

TIDEINGS

ANNUAL NEWSLETTER OF COASTAL RAPTORS

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Coastal Raptors goals:

- Conduct scientific research
- Provide education programs
- Train wildlife biologists
- Collaborate with experts in wildlife research and management

Coastal Raptors monitors the long-term health and viability of raptors living along coastlines. Their risks are many, including exposure to contaminants, disease, wind turbines, oil spills, severe storms, and human disturbance (e.g., being shot, vehicle and powerline collision).

Coastal Raptors provides information to the general public and to scientists researching raptors of coastal environments.



December 3, 2021

Dear Friends of Coastal Raptors,

Welcome to another installment of *TIDEings*, the annual newsletter of Coastal Raptors. Despite the ongoing challenges posed by the pandemic, Coastal Raptors continues to meet its goals.

Last spring I got an email from Paul Danesi of Cranston, Rhode Island. He had taken a photo of a banded Bald Eagle, found Coastal Raptors through an internet search, and asked if I would help him find out more about the eagle and the people who banded it. I did. This story, in Paul's own words, is on page 2.

In the fall Coastal Raptors put a GPS transmitter on a Peregrine Falcon for the first time ever. The transmitter is an experimental model from Germany's Max Plank Institute of Animal Behavior. That story, which includes the rescue of a Peregrine Falcon with an injured leg, is on page 3.

Pages 4-5 provide an overview of the movement patterns of the four Turkey Vultures we fitted with GPS transmitters in collaboration with Pennsylvania's Hawk Mountain Sanctuary Association. Now more than three years since transmitter deployment, two of the birds, Grayland and Coy, are alive and well. This fall they made their fourth migration, outfitted with transmitters, to Mexico for the winter. California birder Kevin Condon photographed Grayland flying overhead with hundreds of other vultures on his way south.

During the year I gave presentations, led workshops, and participated in a podcast. I also helped organize the annual conference of the Raptor Research Foundation. For more on these efforts, see page 6.

The falcon with the injured leg mentioned above is one among others that Coastal Raptors has rescued over the years. My favorite rescue is of one-eyed Gyrfalcon Nike, captured on the Long Beach Peninsula during a survey in 2005. I'm happy to report that Nike is alive and well, living her life out at the Cascades Raptor Center in Eugene, Oregon. That story is on page 7.

Finally, many thanks are due to those who have provided volunteer and/or financial support to Coastal Raptors. Good TIDEings to everyone this Holiday Season.

Sincerely,

Bucket List -Wish Fulfilled!

By Paul Danesi

What does a hobbyist sports photographer do during a pandemic when there are very few games and even fewer spectators? He buys a couple of squirrel-proof bird feeders, a nice comfortable foldable chair and a 150-600mm camera lens!

While it was nice watching the sparrows, cardinals, blue jays, grackles, and the rest of the small birds dining at my feeder buffet, it wasn't much of a challenge. I moved on, trying to capture large birds in flight. While I was able to get shots of Ospreys, hawks and Turkey Vultures, the number one item on my bucket list was capturing images of a Bald Eagle in the wild.



On March 25, 2021 I received a call from my sister-in-law Tina telling me that she had just spotted two Bald Eagles outside the Walmart Plaza five minutes from where I live in Cranston, Rhode Island. I grabbed my camera and lens, hoping that the eagles would still be there.

Thankfully, when I arrived, one was still present, perched high atop a tree that had not yet sprouted leaves. I pulled over, parked, and slowly crossed the street. When I had the eagle in view I fired off a burst of 10-15 shots. I moved closer, taking about 200 shots in total before the eagle flew to a more distant group of trees.

I had taken so many images that it took me a while to review them all. Most were the standard eagle pose but there were a few where the bird had turned slightly and was at a different angle. Zooming in I spotted a band on each leg, one silver, the other gold. As I zoomed in closer I was able to see a perfectly focused group of letters and numbers on each band. This was very exciting!



I did a Google search on *bands on Bald Eagles* which brought me to listing options, the most promising of which was *Marking Birds for Identification* from the Coastal Raptors' website. Therein was the explanation below.

If you see a banded/marked Peregrine Falcon, Gyrfalcon, Bald Eagle, Turkey Vulture or Common Raven, please go to the federal Bird Banding Laboratory website and fill out a bird sighting record. Also please contact Coastal Raptors with your re-sighting information. Please include species, species' behavior, date time and location. Dan Varland – email: danvarland@coastalraptors.com.

I decided that I would email Dan and send him photos of the Bald Eagle plus a zoomed in view of the bands. At around 7:00 AM the next morning (Eastern Time) I received a call from Dan (4:00 AM Pacific Time!), asking me for details and explaining the process for notifying the Bird Banding Lab. We decided that Dan would be the best person to contact the Lab.

Nearly one month later Dan emailed the information that he had received on my eagle from the Lab. I learned that the eagle was banded on May 22, 2017 as a five-week old, 6.25-pound chick in a nest in Lakeville, Massachusetts. The Lab indicated that the bander was Dr. Andrew Vitz, chief ornithologist with the Massachusetts Division of Fisheries and Wildlife, and provided his email address. Dan contacted Andrew by email, hoping he might have photos of my eagle as a nestling. While there were no photos of my bird, Andrew shared that his agency had been banding eagle chicks since they were reintroduced in Massachusetts and they began nesting again in 1989. Quoting Andrew:

We get a lot of information on movements and survival from banding eagle chicks. We continue to band eagle chicks, although as numbers of pairs continues to grow we have had to scale back the effort a bit. However, eagles are still listed on the Massachusetts Endangered Species List under our Special Concern category.

Little did I know that completing the top item on my photography bucket list would provide the added dimension of knowing much more about my eagle, thanks to Coastal Raptors' Dan Varland!

To see more of Paul's Bald Eagle photos and others in his portfolio, go to www.timepreserved.com

Tracking Peregrine Falcon Movements



After 25 years of learning about Peregrine Falcon movement patterns by resightings of banded birds alone, this fall, for the first time ever, Coastal Raptors put a transmitter on one. This solar-powered back-pack-mount GPS transmitter is an experimental model provided at no cost by Germany's Max Plank Institute of Animal Behavior. These transmitters are unique in that they relay signals to the International Space Station which orbits hundreds of miles closer to Earth than other satellites. This lowers transmitter power needs, allowing for a smaller transmitters. Ours weighed a mere 5 grams, the same as two pennies!

In October Mercy Melo, PhD student with Hawk Mountain Sanctuary (HMS), traveled from Pennsylvania to Washington to lend her expertise to the process of transmitter attachment. As a graduate student, Mercy had placed dozens of similarly-attached transmitters on American Kestrels for her research. What's more, Mercy trained me in the process during a visit I paid to her Pennsylvania field sites in June. It was great having her help!



Celebrating a falcon capture north of Ocean Shores.



Injured right leg.

Tom Rowley photos



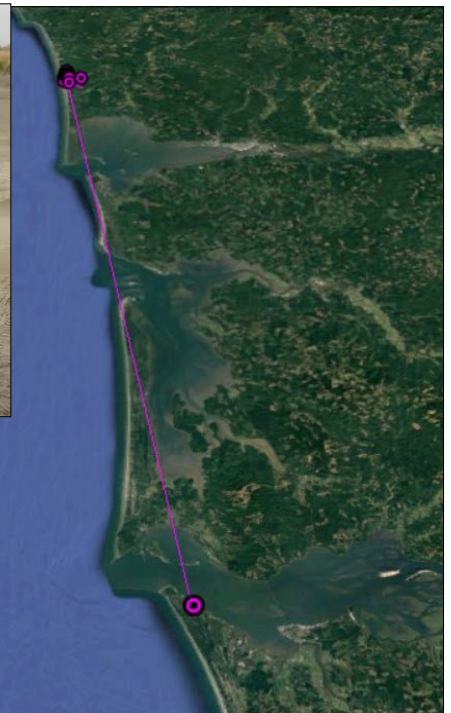
Dale Larson with injured falcon.

At 9:00 AM on October 14 we captured a first-year male Peregrine Falcon, thinking this one would receive our transmitter. Mercy and I high-fived while Jake Burroughs held the falcon. Our celebration was short-lived, however, as soon Jake found a gash on the falcon's right leg that required veterinary care. Dale Larson (pictured) and Tom Rowley kindly transported the falcon to Grays Harbor Veterinary Services where the injury was treated successfully. Thankfully, one week later the falcon was released on the beach at Ocean Shores, several miles from its capture location.

During the afternoon of October 14 Jake Burroughs on our field team captured a first-year female peregrine on the beach north of Ocean Shores, which then became the falcon that received our transmitter. We gave her the name Wanderer. After Wanderer was released, from October 15 to 30 we received a total of 25 locations, all but two of which were clustered within a few miles of Wanderer's capture location. The last two locations revealed that she had traveled 60 miles south, crossing into Oregon at the mouth of Columbia River (see map). As of December 3, we've not received additional location information on Wanderer's whereabouts.



Left: Peregrine Falcon named Wanderer with her transmitter. Right: Mercy Melo releases Wanderer. Dan Varland photos.



Wanderer location points, October 15-30, 2021.

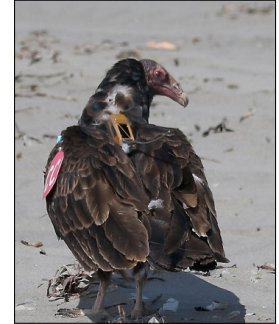
The reasons for the lack of data transmission are many and include issues with the computers on board the International Space Station (there have been many this fall!), coverage of the solar panel by feathers, and the possibility of the falcon biting off the transmitter antennas. We hope to receive more location information in the weeks and months ahead.

Tracking Turkey Vulture Movements



In June of 2018 Coastal Raptors and the Pennsylvania-based non-profit Hawk Mountain Sanctuary Association initiated collaborative research to determine site fidelity and migratory patterns of Turkey Vultures on the Washington coast using solar-powered, back-pack-mounted GPS satellite transmitters. For this effort we captured four Turkey Vultures, fitting them with wing-tags in addition to the transmitters. We gave the vultures names: **Airy**, **Artful Dodger**, **Grayland** and **Coy**.

Airy flew 30 miles north to Quinalt Indian Nation lands after release. Two months later we stopped receiving signals from **Airy's** transmitter. Our last transmission came from just outside Tahola, Washington. Coastal Raptors volunteer Glenn Marquardt and I drove to that location, finding elk carcass remains and a dead vulture not far away. A Quinalt Natural Resources employee who accompanied us to the site said at the time, "They shoot vultures around here". The dead bird was not wearing a wing-tag or a transmitter, so we concluded it was not **Airy**. Nevertheless, we suspect that **Airy** was shot.



Grayland with transmitter and wing-tag just after release on June 2, 2018.

In the fall of 2018 **Artful Dodger**, **Grayland** and **Coy** migrated to Mexico for the winter, returning north in the spring. These movements and more are shown below.



*Annual movements of Turkey Vultures **Artful Dodger**, **Grayland** and **Coy** (they do not travel together). The yellow arrows on the maps point to Mexico City, Mexico. This fall **Coy** and **Grayland** made their fourth migrations to Mexico since receiving transmitters in 2018. Interestingly, **Grayland** was re-sighted and identified by the code on his wing-tag (CC) while migrating through southern California (see facing page).*



*In March of 2019, 643 days after the first transmission, **Artful Dodger's** story ended when his remains were found on a cactus farm 30 miles northeast of Mexico City. Traveling for hours from their home in Xalapa, Mexico to the last known location was Kashmir Wolf and his wife Diana Balbuena. Kashmir is Veracruz River of Raptors Monitoring Coordinator and was asked to search for **Artful Dodger** by Hawk Mountain Sanctuary's Director of Conservation Science Laurie Goodrich. Kashmir and Diana found several bones, feather remains, plus the wing-tag and transmitter; they did not find clues to the cause of death.*

Grayland Sighted in Southern California During Migration

Telemetry data shows **Grayland** spending summers in southern British Columbia, Canada and migrating to winter about 185 miles south of Mexico City, Mexico. Like other Turkey Vultures in the study, Grayland has a wing-tag in addition to a transmitter. This allows individual identification when the letter-letter codes on the Coastal Raptors tags are read. Grayland's tag code is "CC".

Why wing-tags and not bands? Turkey Vultures defecate on their legs to cool down in hot weather and to kill bacteria (their poop is acidic). If Turkey Vultures were banded, the poop would collect between band and leg, leading to abrasion, wounds and infection. Consequently the USGS Bird Banding Lab, the federal authority with oversight over banders in the United States, restricts vulture marking to wing-tags.

In 2021 Grayland's journey south began on October 7. Twelve days later on October 19 he was re-sighted by Keith Condon, a southern California birder with 40 years of experience afield. Keith saw Grayland flying overhead while birding Frank G. Bonelli Regional Park in San Dimas, California. Keith located Coastal Raptors through first contacting California-based raptor biologist and Turkey Vulture researcher Pete Bloom, who connected Keith and me through email. (Note: Pete taught me the wing-tagging technique during a visit I made to southern Cal in 2011.)

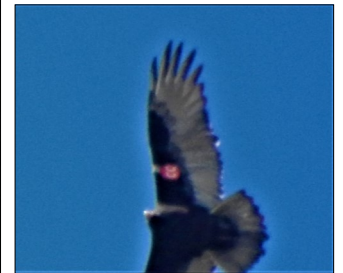
Keith reported that Grayland was flying above the park at 500 ft in a kettle of 125 Turkey Vultures and five Swainson's Hawks. Keith saw three kettles in all, the other two were much larger, containing hundreds of vultures each. Keith estimated that there were 800 vultures in the three kettles.

Quoting from *Migrating Raptors of the World: Their Ecology and Conservation* by Keith L. Bildstein, Cornell University Press.

Kettle a group of raptors circling in a thermal.

Thermal a pocket of warm, rising air created by the differential heating of the earth's surface.

Keith first noticed the wing-tag with his 10x binoculars. Unable to read the code, he switched to his Nikon camera with 83x optical zoom lens, and took several photos revealing the visual ID code as CC. At right is a photo Keith shared of himself in Frank Bonelli Park and a photo he took that day of Grayland soaring overhead.



Grayland's migration through southern California on October 19, 2021. Each purple dot represents Grayland's location on the hour at one-hour intervals. Grayland was re-sighted between noon and 1:00 PM. The red arrow shows the location of Frank G. Bonelli Regional Park in the city of San Dimas. Los Angeles lies west of the arrow.

EDUCATION 2021

Conference Planning



I've been an active member of the Raptor Research Foundation since 1979, serving for many years as conference committee chair. Planning these annual conferences is a large undertaking, and always involves a committed local host organization in the city where the meeting is held. The 2020 conference was scheduled for Boise, Idaho, with The Peregrine Fund hosting. The emergence of the pandemic in 2020 postponed the conference to 2021, when it was done online through Zoom technology. Thanks to many people working together, the conference was a great success! Because travel was not involved and registration fees were low, many more people from many more countries (40!) registered than we have at in person conferences (623 people in 2021 vs. an average of 345 people for 2017-2019, and far fewer countries).

In addition to helping plan the conference, I made a presentation and co-led a workshop.

8 Presentations

Peregrine Falcon Survival Rates Derived From a Long-term Study at a Migratory and Overwintering Area in Coastal Washington



Presented by Dan Varland, Coastal Raptors

Virtual Zoom presentations unless otherwise noted.
 February 23 – The Wildlife Society, Manitoba Chapter
 March 18 – Coastal Raptors—Invited Group 1
 April 5 – Ross Matteson family and friends
 May 17 - Coastal Raptors—Invited Group 2
 June 21 – Hawk Mountain Sanctuary Association, Orwigsburg, PA (In person)
 August 16 – Aberdeen Elks Club, Aberdeen, WA (In person)
 October 11 - Raptor Research Foundation
 November 18 – Coastal Interpretive Center, Ocean Shores, WA

2 Workshops

Techniques for Handling, Measuring and Auxiliary Marking Raptors After Capture
 By Dan Varland and John Smallwood



Virtual Zoom.
 June 17 – Central Washington University, Ellensburg, WA
 October 9 – Raptor Research Foundation

One Podcast



The Hawk's Call—A podcast series created by Pennsylvania's Hawk Mountain Sanctuary Association

Podcast Title —*Turkey Vulture Research in Western North America*

A conversation between Dan Varland and David Barber, senior scientist at the Hawk Mountain Sanctuary Association, on the collaborative study of Turkey Vulture movement ecology between Coastal Raptors and Hawk Mountain.

NIKE'S STORY



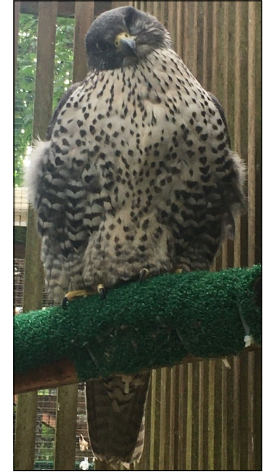
Dan Varland photo

Above L to R: Hannah, Jules, Tom, Gyr Falcon Nike, and Marie Loughin in 2005. **Below** The Loughin family in 2021 L to R: Marie, Jules, Tom, Hannah's boyfriend Griff Bates, and Hannah.



Dan Varland photo

Above: Hannah presents Nike to Sharnelle Fee, then Director of the Wildlife Center of the North Coast. **Right:** Nike at the Cascades Raptor Center in 2021.



Suzanne Staples photo



On February 26, 2005 a female Gyr Falcon with a badly infected eye was captured during a raptor survey on the Long Beach Peninsula. The Loughin family from British Columbia was there that day. Tom and I were friends from grad school at Iowa State. I was working on my PhD in avian ecology studying American Kestrels. Tom, a PhD student in statistics who had a part-time job consulting with students, did most of the statistics work for my dissertation (whew, thanks Tom! Tom and wife Marie teach statistics at Simon Fraser University in BC.) Back in 2005 the whole family came down for a weekend visit, which included a raptor survey.

We transferred Nike to the Wildlife Center of the North Coast in Astoria, Oregon for treatment. Her eye was not salvageable and was removed by an ophthalmologist. With one eye, Nike could not survive in the wild and so was transferred to The Cascade Raptor Center in Eugene, Oregon where she required additional treatment and, in 2006, became a much loved member of the Education Team. Nike is long-lived, for sure! Captured at less than one year of age in 2005, she's now 17. Nike is as old as the oldest known free-living Gyr Falcon on record with the USGS Bird Banding Lab.

Gyr Falcons are arctic and subarctic nesters globally. A few migrate south in winter. In North America, they winter as far south as southern Canada and the northern tier of US states. In 26 years of surveys and banding, Coastal Raptors has banded only eight Gyr Falcons.



© 2021 Nick Dunlop Photo

Financial Support for Coastal Raptors

Support from individual donors like you is important. Please consider helping us move forward by making a tax-deductible contribution toward operating expenses.

Examples of operating expenses in 2022 include:

Data entry and analysis - \$2,000

Vehicle mileage - \$1,000

Website maintenance - \$1,000

Conferences - \$1,200

Mailing and office supplies - \$500

Field supplies - \$500

Data acquisition (from satellites and cell phone towers for vulture tracking) - \$1,500

Honorarium (covering travel expenses for a researcher to assist with deploying transmitters on vultures) - \$1,000

Please Consider a Donation for this year or next if you have not already (see page 8 for a list of donors, 2020 and 2021. Your contribution is Tax Deductible. You may donate by check (payable to Coastal Raptors; send to 90 Westview Drive, Hoquiam, WA 98550) or online at www.coastalraptors.com. THANKS for your support!

Many Thanks to **Coastal Raptors** Supporters

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Donations Made in Memory of: Mr. David Cambridge, Linda Torfin Daniels, Kennard G. Nelson, and Mark Wilhyde.

Coastal Raptors
90 Westview Drive
Hoquiam, WA



Peregrine Falcon 35/B north of Ocean Shores, Washington. Nick Dunlop photo.