

The Washington Wildlifer

Newsletter of the Washington Chapter of The Wildlife Society

~Mike Hall, Editor

(very) Late Autumn 2022



Here Comes JAM 2023!

Hello, WA-TWSers —

Those of you who attended the TWS conference in Spokane know it was Uh.May.Zing. For those of us who haven't been around large crowds for a while, it may also have been a bit overwhelming.

Now we get to turn our attention to the upcoming [2023 Joint Annual Meeting](#) (aka JAM 2023) of WA-TWS, the Society for Northwestern Vertebrate Biology (SNVB), and Northwest Partners in Amphibian and Reptile Conservation (NW PARC)—April 24 to 29 at Great Wolf Lodge in Grand Mound. This issue of our newsletter is JAM-packed with all sorts of stuff to look forward to in April.

Also in this issue:

- Wildlife Webinars
- Regional Reports
- Opportunities to step up your involvement with WA-TWS
- Call for nominations for awards, grants, and scholarships

HEY! THE DEADLINE FOR GRANTS AND SCHOLARSHIPS IS **JANUARY 15!!**



©Karen Zook

President's Message



Greetings, WA-TWS!

For those who attended the recent Annual TWS Conference in Spokane, all I can say is, it was first-rate! Not only were there superb oral presentations and posters, but the Quiz Bowl and Student-Professional Networking Event were great opportunities to see students and new professionals in action. It was such a great time to catch up with and meet many of the people who have only been on a screen the last few years (including several members of WA-TWS)!

I am continually impressed with the scholastic achievement, quality of work, and professional aptitude of those in the wildlife field, and it was on full display in Spokane.

In this newsletter you will find information on our Washington Chapter Meeting coming up in April, as well as updates from our regional representatives about goings-on in the state. We have also been working to increase involvement in the chapter through outreach to professionals and students, and engaging the colleges across Washington that are educating the next generation of wildlife professionals.

With the holidays fast approaching, I am reminded that the end of every year is an opportunity to think about accomplishments and

goals and how each action we take and connection we make can help accomplish something great. If you're anything like me, the calendar is filling up with work and fun...to July already...and I'm excited for the new challenges and opportunities in 2023.

Remember to keep some balance and enjoy a little wildlife on your own adventures!

Respectfully,
Matthew T. Wilson, WA-TWS President

Extra-credit quiz: Can you identify the bird below?



Hint: it's in the Himalayas

2022 TWS Annual Conference Recap

—Sara Hansen, WA-TWS NW Section Representative

Whew, what a whirlwind! It was amazing to see so many Washington wildlifera at the [2022 TWS Annual Conference](#) in Spokane. Over 150 people attended the reception co-hosted by WA-TWS and the NW Section! During the 6-day conference, WA-TWS members served as presenters, session moderators, leadership mentors, symposium coordinators and invited speakers, workshop instructors, storytellers, ground-breaking book authors, and a range of other roles representing the incredible breadth and depth of expertise and professionalism within our membership.

Thank you to everyone for helping make the Spokane conference such a huge success!

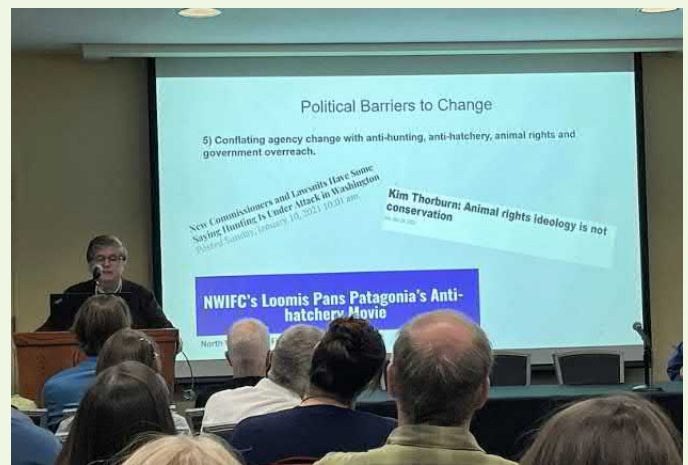
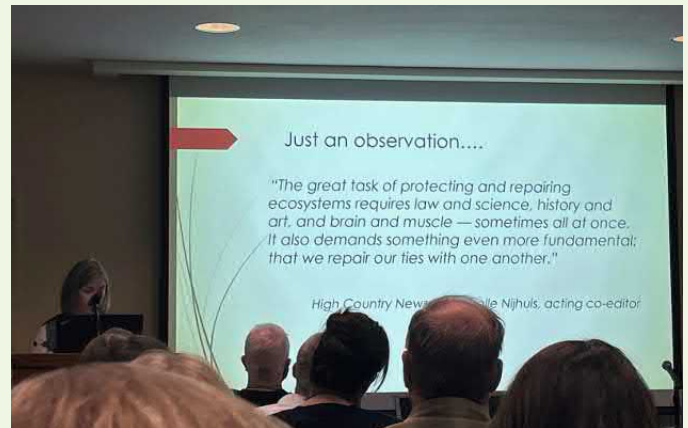
Here's a look at a few highlights:



WA-TWS/NW Section Reception (photo: S. Hansen).



WA-TWS's Sara Hansen (Immediate Past President), George Richotte (Vice President, not pictured), and Bruce Thompson (Treasurer, not pictured) say a few words during the OiTF Luncheon co-sponsored by WA-TWS (photo: L. Satterfield).



WA-TWS members Harriet Allen (WDFW, retired) and Dr. Fred Koontz (Woodland Park Zoo, retired) present during a standing-room-only panel discussion about improving representation and inclusion in state wildlife governance (photo: S. Hansen).

Also, ICYMI:

- [Ales and Allies: How to Be A Great Conference Participant and Get Invited Back](#); web article co-authored by the WA and MI Chapters of TWS, and several active participants in TWS' DEI Network in the lead-up to the conference.
- [Women in Wildlife Science](#); new book co-authored by more than a dozen TWS members, including WA-TWS member Jessica Homyack, who participated in the Women of Wildlife book signing event at the conference.

2023 Joint Annual Meeting

Recovery and Resilience in a Pandemic & Climate Change World

—Wendy Arjo

Do you have some new and exciting research to share? Are you looking for ways to connect with biologists who share the same passion about all things feathers, fur, or scales? We are back in person and invite you to come join us for the 2023 Joint Annual Meeting at Great Wolf Lodge in Grand Mound, Washington!

JAM 2023, hosted by WA-TWS, SNVB, and NW PARC, will run from April 24 through April 29, 2023. Come enjoy educational and training opportunities centered around the meeting theme, the plenary session, technical sessions, and workshops that will emphasize the resilience of people, practices, programs, and the land. JAM 2023 will be all about encouraging interactions for conservation of wildlife and their habitats in an ever-changing world.

This meeting is a great opportunity to network with friends and colleagues (in real, live,

Student Lodging Support

—Bruce Thompson

Once again, WA-TWS, SNVB, and NW PARC are offering **free lodging** for students attending JAM 2023. We want to make it as easy as possible for you to join us at Great Wolf Lodge in April.

Undergraduate and graduate students in biological and natural resources programs are encouraged to apply. Successful applicants will receive free lodging for 3 nights at Great Wolf Lodge. Students receiving free lodging will be expected to volunteer 4 hours of time before or during the meeting to help with the event.

three-dimensional space!), as well as those bright students who are the future of the wildlife community. In addition, this year we will host a quiz bowl where you can have some fun while also testing your wildlife knowledge against other biologists!



It's not too soon to start submitting abstracts for posters and oral presentations. The deadline is February 17, 2023, but why wait?

Format your submission using the [Abstract Submission Guidelines found here](#).

For more information about the meeting, please visit our website:

watws.org/Annual-Meeting



A copy of the application form is cleverly concealed somewhere in this newsletter (*hint: see next page*). You can also download a copy from [our website](#). The application deadline is March 1, 2023. Mark your calendars and apply early if you can.

This incentive is one of our many efforts to promote student participation in the meeting and make the cost of attendance more possible for students. The opportunity is open to all students, with special consideration given to those having affiliations with WA-TWS, SNVB, and/or NW PARC.

Application for Student Lodging Incentive

Students in natural resources, biology, zoology, and environmental studies disciplines at educational institutions in North America

2023 Joint Meeting of Partners

Washington Chapter-The Wildlife Society,
Society for Northwestern Vertebrate Biology, Northwest Partners in Amphibian and Reptile Conservation
Great Wolf Lodge-Grand Mound, Centralia, WA
24-29 April 2023

Applicant Information:

Name: _____ Gender: _____

Address: _____

Telephone and E-mail: _____

Educational Institution: _____

Academic Major: _____

Advisor/Supervisor Name: _____

Education Level: Undergraduate Masters Doctoral

Reason for Requesting Support (*check/complete all that apply*):

- | | |
|---|---|
| <input type="checkbox"/> Delivering Presentation/Poster | <input type="checkbox"/> Serving on Committee for Meeting |
| <input type="checkbox"/> Serving on Partner Committee | <input type="checkbox"/> Leverages Employer Support |
| <input type="checkbox"/> Financial Challenge (<i>explain briefly</i>) | <input type="checkbox"/> Enhance/Supplement Field of Study/Work |

Other (*explain briefly*) _____

How might receiving this support help you leverage other financial assistance or professional opportunities? (*explain briefly*):

NOTES:

- Student Recipients will be granted free lodging at Great Wolf Lodge for the nights of 25, 26, and 27 April 2023. Recipients will be responsible for their own meeting registration, meals, and incidental expenses. Student rooms will have up to 4 persons (same gender) in each room.
- Any student receiving support will be required to provide 4 hours of volunteer help before and/or during the course of the meeting (arranged through Volunteer Coordinator).
- All Recipients are required to attend the meeting during at least 26-27 April.

Submit completed application (electronically preferred [e.g., .pdf]) to arrive **by 1 March 2023** to:

Bruce Thompson, 10025 91st Ave NE, Arlington, WA 98223 (bcthompson248@gmail.com).

If problems with submission, call Bruce at 505-660-0533

Wildlife Webinars

—Candace Bennett

Have you recently completed wildlife research in Washington state?

Do you know of recent research from Washington associated with wildlife or habitats?

Is there a research topic you would like to learn more about???

If you answered yes to *any* of these questions, please contact Candace Bennett, WA-TWS Secretary (secretary@watws.org) with your brilliant ideas for a Wildlife Webinar Series presentation. These virtual presentations happen the second Thursday of each month, beginning at noon. Participation is free and open to members and non-members alike!

Some of the fascinating topics we have already covered include wildlife disease (Chronic Wasting Disease, Epizootic Hemorrhagic Disease, Avian Influenza), cetacean strandings, and wildlife-human conflict. Also: audio moths, research with gray wolves, bees, hummingbird migration, and beaver eDNA!

Visit our website to register to find out more about upcoming Wildlife Webinars.

watws.org/learn/webinars



PhD Candidate Alyssa Sargent presented her project on hummingbird migration.



© Candace D. Hultberg-Bennett

2023 WA-TWS Elections

—Alex Pavlinovic

I want to draw the attention of our membership toward several opportunities to gain valuable experience, network, and give back to the chapter. I am referring to the Vice President, Treasurer, and two at-large positions on our Board. All of these positions need to be filled during our next election.

These roles will give you many opportunities to interact with wildlife professionals from a variety of agencies. Being in one of these positions will give you something of substance to add to your resume. They will allow you to hone your leadership, organizational, and communication skills. Also, if you run and get selected for one of these positions, you will have a chance to better the chapter for its members.

A critical part of any organization is its leadership. The leadership of the Washington Chapter of The Wildlife Society is made up of volunteers, including those who serve on its Executive Board. That is why we need you to run for a position.

Our next elections will be held in Spring 2023! The positions on the ballot will be

- Vice President (4-year term progression)
- Treasurer (2-year term)
- Two board members at large (2-year terms)

Note: Nominees must be members of TWS and WA-TWS to be added to the slate of candidates.

If you would like to submit a nomination, or if you have any questions about the nomination process or positions, please contact the Nominations and Elections Committee at president.elect@watws.org.



More Ways to Engage with WA-TWS

Grants and Scholarships

Short version: **JANUARY 15 DEADLINES!!**

More at watws.org/grow.

Research Grants

WA-TWS provides grant funding for wildlife research projects in Washington State. Funding requests cannot exceed \$2,500. Student proposals are encouraged. Proposals are reviewed by the WA-TWS Research Grants Committee and final funding decisions are made by the Board. The deadline for submission of proposals is **January 15**.

Conservation Grants

WA-TWS also provides grant funding to support conservation efforts. Funding can support new projects or conservation efforts already underway. Funded activities can be on-the-ground or communication and outreach.

To be eligible, a project must be conducted primarily in Washington State. Work funded must be completed by the end of the calendar year in which the project is awarded. The deadline for submission of proposals is **January 15**.

Please contact the Grants Committee (tony.fuchs@pse.com) for more info about research grants or conservation grants..

Scholarships

The Fitzner Scholarship provides up to \$2,500 toward tuition for a wildlife-oriented student with junior or senior standing at a college or university in Washington State. To apply, complete and submit a [Scholarship Application Form](#) by **January 15**.

Please contact our Scholarship Committee Chair (scholarships@watws.org) with any questions.

Awards

Help us continue recognizing the outstanding accomplishments of wildlife professionals here in Washington State!

Submit a completed Awards Nomination Form to william_o_vogel@yahoo.com. Nominations are accepted year-round; there's no deadline.

Learn more about the awards and the nomination process at watws.org/give-back/awards

Conservation Focus Points

We are looking for your input! Are you aware of any legislative, regulatory, or project proposals that (1) could affect (either positively or negatively) wildlife or wildlife habitat in Washington State and (2) would benefit from a review and evaluation by the conscientious and insightful members of our Conservation Review Committee? If so, please get in touch with committee chair Kevin White at Kevin.R.White84@gmail.com.

Please note that the Conservation Review Committee's reviews focus on science and its application. Legislative, regulatory, and project proposals are often based on a wide range of considerations—social, economic, and political, in addition to biological. The committee does not weigh in on social, economic, or political matters.

Finally, if you know of anyone (including yourself) who would be interested in helping the committee do these reviews, please let Kevin know!

Help Our Chapter Website Keep Evolving

Members are encouraged to alert Chapter leadership if they wish to get involved with assisting in design and maintenance of the

evolving Chapter website. This website is built in a WildApricot environment and continues to expand in serving communication and financial management needs of the Washington Chapter of TWS. It will be valuable to include some members who can contribute to how the website serves overall member interests. Those who assist also will enhance Chapter abilities to maintain continuity in awareness of website management needs. If you have interest in helping with the website, especially if you are technically trained with this type of work, please send a brief message with your contact information to president.elect@watws.org. Thank you for considering this important way to help your professional organization serve its members.

Training Opportunities: Wildlife Handling and Immobilization

WA-TWS will be hosting some fantastic [workshops and training sessions at JAM 2023](#). By way of example, we want to tell you about some opportunities to participate in training sessions hosted by Mark Johnson, DVM; Founder and CEO of Global Wildlife Resources. In addition to being an expert in wildlife handling and chemical immobilization, Dr. Mark is a longtime supporter of and collaborator with WA-TWS.

First up: A 2-day class at JAM 2023! Learn the latest drug combinations and fine-tune your field protocols. The class will include lecture, discussion, videos, and a hands-on lab each day. A drug delivery lab will provide opportunities for participants to practice with a variety of projectors (e.g., dart guns). A needle and syringe lab will teach basic skills and improve old skills for working with needles and syringes, syringe poles, and blood collection. The needle and syringe lab builds good habits to maximize human safety, animal care, and successful chemical immobilization. This course emphasizes care and respect for every animal and colleague.

This workshop will be limited to 30 participants, so early registration is encouraged. The registration fee will be \$235 per person and includes lunch the first day, as well as coffee and snacks on both days.

If you have questions, please contact Bill Vogel at william_o_vogel@yahoo.com or 360-528-9145

If you're not able to join us at Great Wolf Lodge in April, an online course, The Foundations of Wildlife Chemical Capture, is also available. Registration is always open. Learn more at wildlifecaptureandcare.com.



Regional Reports

What's going on in your part of the state? Here's what we've heard from the Southwest, Olympic, and Northeast regions. Do you know any stories that are begging to be told? We'd love to know about it! Please contact your regional representative and/or newsletter@watws.org.

Southwest Region

William Ritchie, USFWS

Columbian White-tailed Deer Go To Oregon

The Julia Butler Hansen Refuge (JBH) recently completed a 3-year translocation effort of Columbian white-tailed deer (CWTD), with a goal of creating a new subpopulation in Oregon. The Refuge moved 37 deer from Tenasillahe Island (part of JBH) to the Columbia Stock Ranch, which is a small, formerly agricultural area between Goble and Deer Island in Oregon.

The CWTD population is currently restricted to a string of fragmented parcels surrounded by habitat barriers. This arrangement has impeded the natural expansion of the population, and translocations are the only way to return the animals to their historical range. This translocation has filled a break in the string of subpopulations that is within genetic reach of deer to the north and south of the area.

The translocation was a success, and the deer have generally stayed within a few miles of the release area, spreading out to encompass Goble, Kalama, Sandy Island, and the northern part of Deer Island. The potential for growth of this subpopulation is high. Not only is habitat restoration underway at the site, unoccupied habitat exists both north and south of the area.

The donor site has shown little effect from the removal of deer. The process was gradual, and the population has rebounded to its former levels. Tenasillahe Island has maintained a density of 65 to 77 deer per square mile over the last 10 years, which is higher than management goals. It was hoped that removal of deer would reduce density on the Island, but deer removal also reduces competition, and the population quickly returned to what the area could support.

This latest action, along with a general upward trend in CWTD numbers, has resulted in an overall population of over 1,300 animals, more than tripling both the size and range of the population since it was listed as Endangered in 1970. Currently the population is listed as Threatened after being downlisted in 2016.

The Refuge, with its federal, state, tribal, and NGO partners, continues to look for opportunities for CWTD population expansion. In addition, the refuge continues to improve habitat on refuge lands to support long-term sustainability of CWTD numbers.

The photos to the right show the translocation effort in action.



Olympic Region

Betsy Howell, USFS

Olympic National Forest Pollinator Surveys

—Karen Holtrop, USFS

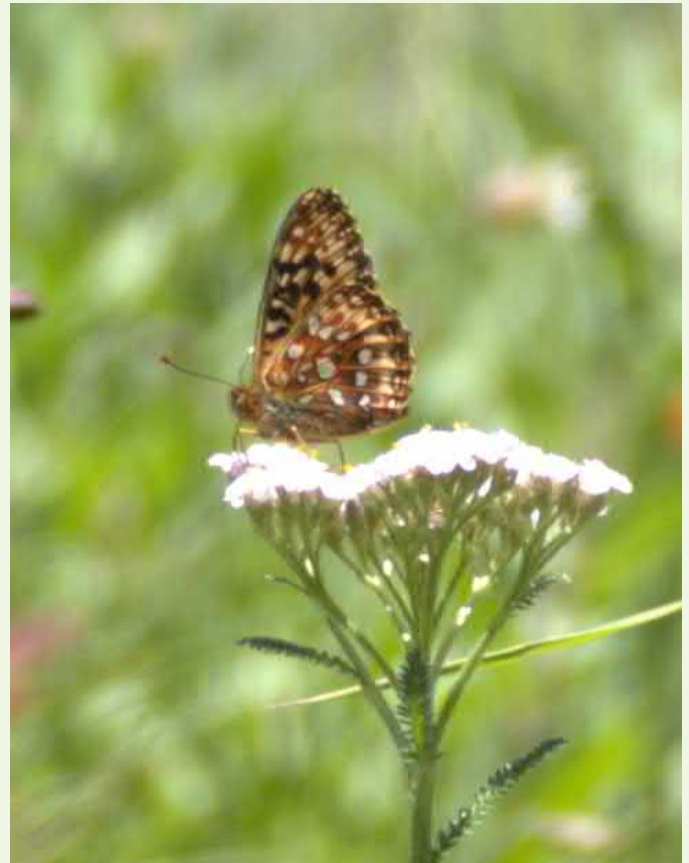
This summer, Olympic National Forest staff and volunteers accomplished bumblebee surveys at more than 15 sites. They confirmed two new western bumblebee (*Bombus occidentalis*) sites on the Forest, and they identified several other species. Thanks to the team's efforts, there are now four known *B. occidentalis* sites on the Forest, along with several sites on other land ownerships on the northern Olympic peninsula.



Olympic NF biological technician Logan Fields with native plant seed in 2022.

In July 2022, a joint team from the Forest Service regional office and WDFW conducted surveys for sensitive butterflies at high elevations on the Olympic National Forest. The trip was hosted by USFS biologist Karen Holtrop. The goal of the surveys was to improve our understanding of habitat and survey needs, specifically for valley

silverspot (*Speyeria zerene bremnerii*, aka Bremner's silverspot). The team hopes to continue surveys and habitat trips.



Valley (Bremner's) Silverspot photographed during a survey at Tubal Cain Trail, Olympic National Forest, July 2022.



Aja Woodrow (USFS) and Taylor Cotten (WDFW) surveying for butterflies and obtaining photo vouchers in subalpine meadow.

The Olympic Cougar Project

—Kim Sager-Fradkin,

Lower Elwha Klallam Tribe

The Olympic Cougar Project (OCP) is an Olympic Peninsula-wide effort to understand the role of cougars on the landscape. Cougars are the largest and widest-ranging predator on the Peninsula, acting as an umbrella species by using habitats shared by all other species. The OCP is co-led by the Lower Elwha Klallam Tribe and our principal partner, Panthera, with collaboration from the Makah, Quinault, Jamestown, Port Gamble, and Skokomish Tribes.



A male we called Apollo. Photo by Mark Elbroch.

The OCP has one overarching goal: to create a coordinated approach to monitoring and conserving wildlife diversity on the Olympic Peninsula. Our work encompasses five terrestrial mammalian species of cultural importance, each of which interacts with cougars in unique ways, either as prey or by benefitting from meat left behind at kills. These species are black-tailed deer, elk, bobcats, black bears, and coyotes.

We have three specific objectives: 1) estimate the abundance of cougars and bobcats on the north Olympic Peninsula, 2) document the distribution of and travel corridors used by the six species of importance, and 3) monitor cougar movements, habitat use, prey selection, and perhaps most importantly, dispersal patterns of subadult cougars when they leave their mothers.

To estimate cougar and bobcat population abundance on the north Olympic Peninsula, we used scat-detection dog teams to collect 665 bobcat and cougar scat samples between 2018 and 2020. Our project graduate student, a member of the Lower Elwha Klallam Tribe, was able to identify unique individuals for about 50 percent of scat samples, preliminarily identifying a minimum of 24 unique cougars in the study area. Bobcat analyses are ongoing, as are population estimates for both cougars and bobcats.

For the species distribution effort, we have deployed more than 450 cameras across a large portion of the Olympic Peninsula. To identify wildlife documented in photos, we are using Panthera IDS, a software that uses artificial intelligence to categorize images. We have collected over 800,000 images of wildlife, including all six species of cultural importance. Early results indicate cameras may provide a viable method for population estimation and long-term monitoring of culturally important wildlife species. These images will also provide insight into important habitats, travel corridors, and highway crossings.

Finally, we have captured and radio-collared more than 87 individual cougars on the Olympic Peninsula since 2018, gaining valuable data on habitat use, home ranges, dispersal patterns, and diet. We have visited thousands of cougar clusters (concentrations of GPS points gathered



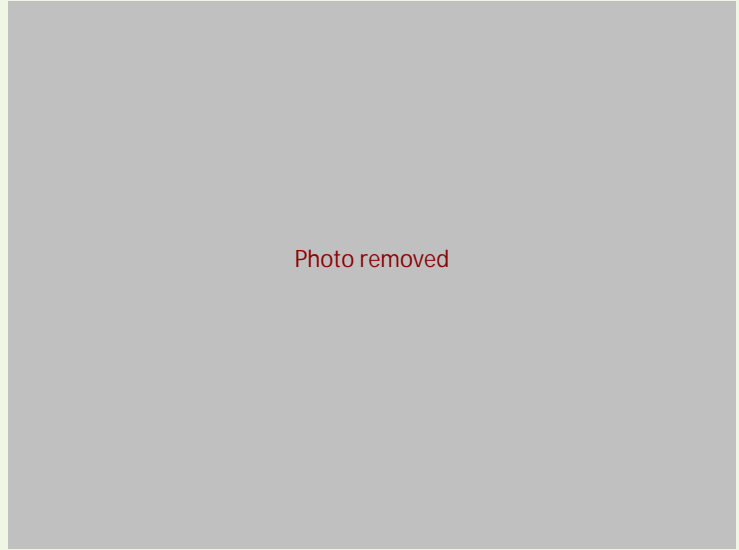
A male we called Qewicep (cougar in Klallam). Photo by Dave Shreffler.

by the collars) and located more than 1,500 kills, more than 2,500 bed sites, and at least a dozen dens. Several young cougars have dispersed after leaving their mothers, traveling up to 150 kilometers. Several traveled as far as the Columbia River, and one crossed back and forth over Interstate 5 before being shot by a hunter during elk season. Cougars have used lands across a variety of land management regimes, from industrial and state-owned timberlands to wilderness areas inside Olympic National Park and Forest.



A cat called Lilu ('salmonberry' in Klallam; also a term of endearment). Photo by Dave Shreffler.

We are also working with the Washington State Department of Transportation and the Washington Wildlife Habitat Connectivity Working group to identify critical safe passages, bottlenecks, and blockages in existing wildlife corridors. Work will continue into 2023 and beyond.



Olympic Martens

—Dylan Hubl and Betsy Howell

The 2022 field season saw great leaps forward in the work to better understand the distribution of Pacific martens (*Martes caurina*) on the Olympic Peninsula. This spring, Dylan Hubl began his master's work studying martens at the University of Washington. With funding from Olympic National Park, logistical support provided by Olympic National Forest and Woodland Park Zoo, and additional funds from Olympic Park Advocates, Dylan and his crew installed 67 remote camera stations and 131 cameras at high elevations (>2,000 feet) in the National Park and Forest.



Installing a lure dispenser. Photo: B. Howell.



Dylan Hubl with lure dispenser. Photo: B. Howell.

Each station includes two cameras. One is paired with an overwinter lure dispenser, bone attractant, and a hair snare collar. All components are installed 12 to 15 feet up a tree to remain above the snowline. The second camera is unbaited and installed along a game trail 100 to 200 meters from the primary station.

Several volunteers assisted with this work, carrying substantial amounts of gear and assisting at the sites while Dylan and the crew climbed trees to install survey equipment. In summer 2023, all of these stations will be checked, and additional hair snare devices will be added to gather genetic material where martens have been detected.

This has been the most extensive effort to date searching for martens in the Olympic Mountains, and the work of getting to some of these remote locations proved a real challenge. Many thanks go out to all that helped this summer.

Additionally, this year we detected a marten at a camera station on Olympic National Forest that had been installed in summer 2021. This is the first marten detection at a survey station on the Forest. Given the numerous survey efforts since 2008, the detection was very rewarding indeed. The marten visited the station in January 2022, 5 months after the installation in August. Our ability to detect martens on the Peninsula has improved greatly with the use of overwinter lure dispensers.



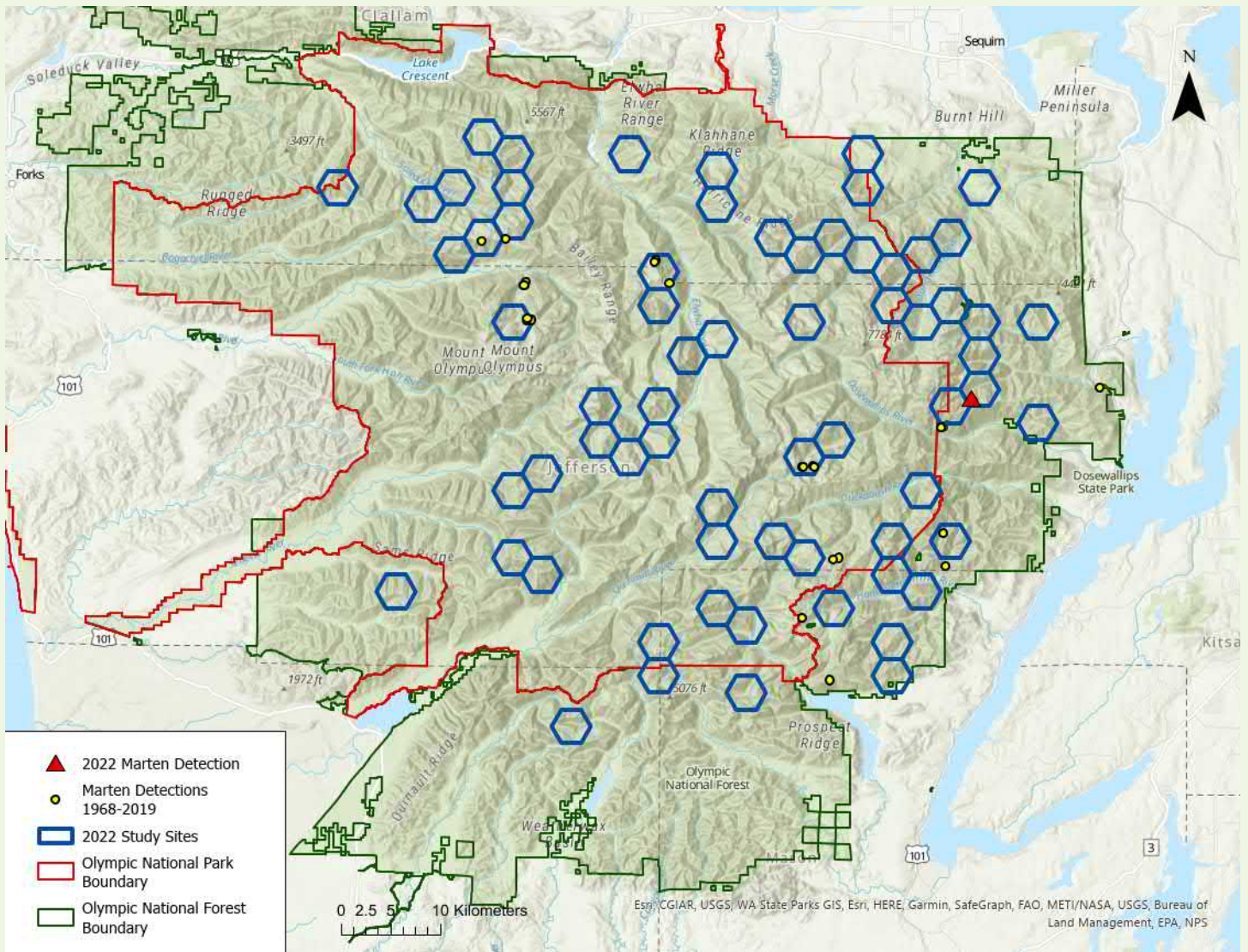
The first marten detection at a camera station on Olympic National Forest since survey efforts began in 2008!

Dylan produced a figure for this study, showing the locations of marten detections. It's on the next page. Check it out!

Mountain Goats at ONP

—Patti Happe, Olympic National Park

In September 2018, the National Park Service, USFS, and WDFW, along with many other tribal and state partners, started implementing the Olympic Mountain Goat Management Plan/EIS.



Marten detections on the Olympic Peninsula. Figure developed by Dylan Hubl.

That plan called for mountain goats to be removed from the Olympic Mountains (where they are not native) over a period of 20 years, divided into a 5-year initial management phase (during which we hoped to remove 90% of the goat population) and a 15-year maintenance phase (during which 100% of the population is to be removed).

In the initial phase, mountain goats were removed through two 2-week aerial operations conducted during summer. The first set of aerial operations included capture and translocation to underpopulated portions of the goat range in the Washington Cascades. Once goat capture operations became unsafe or unfeasible and/or

when WDFW met their translocation goals, lethal removals began. Four aerial capture operations were conducted from 2018 through 2020, during which 325 goats were translocated. Lethal removal operations started in September 2020, first with ground removal operations by highly skilled volunteers, followed by four aerial lethal removals conducted in 2021 and 2022.

The last aerial operation of the initial phase occurred in August 2022, when only 3 goats were removed during the 2-week operation. In total, 548 goats were removed during the initial management phase, more than 59% of which were translocated. The partners will now move into the maintenance phase of the plan.

Northeast Region

Annemarie Prince, WDFW

Chronic Wasting Disease

WDFW's chronic wasting disease (CWD) surveillance program expanded this fall to include Game Management Units (GMUs) throughout WDFW's Region 1, which covers Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, and Whitman counties. WDFW staff are collecting samples year-round and testing adult (approximately 1 year old or older) deer and elk. WDFW will continue to test any cervid statewide if it is showing clinical signs consistent with CWD.

CWD is a fatal neurologic illness of cervids, which include deer, elk, moose, and caribou. CWD is caused by an infectious prion protein and transmitted from animal to animal or through contaminated environments. Most animals with CWD appear normal until the end stages of the disease when they show signs of weight loss, lethargy, drooping ears, excessive salivation and urination, and loss of fear of people. There is no cure for CWD.

As of summer 2022, CWD has not been detected in Washington, but has been detected in 30 states and four Canadian provinces. Testing tissue samples collected from the head and neck of carcasses is the only way to determine if an animal is infected with CWD.

The WDFW management plan for CWD can be found here.

<https://wdfw.wa.gov/publications/02292>

In Search of Northern Bog Lemmings

The northern bog lemming (*Synaptomys borealis*) is a boreal species found in high-elevation wet meadows, bogs, and fens (dominated by sphagnum moss) in northern Washington. Northern bog lemmings are present in low numbers in our state, occurring in small, isolated populations.

The northern bog lemming is identified as a Species of Greatest Conservation Need in WDFW's State Wildlife Action Plan. Data on the current distribution, habitat requirements, and population demographics of northern bog lemmings are needed for the development of effective conservation measures. Little is known about this species throughout the U.S., but it is thought to be declining in many areas. WDFW has joined with other northern states to collect more information.

WDFW biologists have been searching for these elusive small mammals for the past 2 summers. To determine the species' presence in historically occupied areas, biologists comb through sphagnum-dominated bogs in search of scat samples for DNA analysis. This involves a lot of bending over and parting grass, looking for a 4- to 6-mm long scat—about as close to a needle in a haystack as you can get.

Bog lemmings eat sphagnum moss, which gives their scats an almost fluorescent green color. A vibrant green sample is a good sign, indicating freshness and a strong likelihood of a positive ID during genetic analysis.

Due to its dependency on cold, wet environments, the northern bog lemming is particularly vulnerable to climate change. WDFW plans to continue surveying for bog lemmings in the future to document their distribution and presence in Washington.



***We wish you and yours a truly
delightful solstice (1:47 pm,
Wednesday, December 21)
and associated holidays.
May your days be merry
and bright!***

