

P.O. Box 492, Hoquiam, WA 98550 www.coastalraptors.org Conservation Through Research and Education

COASTAL RAPTORS TIDEINGS

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Coastal Raptors is dedicated to providing research and education programs leading to better understanding and conservation of raptors in coastal environments. Active since 1995 and with non-profit 501(c)(3) status beginning in 2009, the **goals** are to:

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

Contact Dan at 360-591-5959 or danvarland@coastalraptors.org or Coastal Raptors PO Box 492

Hoquiam, WA 98550

Dear Friends of Coastal Raptors,

Welcome to another installment of TIDEings, the annual newsletter of Coastal Raptors. The first issue of TIDEings was printed in 2010, the year after Coastal Raptors got started as a tax-exempt, non-profit organization. The all-volunteer raptor survey and monitoring effort had its beginnings in 1995, 20 years ago. Coastal Raptors is marking this special anniversary with a photo exhibit of its work at the Polson Museum in Hoquiam, Washington. The exhibit features the photography of Tom Rowley. Tom has participated in field work since in 1995, always with camera in hand documenting our field adventures. I invite you to read the newsletter to learn more about the photo exhibit and other Coastal Raptors activities in 2015.

Sincerely,

Dan Varland

Dan Varland Executive Director Coastal Raptors Hoquiam, Washington



Dan Varland and Phil Olafson with a Peregrine Falcon recaptured for blood and feather samples on the beach south of Grayland, Washington. Photo by Dan Miller, November 30, 2015.

PHOTO EXHIBIT AT POLSON MUSEUM

Polson Museum Website Announcement

"We are pleased to host our first natural history exhibit featuring research, education, and conservation work of Grays Harbor nonprofit, Coastal Raptors.

For anyone curious about raptors on the Washington coast, the exhibit marks the twenty-year work of wildlife biologist Dan Varland, Executive Director, and stunning images of Tom Rowley, retired physician and photographer. It runs through the spring of 2016.

Beyond thirty-one framed, curated photos, it displays over fivehundred changing images on our flat-screen TV. You'll see as well, in glass cases, trade tools in surveying, capturing, and banding raptors, particularly bald eagles and peregrine falcons."



Exhibit photos and display case, Polson Museum.



Tom Rowley, Photographer

I am a retired physician with the hobby of photography. Originally an Iowa native, my wife Nancy and I moved to the Pacific Northwest in 1971. After additional training including a diagnostic radiology residency at the University of Washington, we moved to Hoquiam in 1977, choosing Grays Harbor because of its beauty and its proximity to both the mountains and the coast. I had the good fortune of meeting Dan twenty years ago and have since been accompanying him on coastal raptor field trips. I feel very privileged to be allowed to observe, participate in and help to document Dan's work with these amazing special birds known as raptors in our beautiful environment of coastal Washington.



Tom Rowley and Hoquiam artist Jenny Fisher pose at the Polson Museum, Tom with a photo featured in the exhibit and Jenny with a water color she created from Tom's photo. Jenny's painting is being raffled as a fund-raiser for Coastal Raptors. Raffle tickets are \$10 each and are available at the Polson Museum. Only 100 tickets will be sold. The drawing will take place before just before Dan's talk on April 16, 2016 (see below).

Coastal Raptors Lectures at the Polson Museum Dan Varland will present two informative Saturday afternoon talks

Saturday, January 30, 2016 - "Get to Know Your Coastal Raptors", 1:00 PM

Saturday, April 26, 2016 - "Monitoring the Health of Avian Scavengers", 1:00 PM

Many thanks to the Polson Museum for hosting the Exhibit!

Avian Influenza in Washington

Avian influenza ("bird flu") is a viral disease found in birds. Wild birds can carry a number of bird flu viruses, and most strains do not seriously affect them. Some, however, mutate into deadly strains known as "highly pathogenic avian influenza" (HPAI). Poultry, including chickens and turkeys, are particularly vulnerable to HPAI, often suffering 100% mortality rates when exposed. Migratory waterfowl have proven to be natural carriers and may transmit the disease along migratory pathways. In November, 2014 HPAI was detected in poultry in Vancouver, British Columbia. This marked the emergence of the disease in North America. Chickens and turkeys at commercial farms died by the thousands in the Vancouver area. Researchers suspect that migratory birds carried HPAI from Russia to Alaska, and south, during fall migration.

During a survey on January 25, 2008 we captured a first-year female Peregrine Falcon on the beach at

Ocean Shores, applying visual identification band B/3. Over the years that followed, there was not a positive ID of B/3 until she was found dead on December 29, 2014 at the Ocean Shores Wastewater Treatment Plant.

Given the outbreak of HPAI in British Columbia one month earlier, the Washington State Department of Fish and Wildlife immediately dispatched biologist Warren Michaelis to pick up the carcass, who sent it via overnight mail to the National Wildlife Health Center in Madison, Wisconsin, for necropsy.

The Madison lab determined that HPAI was the cause of death. A Cooper's Hawk found dead in Whatcom County, Washington on the very same day that B/3 was found was also diagnosed at Madison as having died from HPAI. These two birds



Peregrine Falcon we banded in 2008 that in 2014 died from highly pathogenic avian influenza, a first for North America.

thus earned the dubious distinction of being the first wild raptors to die from HPAI in North America. (Some captive raptors, including several Gyrfalcons and a Great Horned Owl, died from HPAI in the initial outbreak when they were fed meat from HPAI-infected waterfowl.)

Since the initial outbreak HPAI has spread through much of the US, carried by migratory birds. Tens of millions of poultry have died from HPAI, with Iowa and Minnesota especially hard hit by the disease. A US Department of Agriculture Report posted online indicates that, as of early December 2015, there have been relatively few wild raptor deaths caused by HPAI. In addition to the Cooper's Hawk and Peregrine Falcon found dead from the disease in December 2014, the list includes two Red-tailed Hawks (Washington); one Bald Eagle (Idaho); one Snowy Owl (Wisconsin); and a Cooper's Hawk (Minnesota).

Wildlife health specialists do not yet know whether raptors, like waterfowl, can carry the disease and survive.

By the close of 2015, Coastal Raptors had tested 51 birds for exposure to avian influenza - 18 Bald Eagles, 16 Turkey Vultures, 13 Peregrine Falcons and 4 Common Ravens. Coastal Raptors tested 12 of these birds in 2015, following the HPAI outbreak. While a few tested positive for exposure to avian influenza, none were positive for exposure to HPAI.



Blood samples from Coastal Raptors lined up for HPAI testing at Washington State University's Avian Health & Food Safety Laboratory in Puyallup, Washington.

Working with Coastal Raptors

Since 2012, Coastal Raptors and the consulting firm Hamer Environmental have collaborated on research to examine contaminant and disease exposure in avian scavengers - Bald Eagles, Turkey Vultures and Common Ravens - on the Pacific Coast. This collaboration intensified in 2015 when Hamer Environmental's Nathalie Denis came to work for Coastal Raptors. A Canadian citizen, Nathalie needed to establish a new work permit for her professional-level employment in the US. For this process, Nathalie worked more than 500 hours on Coastal Raptors projects, including the avian scavenger study.

My Work Experience with Coastal Raptors By Nathalie Denis

I was born and raised in the French-Canadian Province of Quebec. Following graduation from the University of Montreal in 1999, I began a career in wildlife research and management, first in Canada and then, beginning 1999, in the US with Hamer Environmental. In 2015, I worked for Hamer Environmental and Coastal Raptors through a special research agreement that was reviewed and approved by the United States Citizenship and Immigration Services.

My work with Coastal Raptors extended from March through September and included time in the field, some with hands-on experience. In June, I joined Dan and others near Grayland, Washington in the capture and processing of three Turkey Vultures for the avian scavenger study. In September, I helped with a raptor survey on the Long Beach Peninsula where a Peregrine Falcon was captured and banded; we took blood and feather samples for contaminants and disease testing before release (see page 5). These were my first experiences handling raptors in the field!

During the summer, I prepared nearly 150 DNA samples for transfer to the Genetic Resource Collection at the University of Washington's Burke Museum. The samples were collected between 2004 and 2015 from Peregrine Falcons, Bald Eagles, Turkey Vultures and Common Ravens by Coastal Raptors.

The Genetic Resource Collection at the museum is essentially a "library" of biodiversity, containing tissue specimens from birds and mammals from around the world for use in molecular research. The Burke's Genetic Resource Collection and the few others like it are the only places where tissues of a wide variety of animals are systematically stored under archival conditions for future research by scientists. The Burke preserves frozen tissues from thousands of species that would otherwise not be available. The importance of such collections is rapidly increasing as habitats and organisms face destructive pressure in the wild.

I also spent time working with Coastal Raptors data. I entered data into the Access database used by Coastal Raptors and compared data entered by me and others with the hand-written information on field forms, looking for discrepancies. When discrepancies were found, I worked with Dan to resolve them.

Over the last several years, Coastal Raptors has applied for and received grants from the Oregon Zoo Foundation for their research on avian scavengers. I co-authored a report due based on financial support the Foundation had provided Coastal Raptors in 2014. In 2015, Coastal Raptors once again made a funding request to the OZF. I helped Dan write the grant proposal.

My involvement with Dan and everyone at Coastal Raptors provided me a rich and fulfilling experience. It also brought me a better understanding of the current issues and the research being done in raptor ecology and conservation in coastal environments.

Even though my term ended officially on September 30, I look forward to keeping up with the ongoing research, education and conservation efforts of Coastal Raptors. I hope to stay involved with Coastal Raptors, despite my busy schedule at Hamer Environmental.

Thanks so much Dan for giving me this opportunity!







Nathalie Denis releases P/M, a first-year female Peregrine Falcon captured and banded on the Long Beach Peninsula on September 14, 2015. Tom Rowley photos.



Leif Hansen



Tom Rowley

Nathalie Denis preparing DNA samples for transfer to the University of Washington's Genetic Resources Collection at the Burke Museum. The samples were collected betweeen 2004 and 2015 from Peregrine Falcons, Bald Eagles, Turkey "Vultures, and Common Ravens by Coastal Raptors."

Nature's Depths: John Palka's Nature Blog

In November, 2015 John Palka initiated *Nature's Depths*, a natural history blog online at *www.naturesdepths.com*. In *Nature's Depths* John posts thoughtful essays, primarily on forests and their plant life, incorporating his wonderful photography. John welcomes you to *Nature's Depths* where you may subscribe to receive notifications of new essays as they are created. John was a professor of biology at the University of Washington with a specialty in neuroscience. Now retired, he and his wife Yvonne live on Whidbey Island. in Washington.





John Palka

Dan Varland

John and Yvonne Palka during a Coastal Raptors survey at Ocean Shores on April 8, 2015.

Education Programs 2015

Date	Topic	Organization/Location
March 17	Raptor Surveys and Banding on the Washington Coast	Hoquiam Lions Club, Hoquiam, WA
April 14	Raptor Surveys and Banding on the Washington Coast	Red Hat Ladies, Hoquiam
May 2	Field Trip - In Search of Coastal Raptors	Grays Harbor Audubon Shorebird Festival, Hoquiam
May 3	Presentation - Get to Know the Raptors	Grays Harbor Audubon Shorebird Festival, Hoquiam
June 3	Presentation - Show and Tell at Vehicle Day	Emerson Elementary School, Hoquiam
June 18	Presentation - Monitoring the Health of Avian Scavengers	Hoquiam Public Library
June 28	Presentation - Get to Know the Raptors	Seabrook Community, Pacific Beach, WA
Sept 24	Field Trip - Raptor Survey	Veterinary Students, Washington State University, Ocean Shores, WA
Nov 4	Workshop - Techniques for Handling, Auxiliary Marking, Measuring and Blood Sampling Raptors	Raptor Research Foundation 2015 Conference, Sarcramento, CA
Dec 9	Presentation - Careers in Wildlife Science	Hoquiam High School







Dan Varland speaks to First Graders in Sue Varland's class during "Vehicle Day" at Emerson Elementary School in Hoquiam, Washington. Tom Rowley photos.





With a live Golden Eagle as special guest, Dan Varland demonstrates eagle handling techniques for a workshop on raptor marking and handling during the 2015 conference of the Raptor Research Foundation in Sacramento, California. Kate Davis photos.

Wildlife Society Award



Pictured with Dan from The Widlife Society are Bill Vogel (left) and Bruce Thompson.

In April, Dan Varland received a Special Achievement Award from the Washington Chapter The Wildlife Society for his raptor work. The plaque he received read, Recognized for career devotion to collaborative conservation of raptors through research, monitoring, and public involvement.

Please Help Fund Coastal Raptors

In these days of federal and state budget cuts, finding grant support for the work of **Coastal Raptors** is challenging. That makes support from individual donors like you even more important. Please help us move forward by making a contribution toward our operating expenses.



isa Engtveld

Tom Rowley

It takes quite a lot to run **Coastal Raptors**. Listed below are some of our annual operating expenses.

Vehicle: \$2,500 - \$3,500 Blood sample analysis: \$2,000

Database analyses and maintenance: \$2,000 Statistical consulting: \$1,000 - \$2,000

Office Supplies: \$900

State and Federal Permits: \$300

Please Consider a Donation for 2016 or 2015 if you have not already (see page 8 for a list of 2015 donors). Your Contribution is Tax Deductable. You can donate by check (payable to Coastal Raptors); Send to PO Box 492, Hoquiam, WA 98550. Or donate online at www.coastalraptors.org. THANKS!

Many thanks to **Coastal Raptors** Supporters

2015 Donors Through Mid-December

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Coastal Raptors PO Box 492 Hoquiam, WA 98550



Bald Eagle at the surf line, Ocean Shores, Washington. Tom Rowley photo.