-tailed Hawk banded on 10/27/05 by Yiwei Wang; found dead in Kentfield, Marin Co., CA 12/26/08; reported by Carl and Sylvia Thoelecke. Mr. Thoelecke believes the bird died in a big storm a few days earlier.

981 Second-year Red-tailed Hawk banded 8/20/07 by Eddie Bartley; found dead 3/26/09 near Lands End, San Francisco, San Francisco Co., CA; reported by Charles McIntyre.

982 Juvenile Red-tailed Hawk banded 10/28/08 by Rachel del Rio; found dead, “pretty fresh,” 4/19/09 on road at Mill Valley, Marin Co., CA; reported by John O’Neill.

983 Juvenile female Cooper’s Hawk banded 9/10/05 by Greg Gothard; found dead 12/31/09 in San Jose, Santa Clara Co., CA; finder is anonymous.
RAPTORS ARE WONDERFUL. I don’t remember the first one I ever saw, but I certainly remember the first one I met. I had been stalking hummingbirds and herons around the Palace of Fine Arts lagoon during my very first days as an aspiring bird photographer. I was standing still, watching an Anna’s Hummingbird preening with the great rotunda rising steeply above us, when a rush of air passed my left ear. When my eyes caught up with the source it turned out to be a Red-shouldered Hawk pulling up from a dive and landing softly on a low branch in the distance. It had flown through the space between my shoulder and the building, a mere 20-inch gap, and now it was eyeing the shoreline where careless rats often wandered.

Walking over to the perched bird, I was sure it would flee. Eventually I ended up sitting five feet away, marveling at this unexpected encounter. The hawk preened for a while before powering off across the lagoon and it left me with a fascination that never faded.

After that I went out of my way to find and photograph hawks. I saw Red-shoulders mating in the Presidio, Cooper’s Hawks chasing parrots through eucalyptus groves, and I even glimpsed a Swainson’s Hawk and a Golden Eagle over San Francisco during those early days. But it was our “every hawk,” the common Redtail, that cemented this fascination into something more akin to obsession.

A clear blue sky graced Alta Plaza Park. This was a walk I’d taken regularly to work—through the park, down into the Presidio, and emerging at the Exploratorium by the bay. Without incident it would take 45 minutes. On a particularly birdy day it might take four hours. I was climbing the terraced hillside to scan for birds in the flowers near the summit when a shadow slid past my feet. Looking up I found a gliding juvenile Red-tailed Hawk surveying the park on the wing. I followed that bird from tree to tree as it hunted, preened, evaded ravens, and then it vanished. Two days later it reappeared and I tracked it until it planted itself deep within a pine and refused to move. I could tell it was the same bird because of a broken primary feather.

A few weeks into this game of cat-and-mouse, I found myself sitting on the grass, camera in hand, under the hawk. It was perched on a streetlight staring intently in my direction. It leapt straight down towards me and, within seconds, I saw talons extending and put my camera down, sure that I was about to be taught a lesson about keeping my distance. But I heard the rustle of its feathers and it landed next to me on the ground. It cocked its head and then reached down to pick up a green caterpillar, which it then ate. We sat there for a minute, together in the wet grass, neither of us in any hurry until another person came strolling down the sidewalk and the hawk, who I dubbed “Patch,” fled for higher ground.

I was hooked! How amazing! The closest of close encounters right here in the city. I followed that bird for seven months and watched it transition from a juvenile to an adult. It was a privilege to have a wild bird decide I was part of the landscape and pay me no mind as it tried to survive in the city.
I signed up to apprentice in GGRO’s banding program and learned more about raptor identification, anatomy, and conservation. I spent an incredible first season in the blinds with almost 100 birds. Some, like the irrepresible Merlin, I’d rarely even seen before.

That 2008 season I saw Broad-winged Hawks fly past Hill 88, watched a Ferruginous Hawk glide in toward, and then sadly past, Hawk Blind, all the while getting to know Sharpies, Coops, and the varying personalities of our Redtails. It was on those hillsides last fall that I learned that optimism is the key to all things great and feathered. You just never know what will happen or when. There may always be another Merlin around the bend. Then, as if to prove the point, we had two visitors while I was processing at Hawk Blind one afternoon—my first Merlin, and a first-year representative of the very bird that started this fascination, a Red-shouldered Hawk.

I have just completed my second year as an apprentice and am now an official member of the banding program. I take it very seriously when I’m on that hill because I respect the birds and I respect the work we do. One thing about the GGRO that stands out to me is a general understanding among volunteers that it is always acceptable to ask for help. This makes the act of learning and improving your skills a central and valued part of the experience.

Now I have a dual relationship with raptors. One is the research side, working with them in close quarters at the GGRO, and the other is stalking them as a bird photographer. These endeavors aren’t mutually exclusive because they’re both best accomplished with good spotting skills, sensitivity to the bird’s behavior, and a good deal of respect and knowledge ... and luck also helps. Yes, indeed it helps.

I’m truly indebted to my friend Siobhan for dragging me kicking and laughing into this; to Allen and Buzz for their generosity, leadership, and kindness; to John Keane for leading by shining example and for teaching me strategy; and to Jill and all the volunteers I’ve shared time with for reminding me that life is wonderful whether the birds are near or distant, and that the arc of experience can be measured in seasons as well as in heart-pounding seconds. I’m humbled by the fact that I’m just embarking on a path that has been so well-traveled by the veterans of the GGRO and I hope that, one bird at a time, I will measure up.

*Walter Kitundu takes candid of unsuspecting birds of prey in San Francisco when not working at the Exploratorium. Be warned.*

I reminded myself that this acceptance was based on respecting a threshold: a line that the bird and I had negotiated over weeks, and one that had brought me so close that a few times I could have reached out and touched the hawk. I gained valuable insight into its behavior but never imagined that it might be applicable. It was wonderful to experience.

The images from these encounters were often sent out to the local birding community and there were a few people who kept track of my exploits. I met one of those people at a raptor-banding demonstration on Hawk Hill and made fast friends with Siobhan Ruck. That connection would eventually result in an invitation to visit the banding program at GGRO in the fall of 2007. Coincidentally, the bird I had been photographing had been banded a few months prior in the Marin Headlands.

The first thing I noticed was a maniacal dedication to raptors among the volunteers. They were welcoming, talented, and tireless. They were also blessed with a sense of humor that I would later realize is essential when you are sitting in a fog-filled tiny room on a hillside with too many snacks and too few birds. But I’m getting ahead of my story.

That first visit gave me a focused look at the hunting behavior I’d been seeing in the city. It was thrilling to watch the birds approach, and before I knew it I was sitting across from a hawk in the blind. For the past few years all I had wanted to do was get as close as I could to these wild birds—and now here was a Cooper’s Hawk staring me in the face.

On a subsequent visit, after gaining more familiarity with the banders and the program, I was asked if I wanted to hold a hawk. The first hawk I ever held was and still remains my favorite (though every other hawk is a close second—so close as to be nearly first anyway). It was a Northern Harrier. I remember how warm it felt, how calm I was trying to be, how soft the feathers were. It was first contact. I had bridged the divide that separated me from all those distant raptors and my sense of them was slowly shifting.

I got so close I could hear the sounds of it dining on gophers. On a few occasions it flew by within a foot or two and I could hear the wind in its feathers, or an angry growling sound made in extreme irritation, after being kicked in the head by resident Western Scrub-Jays.

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When Laurence Binford was Curator of Ornithology at California Academy of Sciences, he spent a lot of time birding out his office window, which overlooked trees on the western edge of the Rhododendron Dell in San Francisco’s Golden Gate Park. He occasionally saw unusual birds there. One day he identified a Least Flycatcher, but in those days sight records of that species were not considered acceptable, so he got his gun and went outside to collect it. The specimen proved to be correctly identified as a Least Flycatcher, but the American Birds account simply but accurately said it was “found dead.” There was considerable anti-collecting sentiment within some members of the birding community in those days. Binford collected in secret.

One September day in 1972, Binford noticed a Broad-winged Hawk fly by his office window. He looked at a Bay Area map and looked for possible raptor concentration points. He explored a number of sites in the Marin Headlands, including one that was then called Hill 129. He decided to do a migration count there in the fall. The first day, he tallied 160 raptors of 10 species in just 2.5 hours. That first fall he recorded an incredible 16 Broad-winged Hawks.

At the time California had only a few previous records of the species. I remember a California Bird Records Committee discussion about removing the Broad-winged Hawk from the California review list because the large number at the Marin Headlands was well above the cutoff—an average of 4 or fewer records per year for CBRC review. Guy McCaskie was initially opposed to removing it because he thought the 16 birds in 1972 might have just been a fluke. However, Guy was apparently out-voted and the species was removed from the review list in 1973. This saved Binford the trouble of having to document the 76 Broad-winged Hawks that he eventually counted at the site over the next 6 years.

Binford had a different counting protocol than that used by GGRO hawk-counters today. He never counted a bird unless he was able to confirm that it flew over the Golden Gate towards San Francisco. Birds that headed back north also were not added to the totals.

As news of the hawk migration spread, more of us started to visit the Marin Headlands, many hoping to add Broad-winged Hawk to our California lists. I started teaching ornithology in San Francisco in 1976 and ran fall field trips to Rodeo Lagoon. If the weather was decent I included a visit to Hill 129, where students could observe hawk migration. Two of those students were Carter Faust and Herb Brandt. They both got hooked on hawk-watching and, as the saying goes, the rest is history.

Bay Area resident Joe Morlan has taught field ornithology classes in San Francisco over four decades. His classes are known for their meticulous detail, and for Joe’s current and comprehensive knowledge of each species, Joe was the voice of the Bay Area Bird Box for many years, and he also manages the California Birding website http://fog.ccsf.cc.ca.us/~jmorlan/index.htm.
Still feeling the effects of our Santa Cruz Thanksgiving feast, we rose at the leisurely hour of 8 am on the morning of our great adventure. After a tasty breakfast of pumpkin pie, we headed south for the Big Sur coast. Our mission: to find the elusive California Condor.

The Ventana Wildlife Society website explains that this magnificent carrion-eater, with a 9½ foot wingspan, lingers on the precipitous verge of extinction. In 1987, the last California Condor was removed from the wild to join 26 captive condors in a recovery program. As of October 31, 2009, the entire world population of California Condors numbered 351 individuals, only 180 of which are in the wild. Twenty-six condors (six wild-fledged, 20 released) live along the Central California coastline, the destination of our expedition.

The odds of finding even one seemed rather slim as we set out, but GGRO hawkwatcher extraordinaire Tim Behr had informed us earlier that week that we were almost guaranteed to find condors on Highway 1 at milepost 42. Though we were slightly skeptical of this suggestion, the spirit of adventure and our enthusiasm had won out, and we set our sights for the magical milepost.

If there is one thing that we will take away from our time in the Marin Headlands, it is a deep faith in microclimates. If it is raining where you are, it certainly cannot be raining where you aren’t. With that in mind, we trusted that although Santa Cruz was wet and miserable, if we just drove far enough we would find sunshine and birds.

Even in the drizzle on our way down Highway 1, we saw kiting Redtails, White-tailed Kites, Cooper’s Hawks, and, of course, Turkey Vultures. We stopped at Hurricane Point (the high point on Highway 1 between Carmel and Big Sur) to admire the stunning view. The scene was both gorgeous and grim. Dark cyan waves frothed powerfully at the base of the precipitous cliff and stormy gray clouds bled pensive trailers of mist across the road behind us.

When we reached Pfeiffer Big Sur State Park, the rain was still coming down. Our optimism was dampened a bit at this point, but nonetheless, we continued south. (It can’t be raining everywhere, right?)

We stopped the car at the pullout just beyond milepost 42. As we rolled to a stop in the gravel, rays of glorious sunshine cast aside the dreary clouds. We might even have heard the music of the spheres. As if on cue, a lone condor appeared before us, cresting a chaparral ridgeline. Three pairs of binoculars snapped up and jaws dropped. It was a Thanksgiving miracle!

“Yes is another condor?” asked Nathan in disbelief. We all lined up our binoculars with his and found not just one but TWO of the giant vultures in the sky. Soon, a third and fourth bird appeared above the ridgeline. We were beside ourselves.

We had kidnapped intern Sarah Hall from the Habitat Restoration Team (you know, those mysterious plant-loving people that share one small corner of Building 1064). She was more amazed by our excitement and reverence for our Holy Grail of raptors than by the condors themselves. She did, however, concede that their size was impressive.
A tiny, tippy Turkey Vulture flew past and we were awed by the size contrast. It was a windy day, and the condors exploited the extra lift. While the Turkey Vulture was buffeted by the wind, the condors hung solid and steady in the sky.

We set up our GGRO scope to get a better look. Reading the numbers on the condors’ patagial tags proved difficult, but we think that one of the birds was Number 51. Or was it 57?

After the condors took a lap around us and headed back behind the far ridge, we decided that it was time to pack up and continue south. On the way, another condor flew directly over our car (condor score: 5). A public service announcement for raptor-enthusiast drivers: use caution when viewing condors in a moving vehicle, especially when driving along the sheer edges of Highway 1 in Big Sur.

The next stop was at Julia Pfeiffer Burns State Park. We wanted to get up on the ridgeline, but due to the damage from last year’s fires, all trails east of Highway 1 were closed. Our chagrin at learning this was assuaged by the appearance of more condors circling above the park (condor score: 7).

We contented ourselves with a short jaunt down to the McWay Falls viewing area. Though there weren’t many birds other than Western Scrub-Jays and Brown Pelicans, we recommend this easy but rewarding walk. It leads to a beautiful spot where you can observe McWay Falls emptying onto the sand below. With the sun out, the ocean had turned the blue-green of a tropical sea. The overlook was bordered by verdant blossoms and the occasional butterfly glimmered past us. Only a faint and distant haze hinted at the wet weather further north.

Despite the beauty of the waterfall, it was not long before we began agitating for more condors. We decided that we had had such luck at milepost 42 that we should return to continue our condor watch. On our second arrival, we were disappointed to find a dearth of condors. However, within five minutes, there—rising over the ridgeline—was a condor. As before, the lone condor soon multiplied into three. Even after you’ve seen your first condor, the excitement just doesn’t fade.

Our scopes attracted a birding couple, who pulled over beside us, eager to know what we had spotted. We shared our scope and raptor knowledge, and they quickly became as excited as the three of us (well, almost).

The condors flew north and out of sight. We hoped that they would be back soon, so we occupied ourselves by watching an adult Red-tailed Hawk and searching the ocean for other fowl. Instead, our attention was caught by another endangered species, the oh-so-cute California Sea Otter, rolling around in the kelp beds.

Unfortunately the rain returned before the condors did. We decided that it was a good time for lunch, and drove north to a restaurant called Nepenthe, right along Highway 1. With great views, brews, and food, it is definitely worth stopping, even if a little pricey and crowded.

While we waited to be seated, Steller’s Jays complained about the weather from the shelter of the trees. We joined them under the protective awning of leaves and noticed that only one side of the patio was experiencing precipitation. What an incredible instance of microclimates! In the comfort of Nepenthe, before their toasty hearth and over our delicious lunch, we rehashed our day’s adventure, content that we had completed our mission.

Lisa Harn is currently stalking Song Sparrow nests for the Point Reyes Bird Observatory while Zeka Kuspa works on an organic farm in Santa Cruz, and returns to band at GGRO in 2010.
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