

The Washington Wildlifer

Newsletter of the Washington Chapter of The Wildlife Society



MESSAGE FROM THE PRESIDENT

Lisa Dowling



Spring has sprung in Washington and we have been busy bees. As we dust off our field gear and get ready for the 2019 field season it's always nice to take stock of the multitude of contributions our hard work brings to the wildlife management and conservation. In a profession as diverse as wildlife management and conservation, we are fortunate to

have a community of members that span the full spectrum. From working directly with wildlife, to managing their associated habitats, to fueling the research engine, to synthesizing science into education and outreach, to being on the front lines of driving wildlife-related policy and legislation, each contribution is an important cog in the wheel that works to keep our wildlife populations sustainable for future generations.

This year our focus will be on increasing member engagement and opportunities to collaborate and network within our state. Our goal is to expand our opportunities for member involvement by recruiting members to participate in the planning of events and workshops so that we can better tailor these services to represent the diverse interests of our community. We have a wide range of opportunities to get involved, from participating in voting, to nominating a fellow wildlifer for an award, to building your leadership skills through committee engagement. Please visit the "Call for Committees" section below, as we have several vacancies. If you are interested in increasing your involvement, we can work to connect you with a role that suits your interests and skill set. Planning for our 2020 Annual Meeting is underway (see Sara's section below), and we look forward to providing a suite of technical workshops and sessions that encompass the emergent research and diverse interests across the state of Washington.

We aim to continue to explore new avenues for supporting wildlife research, management, and education in Washington State. We prioritize student involvement and offer support for both students and early career professionals to attend and present at our annual meetings. These valuable incentives cover the costs of lodging or

Spring 2019

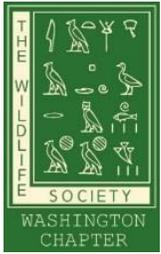
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registration fees, so stay tuned for details regarding the application process for these opportunities for our 2020 Annual Meeting. We welcomed new student officers to the Washington State University Student Chapter and are interested learning more about how our Chapter can facilitate opportunities for students to network and build leadership and technical skills.

This past year Katy Stuart led the effort to develop new artwork for our Chapter (see page 3)! Our goal was to create an image that would encapsulate the diversity of wildlife and habitats in Washington State—from the western coast to the Cascadian ridge to the coulees and shrub-steppe in the east. We were thrilled to see what a hit our new gear made at the 2019 Annual Meeting. This year we offered t-shirts and hoodies that sported the TWS National logo on the front and our newly minted Washington Chapter artwork on the back. We are working to develop a process for purchasing gear online, and next year we hope to expand our merchandise to include cups, koozies, and more!

JOINT ANNUAL MEETING ROUNDUP



Lisa Dowling



We enjoyed a successful Joint Annual Meeting at the majestic Great Wolf Lodge in Grand Mound, Washington, from February 25 to March 1, 2019. The Washington Chapter of The Wildlife Society hosted the meeting with our partners from The Society for Northwestern Vertebrate Biology (SNVB), in association with Northwest Partners in Amphibian and Reptile Conservation (NW PARC). Our theme this year was **Connecting Science and Management Through Communication**, with the goal of coalescing the various arms of the wildlife profession through communication. Our plenary session kicked off the meeting with high-energy presentations from Mr. James Waddell, Dr. Penny Becker, and Mr. Nathan Dexter, each bringing a new and unique perspective on how we can connect people to conservation efforts through building relationships and trust among partners.

In conjunction with our Annual Meeting, we hosted several technical workshops designed to provide our members with opportunities to continue their professional education and fine-tune their skill set. We kicked off our week with a two-day workshop on **Wildlife Handling and Chemical Immobilization**, taught by Dr. Mark Johnson on Monday and Tuesday. This workshop included lectures, discussions, videos, and hands-on lab experience, both in the lab and in the field, with opportunities for participants to shoot dart guns and practice with a variety of drug-delivery systems. On Tuesday, Dr. Bruce Thompson led a one-day **Conservation Communication** workshop designed to help participants learn new ways of interacting with fellow natural resource professionals through the interactive exploration of key facets of effective communication processes. Finally, for those who aim to break down the barriers between art and science, we offered a half-day **Scientific Illustration** workshop on Friday. Ms. Anne Yen taught participants how art and science are complementary and play a vital role in science communication and conservation advocacy.

Wednesday and Thursday featured concurrent technical sessions with fun events sprinkled into the schedule to provide us time to break bread, laugh, and learn alongside our fellow wildlifers. Following the plenary session and

hosted lunch on Wednesday, we had three half-day sessions featuring talks from invited speakers on Herpetology, Avian Studies, and a fast-paced IGNITE session. Our Evening Social Mixer was a hit and featured a poster session with 22 posters, more than half of which were presented by students!

On Thursday we kicked off three full-day symposia featuring invited speakers and contributed papers. Alex Pavlinovic moderated the very popular **Marine Mammal Symposium** that included presentations on cetaceans, killer whales, new sampling methods for marine mammals, marine mustelids, and pinnipeds. Dave Clayton moderated a **Mammal Symposium** with presentations ranging from small mammals to large mammals, to hooved animals, and several talks specific to human influences on mammals in the Pacific Northwest. Katy Weil moderated the **NW PARC Symposium** including presentations on emerging research in eDNA herpetology studies, herpetology disease, and an afternoon mini-symposium on the Western Pond Turtle, led by Bruce Bury.

We wrapped up our meeting with a delicious banquet dinner Thursday evening followed by a photo contest, silent auction, and live entertainment from Jay Bowerman, who combined his comedic and musical skills in a performance titled *What can a toad teach us? Musings from a Warped Biologist*. The evening concluded with award presentations from WATWS, SNVB, and NW PARC, followed by announcements of the winners of the photo contest and silent auction. Our ever-popular **Breakfast with a Wildlifer** event Friday morning was well attended and was a good opportunity for students and mentors to make connections over delicious food and hot coffee.



[A Canadian male sharp-tailed grouse about to undergo a change of citizenship. Learn more about it in the Northeast Region report on page 22. Photo: Scott Fitkin, WDFW](#)

The Joint Annual Meetings are made possible by the efforts of our Joint Meeting Steering Committee. This year's committee was headed up by Lisa Dowling and Katy Stuart

from WATWS and Teal Waterstrat and Jessica Brown from SNVB. Teal Waterstrat and Lisa Dowling managed many of the details, including the venue, catering, entertainment, plenary speaker, name tags, A/V equipment, and the design of the technical program. Lisa Dowling led the bi-monthly calls and helped keep the large planning group on track. Teal Waterstrat created the meeting announcements and calls for papers and led the effort to coordinate session moderators and workshop leads. Sarah Kindschuh (WATWS), with the help of Patrick Burke (SNVB), worked hard on the budget and finances for the meeting. Leah Rensel designed and managed the registration system, including several last-minute efforts to accommodate furloughed Federal employees who had been unable to register by the early-bird deadline due to government shutdown. Blake Hossack (SNVB) led the effort of managing abstract submissions with the help of Kevin White (WATWS), Carrie Lowe (WATWS), and Clara Wheeler (SNVB). Michelle Dragoo (SNVB) coordinated the photo contest. Randi Riggs led the poster session and poster judging effort. Bruce Thompson (WATWS) led the sponsorship drive with the help of Katy Stuart (WATWS) and managed lodging and registration incentives for students and early career professionals. Bill Vogel (WATWS) and Teal Waterstrat (SNVB) planned workshops and awards. Thank you to all of these volunteers and many more helped make the 2019 meeting a success. We couldn't do it without you!

2020 JOINT ANNUAL MEETING

Sara Hansen

Conversations are underway with several conservation organizations, including SNVB, the Society for Range Management, and the Society for Ecological Restoration, about partnering for a joint meeting to be held in eastern Washington in April of 2020. Stay tuned.

Finally, if you are interested in volunteering for this event, please contact Sara at watws.presidentelect@gmail.com.

2019 ELECTION RESULTS

Many thanks to all who participated in our recent elections, both by voting and (especially) by running for board positions. After tallying the results, we are pleased to announce that **Matthew Wilson** of WDFW will be stepping into the Vice President position. Our new Treasurer is **Emily Butler**, and **Ciera Strickland** and **Victoria Kaufman** are joining us as Board members. **Teresa Lorenz** is staying on as our Secretary, and **Kevin White** and **Clint Robins** are remaining on the Board.

Thanks to our succession process, former Vice President **Sara Hansen** is now our President-Elect, former President-Elect **Lisa Dowling** is now our President, and former President **Katy Stuart** is now our Past President. Big thanks to **Danielle Munzing**, our former Past President, who is now free to enjoy our joint annual meetings simply as a spectator. Many thanks also to former Treasurer **Sarah Kindschuh**, as well as departing Board members **Annemarie Prince** (who is staying involved as the Northeast Region representative) and **Dominic Bachman**.



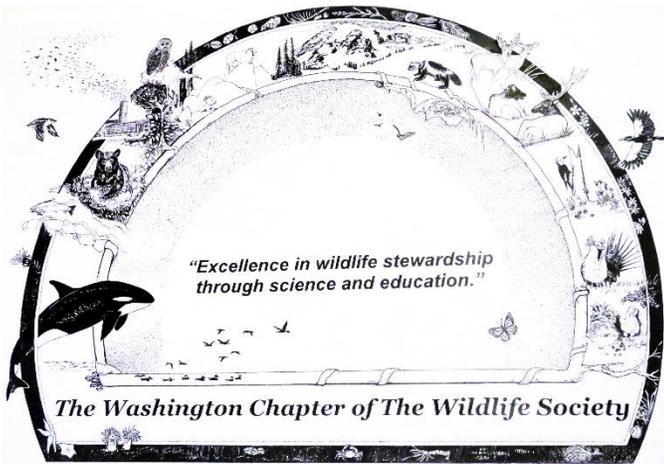
Mountain goats—and WATWS biologists helping relocate them—were in the news last year. Get the inside scoop from [Patti Happe and Rich Harris on page 16](#).

NEW ARTWORK FOR WATWS

Katy Stuart

Over the past year, the WATWS Board worked with local artist Cathy Clark to design new artwork for use on promotional materials such as sweatshirts and t-shirts. The vision for the artwork was an arc representing the spectrum of species and habitats that Wildlife Biologists in Washington State study, from threatened and endangered species including sage-grouse and orca whales to more common species like deer and elk. The artwork went through several drafts and rounds of review from the Board to make sure a wide range of species was accurately

represented. Board Member Kevin White put forth the idea of adding our mission statement to center of the arc. We hope you like how it turned it out! Look for the new artwork on additional promotional and media materials this year. And just to be clear: This is not a replacement our existing logo; it's just a new option for communicating our identify on t-shirts and other swag.



APPRECIATION FOR JOINT MEETING FINANCIAL SUPPORT

Bruce Thompson

Organizers extend special thanks and appreciation to the 9 Sponsors, Financial Supporters, and Exhibitor that helped to make the 2019 Joint Meeting a resounding success and ensured that we met costs to provide this professional forum to nearly 300 participants. These sponsors and other supporters included: Washington Department of Fish and Wildlife, USDA Forest Service Region 6, Port Blakely Tree Farms, Weyerhaeuser Company, Sustainable Forestry Initiative Washington State Implementation Committee, Parametrix, Puget Sound Energy, Washington Back Country Hunters & Anglers, and Vectronic Aerospace. In total, these partners provided \$9,800 in financial support toward the Meeting, which helps keep registration fees lower and supports other efforts of the coordinating organizations. We encourage all of you to further acknowledge this support during your year-round interactions with these agencies, organizations, and businesses.

STUDENT AND EARLY CAREER PROFESSIONAL INCENTIVES

Bruce Thompson

Incentives to encourage greater participation at the 2019 Joint Meeting by students and early career professionals

were a substantial success. The Student Lodging Incentive provided no-cost lodging for 22 students (14 female and 8 male), who in return provided volunteer services during the Meeting. These students represented undergraduate to doctoral-level programs at 7 universities in 3 states and 1 Canadian province. Early Career Professional Registration Waiver Incentives were provided to 7 individuals. These individuals (6 female and 1 male) represented 4 agencies, 1 university, 1 conservation organization, and 1 consulting service. It is especially encouraging to see the continued interest in these opportunities and the degree to which female students and early professionals are assisted to be part of our Meeting endeavors. The diversity of backgrounds, programs, and areas provided by these participants surely enhances the Joint Meeting environment and promotes learning by all. Congratulations to all students and early professionals who were selected and able to gain from these incentives provided by Meeting organizers. WATWS made substantial financial contributions toward both incentives as an ongoing effort to promote broader participation.

SCHOLARSHIPS AND GRANTS

Tony Fuchs and John Grettenberger

WATWS is delighted once again to be able to fund wildlife-related education, research, and conservation projects. We received many excellent applications for the latest round of scholarships, research grants, and conservation grants. After careful review and consideration, we identified several successful applications.

Scholarship

Sydney Potter is the recipient of the Richard Fitzner Memorial Scholarship Fund for the 2019-2020 academic year. The \$2,500 award is given to a junior or senior in the wildlife field and is based on academic achievement, leadership, and financial need. Sydney will be a senior at Washington State University this fall, pursuing a degree in Wildlife Ecology. Her academic success is even more remarkable in light of the financial and logistical challenges she has overcome. Please join us in congratulating Sydney and looking forward to her future accomplishments.

Research Grants

We received three applications for the 2019 research grants. After careful consideration by our grants committee and approval by the Board, we are pleased to award research grant funds to two of the applicants.

We awarded \$2,500 to **Logan Whiles** (WSU M.S. Student) for his research, "Is climate change increasing predation on Hoary Marmots in the North Cascades National Park?"

Using remotely sensed snow data, marmot point-counts, behavioral observations, camera trapping, and genetic analysis of carnivore scat, this project examines whether reduced snowpack increases subalpine access by carnivores, in turn increasing the predation rate on marmots.

Our second award is a little unusual because we don't often receive applications from undergraduate students seeking research funds. We have awarded an additional \$480 to **Ethan Duvall** (WWU student, Terrestrial Ecology) for his study, "Long-term changes in abundance and distribution of bald eagles on the Nooksack River." This is a follow-up study on Mark Stalmaster's seminal 1976 assessment. The results of Logan's and Ethan's studies will be presented at a future WATWS chapter annual meeting.

Conservation Grant

We received two conservation grant applications for the 2019 funding year. The grant committee reviewed the application and forwarded their recommendation to the Board, who approved the recommendation to fund both applicants. Conservation Grant funding will be split between two organizations this year.

Elizabeth Hanwacker of the **Foster Creek Conservation District** will receive a \$1,000 grant. The funds will assist in outreach to residents in the District to facilitate stewardship of flora and fauna, including species such as sage-grouse, Washington ground squirrel, sharp-tailed grouse, and pygmy rabbits.

The **Whatcom County Amphibian Monitoring Program Citizen Science Program** was awarded \$1,500 once again for education materials for their program. This year's grant supports the development and installation of an interactive sign, "Western Toads at Silver Lake Park," to be placed near the park's boat ramp at Silver Lake. This is the fourth year in a row that we have provided funding to this excellent citizen science program!

Please join us in congratulating this year's award recipients! For more information on how to apply for scholarships and grants, visit our website: <http://wildlife.org/washington-chapter/grants-scholarships>.

AWARDS AND RECOGNITION

Bill Vogel

During this year's Joint Annual meeting, WATWS was pleased to present our Chapter's Leadership in Conservation Award to **John Calambokidis**, noted cetacean researcher and co-founder of the Cascadia Research Collective.

John showed a passion for conservation at an early age, when he and a friend collected recyclables in their neighborhood (kids: there was a time, known as the Dark Ages, before municipally sponsored curbside recycling existed—ask your grandparents about it). He became interested in studying biology while living in a cave in Greece. Upon his return from that trip, he enrolled at The Evergreen State College and started working on National Science Foundation grants—first, on a study to examine the distribution of PCBs in fish, sediment, and mussels in Puget Sound, and later on a study of harbor seals and environmental contaminants. After that, he was hooked, and learning more about marine mammals was his life. You can learn more about John at the Cascadia Research website: <http://www.cascadiaresearch.org/washington-state/john-calambokidis-awarded-leadership-conservation-award>.



John Calambokidis with his wife and research partner, Gretchen Steiger, in one of their favorite places: on the water, in a small, inflatable boat. Photo courtesy Cascadia Research

Note: We were deeply saddened to learn of Gretchen Steiger's untimely death on April 12, 2019. We mourn the loss of this shining beacon of marine mammal research and conservation, and we send our deepest sympathy to John and everyone who knew and loved Gretchen.

GET TO KNOW YOUR BOARD

Sure, we all read the candidates' statements when we were casting our votes, but what do we *really* know about the people who represent our interests as WATWS members? Last year, then-President Katy Stuart came up with a few getting-to-know-you questions for the members of our executive board. New President Lisa Dowling is continuing the tradition. Here are the questions, followed by each board member's responses.

1. What do you do at your current job, and what is your job title?
2. What is your favorite wildlife species and why?
3. Why are you excited to be a WATWS Representative?

4. What is one interesting (non-wildlife related) thing about you?

Emily Butler, Treasurer

1. I work for the Washington Department of Fish and Wildlife the Assistant District Wildlife Biologist for Pierce and Thurston Counties. In my role, I help manage both game and non-game species throughout my district.
2. My favorite wildlife species would have to be the American pika. When I'm hiking, I love hearing them call and trying to spot them.
3. I am excited to interact more closely with others in the wildlife field.
4. I am currently learning how to sail and love every minute I get to be on the water.

Ciera Strickland, Board Member

1. I currently work at the Washington Department of Fish and Wildlife where my working job title is Private Lands Access Program Manager. I manage the access portion of the WDFW Private Lands Program. I am privileged to work with 13 regional Private Lands Biologists/Techs that work to provide and enhance access opportunities to the general public onto privately owned land all across the state of Washington. Besides assisting with managing hunting, wildlife viewing and some fishing access opportunities, I also assist with industrial timber access and have also provided internal guidance for access issues to WDFW public lands. In addition to managing the Private Lands Access Program, I am also the one responsible for the production of the Washington Big Game/Migratory Waterfowl and Upland Bird hunting regulations books.
2. So, for the longest time I have been fascinated by the weasel family. However, if I have to pick just one as my favorite, it would have to be the Short-tailed weasel. I love the way that they act crazy, yet are extremely efficient hunters. Not only that, I think our personalities are similar. We are both keen, efficient, confident and also occasionally act a little nutty.
3. I'm excited to be more involved. I grew up in Oregon and would occasionally get involved in TWS as a student at Oregon State University. Now that I have a career here in Washington, I would love to put my knowledge and expertise to good use. I also see this as a great opportunity to continue to learn, network and do some great things for wildlife across Washington.
4. I have a dog named, Stryker. He is my best friend and spending time with him is my absolute favorite activity.

Besides being with him, in my spare time (when I'm lucky to have any) I do landscape/wildlife photography and also pyrography (the art of wood burning).

Tori Kaufman, Board Member:

1. Presently, I work as a biological consultant for the Intermountainwest Joint Venture waterfowl surveys and wetland restoration in the Channeled Scablands. On any given day I am coordinating the needs of the project with the organizations involved which include but are not limited to Ducks Unlimited Inc., WDFW, USFWS, Gonzaga University, and the Audubon Society. At baseline, my job is to be the point-of-contact for the project and I do this by doing everything from crunching survey data to presenting the project at conferences.
2. If I had to narrow my scope of appreciation to one species I would sit down with the Red-winged Blackbird. For some reason, their ecology has always rung in tune with my calling as an ornithologist. They were the first bird I ever ran home to identify as a kiddo, they are masters of an undeniably distinct call and song, possess an almost obfuscated mating system, and at the end of the day, retain their 'wildness' despite pressure from the pains of urban sprawl, and at the end of the day who doesn't appreciate their striking wing pattern?
3. The Wildlife Society has been preached as a pillar of young professional engagement since my first semester in college. One fundamental value of mine is the desire to engage in meaningful work in and out of my paid jobs, and so TWS is a natural avenue to express these skills and passions.
4. I have a blog and podcast about my rockhounding hobby and other fun stuff. Some of you at the February conference were featured on it! It's been a brainchild of mine since exiting graduate school and finding myself isolated in the desert during my first full-time position. I honestly think everyone needs some way to foster their creative and empathetic vibes, especially given the isolating conditions we find ourselves in. Rockosophy.com is that for me and I find that the friends I rope into building it also get something out of it. We all do this job for a reason. I think that's love.

NEWS OF NOTE FROM NATIONAL What Wildlifers Are Reading in TWS Journals

Mariah Simmons, TWS Unit Services Manager

In 2018, there were over 240,000 downloads of articles from TWS' three premier wildlife journals—*The Journal of Wildlife Management*, *Wildlife Monographs*, and the *Wildlife Society Bulletin*. That's an average of 20,000 downloads per month!

More than ever before, wildlife professionals from around the globe are turning to TWS journals as their source for the latest research findings in wildlife science and management. Here's what they're reading:

Most Downloaded Articles in 2018

- JWM – [Population growth and status of California sea lions](#)
- WSB – [From climate to caribou: How manufactured uncertainty is affecting wildlife management](#)
- JWM – [Predicting the evolutionary consequences of trophy hunting on quantitative trait](#)
- JWM – [Pneumonia in bighorn sheep: Risk and resilience](#)
- JWM – [Chronic wasting disease influences activity and behavior in white tailed deer](#)
- JWM – [Inefficiency of evolutionarily relevant selection in ungulate trophy hunting](#)
- JWM – [Special section: Controversies in mountain sheep management](#)
- JWM – [Effects of rotational grazing management on nesting greater sage-grouse](#)
- JWM – [Review and synthesis of research investigating golden eagle electrocutions](#)
- JWM – [Applying a random encounter model to estimate lion density from camera traps in Serengeti National Park, Tanzania](#)

As a quick reminder, online access to all TWS journal articles is a benefit of TWS membership. To access, simply login to your TWS account through [Your Membership](#) or directly through the [TWS Journal Hub](#). In addition to catching up on your 2018 reading, be sure to check out some of the most popular articles so far in 2019, like this recent [study](#), which suggests that the expanded range of coyotes has not curtailed deer populations in eastern US states...or this [paper](#), which explores the application of smartphone LIDAR in wildlife studies.

NORTHWEST SECTION REPRESENTATIVE NEWS

Harriet Allen



Hi All,

My second 3-year term as your Northwest Section Representative to Council ends this October at the Annual Conference. These last 6 years have gone by so fast. It has been such a privilege to have been able to serve in this position. I will be wishing our next Northwest Section Representative all the best serving on Council for the coming 3-year term. It's an exciting adventure and a wonderful opportunity to participate in helping the Society to grow, to provide the best benefits it can to members, and to engage in the wildlife policy issues of importance to us all. I want to thank you so much for letting me represent you these last 6 years. It has truly been my honor.

Here are some highlights from the Spring TWS Council meeting and other Council activities this Spring:

TWS Spring Council Meeting—The Spring Council meeting was held in Denver, March 3-4, 2019. In two of the most important aspects of the Spring Council meeting, we approved the TWS FY20 Operations Budget (July 2019 to June 2020) and FY20 TWS Operations Plans. These will guide headquarters operations and expenditures for the coming fiscal year.

There have been reorganizational staff changes at headquarters, with the departure of the Editor in Chief of *The Wildlife Professional (TWP)*. The headquarters staff and the Editorial Advisory Board put in an excellent effort to ensure that *TWP* was distributed on time. If you have some ideas for topics that you would like to see included in future issues of *TWP*, please get them to Barb Hill, the Northwest Section representative on the Editorial Advisory Board.

Strategic Plan—Council voted in a May Conference Call meeting to approve the updated TWS Strategic Plan for 2019-2023. This was not a major overhaul of the plan, but an update for the next 5 years. The major themes and Member comments were solicited at the end of 2018, and comments were addressed in the update. The Early Career Professional Working Group submitted comments to strengthen the role of mentorship in the plan. This has been a high priority for the Working Group and for Council. The Strategic Plan contains 5 core areas and strategies to implement those themes: Wildlife Sustainability; Leadership; Member Services; Organizational Integration; and Organizational Sustainability. The 2019-2023 plan will be posted on the TWS website.

Financial Status—Our financial status is excellent. We approved the FY20 budget and fully funded the TWS “Permanent Reserve Fund”, a set-aside intended to be able to cover 50% of the TWS Annual Budget. We have achieved and exceeded that goal to ensure financial security for TWS. At the March Council Meeting, a new Council Action Fund (CAF) was created. This fund is made up of funds that exceed those needed for the Permanent Reserve Fund; the CAF can be used to fund initiatives from the Strategic Plan. Five funding proposals that were received earlier were approved to be funded from the CAF at the May Council phone meeting. To further TWS international engagement, funds were approved to help support the 2nd Annual Conference on Wildlife Conservation and Management in Mexico and to support the International Wildlife Management Working Group symposium to be held at the International Congress for Conservation Biology in Kuala Lumpur, Malaysia, from July 21 to July 25 of this year. Funds were also approved to support Women of Wildlife activities at the Annual Conference, a new Ding Darling Institute that will be established at Drake University, and a Conservation Leaders for Tomorrow student workshop.

Policy Priorities—In January, we approved five policy priorities for TWS Staff and the Executive Committee over the next 2 years. These are intended to guide staff time on specific policy issues of importance to the wildlife profession. They were developed by the Policy Committee with substantial input from Chapters, Sections, and Working Groups. The five priorities are:

1. Advance the recommendations from the Blue Ribbon Panel on Sustaining America’s Diverse Fish & Wildlife Resources, to fund state efforts to conserve the full array of fish and wildlife species.
2. Work to ensure the Endangered Species Act retains science as the foundation for decision making while advancing meaningful legislative and regulatory modifications that enhance its effectiveness in conserving at-risk native wildlife and ecosystems.
3. Work to pass streamlined regulatory mechanisms that will provide the USFWS and state partners with the tools necessary to prevent the introduction and spread of invasive species and wildlife disease.
4. Support robust annual appropriations for the USGS Cooperative Unit program and other U.S. conservation programs that promote federal, state, and private partnership in wildlife conservation and management.
5. Support chapter and section efforts through continued enhancements to the Conservation Affairs Network and engagement of the Network and TWS working groups.

In addition, four issues were placed on a “Watch List:”

- The Farm Bill
- Wild horse and burro management levels
- Reinstatement of the previous definition of take under the Migratory Bird Treaty Act
- Working with other entities and the public to promote the value of and access to public lands.

Two issues from Chapters—recruiting female leadership and providing guidance on how indigenous people and their perspectives fit into wildlife management—will be worked into Council committee charges and will be referred to Working Groups.

Diversity Initiatives—The USFWS and TWS entered into a Cooperative Agreement in 2018 to increase diversity in the natural resource management workforce through professional development and recruitment efforts. They formed a writing team of FWS, TWS staff, and TWS members through an open call to TWS members and Working Groups. The writing team developed a draft report, identifying issues and solutions. The report, which is intended for decision makers and hiring officials in natural resource management agencies and organizations, was presented to Council at the Spring meeting and is currently being finalized after Council reviews.

International Involvement—In the past, TWS co-hosted international congresses every 3 years or so, but TWS has suspended that while Council, an *ad hoc* Council Committee, and the International Working Group are exploring how TWS should be engaged in international activities. Our current international engagement activities include:

- Applying for membership in the IUCN;
- Participating in international conferences hosted by other organizations the International Working Group will have a symposium at the International Congress of Conservation Biology in July in Kuala Lumpur;
- Providing sponsorship for the first Conference of Wildlife Management and Conservation in Mexico in 2018, which was very successful, with over 500 attendees; and
- Supporting a potential TWS Mexico Chapter.

Council and the Working Group are looking for member input and thoughts on how TWS can facilitate international engagement and provide leadership to better serve international members and their interests. The working group proposal for a panel on the topic has been accepted for the 2019 Reno Annual Conference.

Issue/Position Statements—A TWS Issue Statement on Wildlife Killing Contests was recently approved. This emerging issue was raised by several Chapters and developed through the Council Ad Hoc Committee on Position Statements. Following review by Council, it was approved by the Executive Committee, and is now posted on the TWS website.

Working Groups—With the addition of the Nutritional Ecology Working Group, which was approved by Council at the Spring meeting, TWS now has 26 working groups. The working groups cover a huge range of topics and are great networking opportunities. I would urge you to consider joining and getting involved with one or more of them. You can check them out on the TWS website.

26th Annual Conference—Our next annual conference will be in Reno, Nevada, from September 29 to October 3 and will be the first ever joint meeting with the American Fisheries Society. Registration is now open!

Elections!! The ballot for The Wildlife Society’s 2019 elections will be sent June 7 via email; members without an email address will receive a paper ballot in the mail. The ballot will include nominees for the positions of **Vice President of TWS** and the **Northwest Section Representative**. Two great candidates—**Shawn Cleveland** and **Grant Hilderbrand**—will be running for Northwest Section Representative. In addition, the ballot will include an amendment to the bylaws. The proposed amendment has been approved by Council for consideration, and now members will be asked to vote on the amendment. Voting will close July 1. The newly elected Northwest Section Representative to Council will be installed at the 26th Annual Conference in Reno.

Again, my deepest appreciation for being allowed to serve as your Northwest Section Representative to Council these last 6 years.

Best Regards & Happy Spring,
Harriet Allen
Northwest Section Representative to TWS Council

From the 2015-2019 TWS Strategic Plan:
“The privilege of possessing the earth entails the responsibility of passing it on, the better for our use, not only to immediate posterity, but to the unknown future, the nature of which is not given to us.”
Some Fundamentals of Conservation in the Southwest (1923)
Aldo Leopold,
President, The Wildlife Society, 1939-1940

Editor’s note: If it were possible to give a standing ovation in a printed medium, I’m sure Harriet would be basking in one right now. Her service and dedication to TWS, the Northwest Section, and WATWS, including a stint as Chapter President, have been nothing short of inspiring. Please join me in thanking Harriet for everything she has done for our profession and for the species and habitats to which we have devoted our careers.

CALL FOR COMMITTEES: WE NEED YOUR HELP!

Lisa Dowling

Whether you are seasoned wildlife professional or just beginning a career in the field, volunteering is a great way to continue your education, give back to the profession, and make a meaningful impact to wildlife in Washington State. The table on the next few pages presents a list of our Chapter committees that work to facilitate chapter operations and engage in the Joint Meeting planning effort. We are a volunteer-based, non-profit organization that is fueled by the passion and dedication of members like you. Please contact Lisa Dowling with questions or to see how you can get involved in 2019!
E-mail watws.president@gmail.com.

Committee	General Charge	Specific Targets This Year
Audit Need: Chair & 2+ Committee Members	Review the financial records and support documents of the Treasurer at least once every 2 years. The committee also shall review these records and documents prior to any change in the office of the Treasurer.	<ul style="list-style-type: none"> • Arrange with Treasurer to assemble pertinent records for review • Anticipate Treasurer change in April 2019 based on election outcome • Review records at 2020 Joint Meeting or earlier • Provide report at Chapter Business Meeting in March 2020.

Committee	General Charge	Specific Targets This Year
Conservation Review Need: Chair & 2+ Committee Members	Review legislative proposals, administrative regulations, environmental assessments and impact statements, and other subjects or issues affecting wildlife or wildlife habitat within the organizational area of the Chapter and make recommendations to the Executive Board for any action that should be taken by the Chapter. The Chair may ask any Chapter member to assist with reviews.	<ul style="list-style-type: none"> • Engage with TWS Conservation Affairs Network; respond to requests and provide state level support as needed. • Identify 2 focus topic areas for Committee attention/review • Consult with President on those topic areas • Prepare a review summary for both topics (format is Committee choice)
Education and Information Need: Chair & 2+ Committee Members	Seek and employ methods of informing the public of basic wildlife management concepts and of Chapter and Society activities and interests.	<ul style="list-style-type: none"> • Work with the Joint Meeting Planning Committee to identify ways to inform the public about learning opportunities associated with the 2020 Meeting/Workshops • Adapt/Prepare 1 wildlife conservation message medium that reflects a partnership (e.g., WATWS, WDFW, USFS, Cooperative Extension, WDNR, etc.) approach and is delivered to a lay public audience in Washington (conventional news and/or social media may be used for delivery) • Work with Chapter Newsletter Editor and Social Media Coordinator to identify a conservation-positive message to be incorporated in those periodically updated media.
Grant Need: 2 Committee Members	Solicit applicants and review applications for the award of grant funds. The Grant Committee will submit their recommendations for consideration by the Executive Board, who will make the final decisions. Application forms will be made available to all Chapter members at least 2 months before the application deadline.	<ul style="list-style-type: none"> • Work with Social Media coordinator to update website info/deadlines • Distribute information about grant process through Chapter info media consistent with a 15 Dec 2019 application deadline • Committee review complete by 20 Feb 2020 • Submit recommendation to Executive Board for approval by 28 Feb 2020
Membership Need: 2 Committee Members	Encourage the maximum number of qualified persons residing or working within the Chapter's organizational area to become members of the Society, the Northwest Section, and the Chapter.	<ul style="list-style-type: none"> • Identify up to 3 categories of wildlife and natural resource professionals in WA among which to target membership encouragement and promotion • Design and implement a campaign to communicate to those target groups • Work with President and Secretary to monitor resulting additions to Chapter membership by 2019 Annual Meeting.
Nominating and Elections Need: Chair & 2+ Committee Members	Prepare a slate of 2 candidates for each of the open elective positions from the Chapter voting membership. - All nominees must be Voting Members. - Prior approval shall be obtained from said candidates. - Nomination slate available to be submitted to the membership at least 30 days before balloting begins.	<ul style="list-style-type: none"> • Work, in consultation with Chapter President and President-Elect, to recruit sufficient nominees for President-Elect, Treasurer, and 2 Board member positions • Prepare solicitations for nominees through Chapter newsletter, social media, and e-mail blasts • Adhere to a time schedule that readies election materials for distribution to Chapter members at least 2 weeks prior to the 2019 Annual Meeting.

Committee	General Charge	Specific Targets This Year
Resolutions and Public Statements Need: Chair & 2+ Committee Members	Receive proposed resolutions and public statements from 2 or more members at any time, and shall prepare, submit and recommend action on such items to the Executive Board	<ul style="list-style-type: none"> Review and process statements submitted by members and other Committees. Prepare 1 statement on topic of Committee choosing in consultation with the President, Conservation Review Committee, and Education and Information Committee.
Workshop Need: Chair	Responsible for soliciting ideas, coordinating with other organizations, and developing proposals for training and workshop events. Committee shall provide the Board with recommendations for such events, and if approved, will plan and implement such approved projects with the assistance and oversight of the Board. The purposes of such training and workshop events will vary, but may include activities to generate funds for grants, scholarships, and other uses by the Board. Such events are also intended to improve the knowledge, skills, and abilities of the chapter members and other wildlife biologists, students, and professionals in wildlife-related issues.	<ul style="list-style-type: none"> Focus attention on developing workshops to be held in conjunction with the 2020 Annual Meeting. Schedule at least one workshop to take place outside of the 2020 Annual Meeting.

Committee Needs Specific to the Joint Annual Meeting

Program Need: Chair & 2+ Committee Members	Arrange the technical program for the Joint Annual Meeting and provide the President and President-elect with a proposed agenda for the Annual Meeting at least 2 months prior to the meeting date.
Sponsorship Need: Chair & 2+ Committee Members	Organize the solicitation of sponsorship to help fund the Joint Annual Meeting. Includes tracking and obtaining pledges as well as sponsorship logos for the program and sending Thank You notes to all sponsors.
Auction/Raffle Need: Chair & 1+ Committee Member	Plan and execute the auction and raffle at Annual Meeting Banquets by soliciting donations for auction and raffle items from local businesses and Chapter members, setting up the auction and raffle displays at the banquet, and selling raffle tickets. The committee may decide to include a silent or live auction, and/or a raffle based on the number of donated items available and attendance of the Annual Meeting Banquet.
Student Activities Need: 1+ Committee Member	Plan student activities for Annual Meeting which may include a Student Quiz Bowl, Mentoring Session, Resume Review, Student Breakfast with a Wildlifer or other. In addition to coordinating events, committee members also maintain contacts with local schools to help recruit students to attend the Joint Annual Meeting.
Registration Need: Chair & 1+ Committee Member	Set up and administer registration for the Annual Meeting. Depending on the capacities of partner organizations this may include set up and administration of the registration system (we have used 123 signup in the past), determining levels of registration including early/late, member/non-member/student, separate events: banquet, field trip, workshops etc. and working closely with the Budget Committee to determine appropriate registration fees, creating name badges and appropriate tickets for events, and/or staffing the registration desk at the Annual Meeting.
Plenary Need: Chair	Plan and execute the plenary session at the Annual Meeting by inviting a guest speaker or panel of speakers with presentation(s) relevant to the Meeting theme. Reports to the Steering Committee and Program Committee with room space and equipment needs for the plenary session.

WHAT'S NEW WITH WDFW

Terra Rentz, WDFW's Ecosystem Services Division Manager and a WATWS member, shared the latest WDFW Director's bulletin. Here are some highlights.

Trout Derby



The hugely popular statewide Trout Fishing Derby is entering its fourth season and continues through October 31. Conceived as a means to draw new anglers, youth, and families into fishing, the derby has drawn participation from

both businesses and anglers. Anglers who catch one of 1,000 blue-tagged trout can claim prizes provided by license dealers and other sponsors located across the state. The total value of prizes is more than \$39,000. For a list of lakes with prize fish and details on how to claim winnings, visit our [fishing derby webpage](#).

No-tame Campaign: Buttons the Elk



You may have heard of recent events surrounding an elk known to some as "Buttons." This story started like so many, with a baby animal

presumed to be an orphan who had become a pet to some and a pest to others. While she is now secure at the Woodland Park Zoo, her situation could have been much different. A team of WDFW Wildlife Program and Public Affairs staff worked to turn the unfortunate situation into an education opportunity. Their efforts produced more than 30 newspaper mentions, editorials, radio, and television appearances throughout the state, plus a social media reach exceeding 100,000. It was a chance to share the value of either leaving baby animals undisturbed or contacting trained rehabilitators who care for orphaned animals while being careful to avoid causing unnatural dependencies on people. Visit this [blog](#) for a regional wildlife program manager's perspective on the situation.

More Wild Spaces for Nature and People in Gray's Harbor County



WDFW just completed the first phase of an acquisition that, in partnership with Ducks Unlimited, adds 1,110 acres to John's River Wildlife Area in Grays Harbor County. The property includes saltwater estuarine habitats, old-growth spruce stands and cedar grove forests, not to mention freshwater wetlands and ponds. The purpose is to protect year-round habitat for Roosevelt elk, black-tailed deer, black bear, cougar, salmon, and numerous waterfowl and other bird species; in addition, the property is important component of the water supply for the city of Westport. WDFW expects to complete a second, final purchase of 1,750 acres before the end of this year.

REGIONAL REPORTS

What have our colleagues been up to lately? These reports help keep us informed of the various wildlife and habitat management, habitat restoration, and research projects occurring throughout Washington. Your work is important! If you do not see it represented here, please consider contributing to the next newsletter by contacting your regional representative. Contact information is on the back page of this newsletter.

SOUTHEAST REGION – Jason Fidorra, WDFW

Once again, wildlife scientists on at the Yakima Training Center have been busy. Here are a few highlights from their recent efforts.

Snake Fungal Disease—Collaborative Efforts on the Yakima Training Center

Colin Leingang (Joint Base Lewis-McChord Yakima Training Center) and Kevin White (Whitetail Environmental, LLC)

In 2018, Yakima Training Center (YTC) participated in a collaborative effort with Department of Defense Partners in Amphibian and Reptile Conservation (DoD PARC) and

Dr. Matt Allender, Wildlife Epidemiology Laboratory, University of Illinois College of Veterinary Medicine, to sample for snake fungal disease (SFD), an emergent disease caused by the fungal pathogen *Ophidiomyces ophiodiicola*. In a pattern eerily similar to White Nose Syndrome in bats or Chytrid fungus in amphibians, SFD causes skin lesions, physical deformity, and an alarming rate of mortality. This study has DoD-wide significance: military readiness could be negatively affected if conservation of snake populations decimated by SFD necessitates land-use constraints on military installations. Timely efforts to detect and eradicate the disease will benefit snakes as well as national defense.



Gopher snake after release on YTC.

Funded through the DoD Legacy Program, DoD PARC and Dr. Allender's team developed outreach materials, sampling protocols, and a training video to be used by military natural resource managers as they sample for SFD on their respective installations. The effort employs a citizen-science approach, providing necessary field materials to more than 80 military installation personnel. YTC Wildlife Program staff captured, weighed, measured, physically examined, and swabbed snakes they encountered incidental to other work during the 2018 field season. The samples were sent to Dr. Allender's lab to be tested for SFD. Test results will be available this year.

Kestrels Benefit from Collaborative Research on the Yakima Training Center

Colin Leingang (Joint Base Lewis-McChord Yakima Training Center) and Kevin White (Whitetail Environmental, LLC)

For the second consecutive year, YTC and 13 other DoD facilities are collaborating with Dr. Julie Heath of Boise State University (BSU) and others (UCLA, Saint Mary's University of Minnesota, Hawkwatch International, The Peregrine Fund, and the Environmental Laboratory of the U.S. Army Engineer Research and Development Center) to study breeding American kestrels. The 4-year project,

funded by the DoD Strategic Environmental Research and Development Program (SERDP), is titled "Variation in Phenological Shifts: How Do Annual Cycles and Genetic Diversity Constrain or Enable Responses to Climate Change." The project focuses on how birds respond to climate change through a large-scale, comparative study of American kestrels across North America (See <https://fullcyclephenology.com>).



Female American kestrel incubating eggs inside a nest box. "You lookin' at me?"



American kestrel nestlings in nest box with 1 unhatched egg.

In February 2018, YTC assisted BSU staff with placing and monitoring 20 kestrel nest boxes on YTC. A trail camera mounted to a false lid inside each nest box was programmed to take 3 photos every day to accurately monitor the nesting

phenology and productivity of the kestrels. YTC staff checked all nest boxes for occupancy and nest initiation beginning in early April 2018 and continuing every 4 weeks thereafter until occupancy was confirmed or until the end of the breeding season in August. Staff counted eggs in all occupied boxes, attempted to capture and band the adults if a full clutch was present (i.e., ≥ 5 eggs), and then returned to those boxes to sex and band chicks when they were 2 to 3 weeks of age.

We documented occupancy and nest initiation by American kestrels in 13 of the 20 nest boxes. Eggs were found in all 13 nest boxes (clutch size ranged from 1 to 6). In total, 12 nest boxes were successful (i.e., at least 1 nestling survived for approximately 15 to 25 days), and we banded 17 adults and 40 nestlings between April and July 2018.

Western Monarch Butterfly Conservation

Colin Leingang (Joint Base Lewis-McChord Yakima Training Center) and Kevin White (Whitetail Environmental, LLC)

Populations of monarch butterflies have declined dramatically across North America and particularly in the western U.S. Based on annual counts at overwintering sites in California and Mexico, the western population of monarch butterflies is experiencing a precipitous decline. Counts conducted in the 1980s produced estimates of approximately 10 million butterflies. The population estimate in 2017 was less than 200,000, and it dropped to approximately 30,000 in 2018. The species is currently under review for Endangered Species Act protection, with a listing decision expected June 2019.

YTC and several other DoD installations have been engaged in collaborative efforts on a project titled “Conservation and Management of Western Monarchs on DoD lands: Implications of Breeding Phenology.” The project employs systematic surveys and demographic models to determine the timing of monarch breeding across the West. The first 2 years of monitoring have already played a crucial role in understanding that the most recent declines occurred between the butterflies’ departure from their wintering sites and their arrival on summer breeding grounds.

With funding through the through the DoD Legacy Program, YTC staff have been working on this project in partnership with Washington State University (Associate Professors Dr. Cheryl Schultz and Dr. David James), the Xerces Society for Invertebrate Conservation (Sarina Jepsen, Endangered Species Program Director), and Tufts University (Dr. Elizabeth Crone and Postdoctoral Fellow

Leone Brown). We have requested a third year of funding to continue these efforts.

The combined results of all three years of research will enable DoD natural resource managers to balance habitat protection with training activities. The knowledge gained will be disseminated via a fact sheet, recommendations for best management practices, a webinar, and a final report, all with a goal of developing a rapid and focused response to the decline and hopefully precluding the need to list western monarch butterflies under the Endangered Species Act.



Washington Butterfly Association members collecting butterflies on YTC.

In addition to this project, YTC is also working with the Washington Butterfly Association on developing a local species list and field guide of YTC butterflies. The Washington Butterfly Association is dedicated to the enjoyment, conservation, and understanding of butterflies and their ecology through education and scientific understanding.

Yakima Training Center Contributes to Western States Short-eared Owl Survey

Colin Leingang (Joint Base Lewis-McChord Yakima Training Center) and Kevin White (Whitetail Environmental, LLC)

The Western *Asio flammeus* Landscape Study (WAfLS; <https://www.avianknowledgeinthewest.net/citizen-science/short-eared-owls>) recently expanded to include survey sites in Washington. The random sampling design did not place any study sites on YTC, but we conveyed our interest in participating in this study because we have documented extensive use of YTC by short-eared owls within the last 10 years. We identified 2 areas on YTC where we routinely observed short-eared owls, and we collaborated with the researchers on establishing “hot-spot” grids—areas subjectively identified and surveyed because of

short-eared owl prevalence. Results from the hot-spot surveys will be used to track relative abundance of short-eared owls among survey years.

We conducted surveys along 2 routes (11 points per route) during the evenings of March 19 and April 13, 2018, to coincide with the period when short-eared owls engage in their courtship flight. We observed 4 short-eared owls on one route during the March 19 survey, but none were detected during the April 13 survey. We plan to implement these surveys again this spring. Because we often observe short-eared owls along these same routes and elsewhere on YTC outside the hot-spot survey time (i.e., the 4-hour period around dawn), we intend to collaborate further with WDFW and possibly David Johnson of the Global Owl Project on developing a future sampling design and objectives to improve population monitoring of short-eared owls on the installation.

OLYMPIC REGION – Betsy Howell, USFS

Karen Holtrop: Forest Service Region 6 Wildlife Biologist of the Year

Betsy Howell, Olympic National Forest

In April, Karen Holtrop was awarded the Forest Service Region 6 Wildlife Biologist of the Year! This honor is bestowed each year to a district-level biologist of the Forest Service in either Oregon or Washington and includes recognition from the agency for dedication to wildlife management and conservation in the region. Karen has worked on the Olympic National Forest (ONF) since the mid-1980s and there are few wildlife species she hasn't been involved with. In the early years, the emphasis was on northern spotted owls and marbled murrelets, and Karen was responsible for locating the first murrelet nest on the Peninsula. Fast forward to 2018 and her crucial role in pollinator inventories and habitat restoration for these species, and she documented the first record of Beller's ground beetle (*Agonum belleri*), a Forest Service regionally sensitive species.

Several people, both within the Forest Service and outside the agency, supported Karen's

nomination and wrote about her dedication and many skills as a biologist and as a co-worker that have made her so successful over the years. Karen is reliable, professional, inclusive, innovative, and always willing to jump in to get work done or help someone. She is the kind of person who inspires the next generation of wildlife biologists by providing opportunities and sharing her enthusiasm, which is one of the most important things we can do. In terms of successfully managing ONF's Taylor's Checkerspot program, Karen has worked with and learned from other wildlife biologists, butterfly experts and researchers, District and Forest staff from multiple disciplines, habitat restoration specialists, and plant nursery managers, in order to implement a variety of survey and restoration projects. Her initiative, commitment to wildlife conservation, and ability to work with others have contributed to her success and achievement in endangered species recovery. On top of all the wildlife work, Karen manages Forest-wide habitat improvement and project tracking programs, writes snag creation contracts, performs environmental reviews of various projects, and carries out environmental education programs—notably the Dungeness River Festival in Sequim, which she attends faithfully every year.



Karen with plugs for Taylor's checkerspot habitat enhancement. Photo: Karen Holtrop



Karen Holtrop explaining Taylor's checkerspot work during a field trip to enhancement sites. Photo: Betsy Howell



Karen conducting a butterfly survey on ONF. Photo: Halle Lambeau

I have worked with Karen Holtrop on the ONF since 2004, but I first met her when we were both in the Peace Corps in Argentina in the early 1990s. It seems our paths had always been meant to cross: a decade before we met in Argentina, we also overlapped at Washington State University (we're both introverts, so we didn't actually meet each other at WSU). Karen and I both currently serve as district wildlife biologists for ONF, and while we each have different areas and species of interest, we also collaborate on various program-level projects. Karen is an incredibly dedicated, smart, and hard-working biologist, and I, along with many others, feel privileged to work with her. Congratulations, Karen, on this well-deserved award!

Olympic National Park Mountain Goat Removal and Translocation

Patti Happe (Olympic National Park) and Rich Harris (Washington Department of Fish & Wildlife, WDFW)

Olympic Mountains

On June 18, 2018, after years of planning and extensive public review, the regional director of the U.S. National Park Service signed a Record of Decision, authorizing the beginning of a plan to remove mountain goats (*Oreamnos americanus*) from Olympic National Park (ONP) and adjacent portions of the ONF. For the first few years of this work, the approved plan calls for most mountain goats to be captured live and transported to staging areas on the Olympic Peninsula, where they will formally become the responsibility of WDFW. From these staging areas, mountain goats will then be transported to pre-selected staging areas in the North Cascades, and then brought to release locations where they will be returned to the wild (see the Final Environmental Impact Statement and the Record of Decision for details of the rationale and plans:

<https://parkplanning.nps.gov/projectHome.cfm?projectId=49246>).

In September 2018, a total of 115 goats were captured in ONP, with most of the captures occurring near Klahhane Ridge, the northern portion of the Bailey Range, and on the flanks of Mount Olympus. Under a Memorandum of Understanding between WDFW and Northwest Trek Wildlife Park (NWT, an AZA-accredited arm of the Port Defiance Zoo and Aquarium, Tacoma, Washington), kids captured without their mothers were donated to NWT, who will care for animals until other qualified zoological parks with interest can adopt them.

The average processing time at the helibase was 39 minutes per animal and each goat was assigned a "goat shepherd" who stayed with that animal throughout the processing operation, ensuring that capture information was attached to the processing sheet and that data on that goat was recorded throughout the process. Each goat was evaluated by staff veterinarians for emergency medical conditions and treated if necessary. At least 5 people (often more) working up each goat. Data on weight, condition score, horn dimensions, morphometric measurements, sex, age, and lactation status were recorded. Samples taken included nasal swab, tissue for DNA analysis, blood, hair, and fecal samples. Photographs were taken of the horns and teeth of each animal.



Crates with goats. Shown is a crate with a "howdy door" allowing mother and kid to see and smell each other during transport. Photo: Rich Harris

Of the 115 animals captured, 6 died from capture-related injuries and 3 were euthanized due to being unsuitable for transport, including one billy that was known to be aggressive. Of the 106 animals that were removed from ONP, 6 were orphaned kids that went to NWT, while the remaining 100 went to the Cascades. Because we knew from

previous experience (Harris and Steele 2016) that mountain goats cannot be safely moved *en masse*, each animal to be translocated was placed in its own, specially built crate (see photo below). When ambient temperatures were cool, goats awaiting transport were placed in a shady area near the processing area until ready to be transported. If temperatures rose to a point where over-heating was a concern, goats were placed in refrigerator trucks where the ambient temperature could be adjusted to approximately 10°C (50° F).

Cascade Mountains

More than 70 volunteer drivers participated in the translocation effort, transporting goats to release sites following predetermined routes. Goats were transported in fridge trucks with up to 9 goats in each truck, or by pick-up trucks carrying no more than 2 goats. Pick-up trucks were used to move goats only when ambient temperatures were cool enough to allow safe transport without the use of additional controlled cooling. Each vehicle transporting goats had a team of two volunteers who took turns driving or navigating and maintaining communication with other transport vehicles and WDFW or ONP staff. Additionally, volunteers in personal vehicles accompanied the goat transport vehicles to provide any support needed. Communication was accomplished with personal cellular and satellite phones. Each fridge truck also carried a satellite phone and cell phone, which allowed WDFW and ONP staff to track their progress via the Internet and some communication by text message.

A total of 98 goats were released in the Cascades. Two large adult males died in transit, evidently from capture myopathy exacerbated by the stress of being confined in the crate that was judged to be too small (the capture crew subsequently ceased capturing adult males until we obtained use of 2 larger crates, which were designed for transporting bighorn sheep rams and were generously loaned to the project by Dr. Tom Stephenson, California Department of Fish and Game). Of the 98 animals, 70 had collars with GPS and VHF capabilities, 15 had VHF only, and 13 yearlings had no collars. Most animals left the crates immediately upon doors being opened. A few animals exhibited stiffness and mild limping, which we interpreted as resulting from confinement in the crate (no animals spent more than 24 hours in a crate); others showed no evident effects of confinement. Three animals appeared rigid and unwilling to move upon release, although all were clearly aware of their surroundings and appeared responsive. In all three cases, we pulled the animal from its crate, encouraging it to move via gentle prodding and lifting it up off the ground. In each case, after 2-3 minutes of immobility, the goat suddenly

sprang to its feet and bounded off in the direction that most previously released goats had selected.

As of December 20, 2018, we have documented mortality of 9 of the released mountain goats (7 adult females, 2 adult males). No mortalities of kids have been observed.

Rattlesnake Nanny

To date, we know of no encounters between translocated goats and humans that posed a risk of injury to the person. We have received a few reports of observations from WDFW's public "Report a Goat Incident" website, but none in which the goat approached the reporting party. We are unaware of any reports of property damage and/or crop damage caused by any translocated mountain goats.

The story of nanny 4940, who came to be known as the "Rattlesnake Nanny" (in part from the media coverage she garnered) merits some discussion here. This 3-year-old female (84 kg at capture) was captured on the first day of operations, September 10, 2018, at Klahhane Ridge, and released the next morning (September 11, 2018) at Sutton Lake. Both her capture and release were uneventful. On September 19, a Cedar River Watershed employee photographed her on a low-elevation bridge and noted that she appeared headed west. By September 27, 2018, she had had arrived at the Rattlesnake Lake Recreation Area, operated by Seattle Public Utilities, approximately 26 km (16 miles) from her release site, and was using a prominent cliff face called Rattlesnake Ledge as a rest site and for escape terrain.



Nanny 4940, who made a temporary home for herself on Rattlesnake Ledge in the Rattlesnake Lake Recreation Area (operated by Seattle Public Utilities), near North Bend, from September 26 to about October 7, 2018. Because she was already habituated to people and the trail is popular with day-hikers, many photographs like this were taken. WDFW and Muckleshoot Tribe biologists attempted to capture her, but she evidently had other plans and moved back to the release site, ~16 miles away, where she has remained since that time. Photo: Rich Harris

This goat quickly became the object of fascination and curiosity because the Recreation Area has popular hiking trails, the ledge itself is a common hiking destination, and because she was habituated to people (i.e., having lived her entire life near popular hiking trails she did not react to people, either positively or negatively). We received at least one report from the public of her “following” a hiker, but the judgement of those familiar with goats was that she showed no aggressiveness, nor did she exhibit particular interest in humans as a source of salt or food. Rather, our assessment is that she simply did not mind being around people, and her use of trails was independent of human use. When provided gentle negative stimulus, she retreated.

By the first week of October, it became clear that her continued presence at Rattlesnake Ledge risked a bad outcome, and the Seattle Public Utilities, the Muckleshoot Tribe, and WDFW agreed to plans to capture her using ground darting, and to move her to a more distant location. Following ground reconnaissance during the first week of October, a team of WDFW and Muckleshoot Tribe biologists attempted to capture her using ground darting on October 5. Although they had no trouble locating her, they were unable to move her to a position where she could be safely immobilized. The following day being a Saturday, the decision was made to wait until Monday, October 8, to make another attempt. However, her GPS collar indicated that on Sunday, October 7, she had begun moving eastward, away from Rattlesnake Ledge, and in the direction of her release. Within a few days, she had moved all the way back to the area of her release (near Goat Mountain), where human presence is uncommon.

To date, she has remained in the general area of Goat Mountain and has begun traveling with other released goats. We have no biological explanations either for her movement to Rattlesnake Ledge, her temporary sojourn there, or her return to the release site, except to note that had it not been for the ease with which she was observed by members of the public, her movements and behavior would not have been considered extraordinary in the context of the other 69 animals we followed during this time. However, her temporary presence in a high-use hiking area caused us to consider relocating her to less populated area, simply to avoid concerns from the public during the early stages of the relocation project.

2019

The second and third rounds of translocations are planned for July 8-20 and August 19-31, 2019. Unlike in 2018, we will stage captured goats in two areas: 1) in Olympic National Park, primarily at Hurricane Ridge as in 2018, and 2) on the Olympic National Forest, at the Hamma Hamma

Gravel Pit in July, and at the Mt. Ellinor trailhead in August. Adding a second staging area on the Olympic Peninsula will facilitate capturing goats in the southern and southeastern portion of the distribution.

Literature Cited

Harris, R.B. 2016. North Cascades Mountain Goat Restoration Program. Pilot Translocation Project (July 2016): Elkhorn Mountain (Oregon) to Goat Mountain (Washington). Progress report to stakeholders and interested public. Unpublished report, WDFW. August 9, 2016.

Cascades Frogs Surveys on Olympic National Forest Julie Tyson, WDFW

The objectives of this work are to document breeding success of *Rana cascadae* at a specific location and to mark and monitor individual animals for site fidelity, growth, and longevity. This site, consisting of one roadside ditch pond and four forested ponds in the Hamma Hamma watershed of Olympic National Forest, has been monitored since 2006. The area was discovered opportunistically while driving on the road and noticing egg masses in the ditch; later the forested ponds were determined to also be breeding sites. In recent years, only the ditch has been used for breeding, possibly owing to willow and cedar encroachment into the ponds. Air and water temperature data loggers are providing important information on when these ponds are drying up.

Through this work, we have become acquainted with one male who is now at least 14 years old. Photographs of spot patterns allow identification of individuals from year to year. This unique individual also has a distinctive orange spot on his nose. He was first observed in 2007 and was also seen in April 2019 and has been recaptured returning to the roadside ditch every year in between.



Mr. Orange Nose in 2007 (left) and 2019 (right). Photos: Julie Tyson

In May 2019, we documented hatching of the eggs in the ditch. The snow has melted in this area, so we are hoping sufficient water will remain to allow the tadpoles to develop enough to survive.



Roadside ditch pond in the Hamma Hamma watershed; Cascades frog tadpole cluster near center of photo. Photo: Betsy Howell

An additional project we are conducting is collection and analysis of DNA samples from across Washington, Oregon, and California to better understand the genetic differences, and the timing of divergence, between the *Rana cascadae* population on the Peninsula and the population in the Cascade Range in all three states. This information will be used to inform the upcoming status review for this species.



Very small tadpoles. Photo: Betsy Howell



Julie Tyson downloading water temperatures from the data logger at one of the forested ponds. Photo: Betsy Howell

PUGET SOUND REGION – Steve Hall, Point Environmental Consulting Network

Update on Muckleshoot Indian Tribe Black Bear Study—Year 3

Mike McDaniel and Mike Middleton, Wildlife Biologists, Muckleshoot Wildlife Program

With help from the Fish and Wildlife Service's Tribal Wildlife Grant, the Muckleshoot Wildlife Program began a black bear study in the White River watershed of western Washington in spring of 2017. As reported in a previous WATWS newsletter, the goal of the study is to identify habitat use, survival rates, and tree peeling behaviors, as well as estimate bear density in the 450-square-kilometer study area. So far, the Tribe has GPS radio-collared 38 black bears and collected more than 1,300 hair samples for DNA analysis.



Bear inside a barbed-wire hair snag looking at the scent attractant

The collars record locations every 15 minutes from April through June (peeling season) and then every 1.5 hours until bears den in November. Peeling season occurs in early spring, when young Douglas-fir trees are producing sugars. Bears use their dexterous paws to strip the bark, exposing the phloem, which contains the much-wanted carbohydrates. When bears strip just a section of bark off of a tree, the tree will survive. However, if a bear completely girdles a tree, the tree will quickly die, and the economic loss in certain stands hit hard by bear peeling can be substantial.

Timber managers often use a combination of methods to help reduce tree mortality due to bear peeling. Supplemental feeding in vulnerable timber stands (age 10-20), as well as management control hunts to reduce bear densities, have been thought to reduce peeling in certain stands. We hypothesized that if we could move bears using supplemental feed, we could reduce damage in vulnerable stands by concentrating bears in stands that are not suitable

for peeling. Data from Year 2 of the study are being analyzed to test this hypothesis.



A freshly peeled Douglas-fir. This tree will die

To assess tree-peeling behavior, we used location data and DNA swabs on peeled trees to identify individual bear clusters (i.e., a single bear in one location for 7 or more hours during the period between May 1 and June 30) and have investigated roughly 200 of these clusters from 28 different bears. Preliminary results show that females peel more than males. One young male did, however, peel trees in several different stands both years. Last year, two females accounted for 80% of the total damage we found. Although large males tend to hang out near the supplemental feeders, we have found they do not generally peel trees. The majority of clusters we investigate are either near rotten, ant-filled logs or open areas where grasses and forbs are abundant.



Muckleshoot Wildlife Program staff Leeroy Courville and Mike McDaniel with a collared sow.

In addition, we conducted 2 years of DNA sampling with hair snags to determine bear density. In 2017 we collected 670 hair samples from 62 hair snags and got a density estimate for our study area of 13.8 bears/100km². In spring

of 2018 we placed another 63 hair snag traps throughout the study area and collected more than 700 hair samples that are still being analyzed at the University of Idaho. Final collar data and DNA results will be analyzed in more detail when all collars are retrieved and lab analysis is done with hair sample genotyping.

Swan Mortality Continues on Puget Sound Wintering Grounds

Martha Jordan, executive director and founder of the Northwest Swan Conservation Association (NWSA), reported several trumpeter swan mortalities in the North Sound area this past winter. Of particular concern is a die-off that happened in mid-late March centered in the Crescent Lake Wildlife Area. The final toll over a two-week period was 63 trumpeter swans dead, likely from lead shot ingestion.

A similar die-off occurred 4 years ago near Carnation, with at least 50 dead in a 2-week window. Martha notes that swan and other waterfowl mortality from lead shot and lead fishing sinkers is an issue that is not going to go away soon. WDFW and NWSA biologists have been working on the issue, including recovering and documenting carcasses, estimating additional deaths from feather piles, and even chasing down lead-sick birds for treatment. The group is also working to reduce lead in swan feeding grounds.

Martha's interest in swans began in the late 1970s while working on a snow goose research project in the Skagit Valley. She is now a leader in Trumpeter Swan management and conservation in the state of Washington, helping to protect key habitats and reduce mortality from lead poisoning and powerline collisions. She is also a contributor to the Washington State section of the Pacific Flyway Trumpeter Swan Management Plan.



Martha Jordan and Moss – an Irish water spaniel – at work on Crescent Lake picking up dead and sick swans. Photo: Marc Hoffman/SongbirdPhoto.com

Martha was featured in an April 2 Bellingham Herald story regarding the swan deaths and her work to prevent such deaths:

<https://www.heraldnet.com/news/lead-poisoning-suspected-in-local-trumpeter-swan-deaths/>

For more information on NWSWA, check out their website: <https://nsws.org/>

WATWS Participating in Skagit Wildlife Area Planning

WATWS Past-President, Bruce Thompson, is representing our chapter on the Skagit Wildlife Area Advisory Committee. The planning area includes 17,000 acres in Skagit, Snohomish, Island, and San Juan counties, including about 12,000 acres of estuary in Skagit County. Other areas include Bald Eagle Natural Area on the Upper Skagit and numerous shoreline parcels. It is a beautiful gem in the WDFW Wildlife Area treasure chest.



The 17,000-acre Skagit Wildlife area includes 16 parcels located across four north-Sound counties.

The Advisory Committee will help WDFW managers identify management needs, priorities, tradeoffs, and opportunities. WDFW has selected people representing a diverse group of interests and knowledge sets to serve on the committee, including representatives from the agricultural community, adjacent landowners, birders, hunters—and our very own WATWS representative, Bruce! The committee just formed and has not yet met, so stay tuned for developments.

The planning effort is part of WDFW state-wide effort to update management plans for all of its 33 wildlife areas to reflect current conditions, priorities, and issues. Learn more about the Skagit Wildlife Area Plan at <https://wdfw.wa.gov/news/wdfw-seeks-public-participation-skagit-wildlife-area-plan>

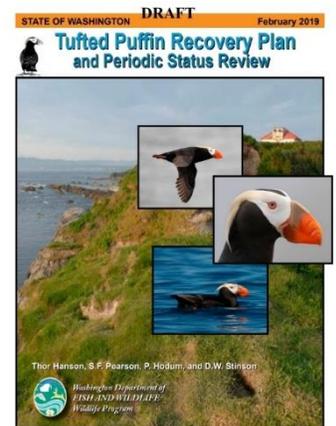
SeaDoc and WDFW Are Partners in Puffin Recovery

Thanks to Dr. Joe Gaydos, SeaDoc Society Science Director, for the news tip on the new Tufted Puffin

Recovery Plan! As he noted in his email, “who doesn’t love puffins!” <https://www.seadocsociety.org/>

This is the first recovery plan and second status review for the Tufted Puffin since the Washington Fish and Wildlife Commission listed the species as state endangered in April 2015. Monitoring data since the first status report in 2015 indicate populations remain well below thresholds recommended for long-term viability, justifying classification of the species as endangered.

This puffin recovery plan, prepared jointly by WDFW, SeaDoc, and the University of Puget Sound, represents another success of the public-partner relationship between SeaDoc and WDFW to advance species listings and recovery planning. According to the SeaDoc website, the public-private partnership between SeaDoc and the WDFW is significant because species are being listed as candidates faster than recovery plans can be prepared. Currently, more than 100 state candidate species are waiting for status reviews.



The public-private partnership is an innovative arrangement that could help relieve some of the stress and backlog from agencies struggling to meet growing workloads amid sometimes shrinking budgets.

More about the SeaDoc/WDFW Partnership:

A novel public-private partnership model for improving the listing of endangered species Hanson, T., Wiles, G.J. & Gaydos, J.K. *Biodivers Conserv* (2016) 25: 193.

<https://link.springer.com/article/10.1007/s10531-016-1048-3>.

NORTHEAST REGION – Annemarie Prince, WDFW

WDFW/UW Predator-Prey Project Updates—Year 3
Melia DeVivo, WDFW (Ungulates), and Lauren Satterfield, UW (Carnivores)

The Predator-Prey Project (PPP) has partnered with the Predator Ecology Lab under Aaron Wirsing at the University of Washington to study competitive relationships between wolves and cougars. This project aims to understand whether and how (a) the recolonization of wolves in Washington State is impacting cougar resource

selection and (b) the co-occurrence of wolves (*Canis lupus*) and cougars (*Puma concolor*) impacts risk landscapes for ungulate prey. These investigations are considered alongside anthropogenic land use to further characterize how human presence influences movement and resource use for both predators. WDFW and UW currently have GPS collars on 34 cougars and 5 wolves (across 3 packs) in Okanogan, Stevens, and Pend Oreille counties. Feeding sites of wolves and cougar revealed varied diet including mule deer and white-tailed deer, with a smaller number of moose, elk, porcupine, raccoon, and beaver. Data will be used to model differences in wolf and cougar resource selection along a gradient of wolf density and to map resulting ungulate landscape risk zones across the study sites in relation to habitat and anthropogenic characteristics.

During the winter of 2016/2017, WDFW and the UW began a 5-year research project designed to investigate the effects of recolonizing wolf populations on sympatric carnivore and ungulate species. The PPP relies on capturing and collaring both ungulates and carnivores for the study. In Year 3 of the winter capture season, WDFW and UW successfully deployed collars on cougars and wolves in Okanogan County, and white-tailed deer, cougars, and wolves in Stevens and Pend Oreille Counties. Various capture methods were used depending on terrain and species, including aerial darting, clover trapping, box traps, a suspended net gun, and ground darting. Captures, data collection, and analyses are slated to continue through 2021.



PhD student Taylor Ganz and her field crew process a white-tailed deer fawn captured in a clover trap

The wolf-cougar component of the Washington PPP entered its third winter this year. As of March 2019, GPS collars have been deployed on 50 different cougars and 11

wolves as part of the study. Both species utilize a landscape of forested public land and private land used by local communities for agriculture, ranching, timber harvest, hunting, and other recreational and economic opportunities. Collars have allowed us to visit 549 potential feeding sites (places where wolves or cougars may have scavenged or killed prey). These data will allow us to investigate how these two carnivores interact with one another, with the deer and elk they prey on, and with the complex landscapes they traverse.



PhD student Lauren Satterfield (left) and technician Nate Rice (right) deploy a GPS collar on a young male cougar as part of the Washington Predator-Prey Project. Photo: Caitlin Kuper

For more information about the WDFW/UW Predator-Prey Project, visit the project website at <https://predatorpreyproject.weebly.com/>

Translocation of Sharp-tailed Grouse from British Columbia to Washington

Michael Schroeder, WDFW

The sharp-tailed grouse was historically an important gamebird in the state of Washington. Following many years

of range contractions and population declines, the grouse is now listed by the State as an endangered species. From April 13 to April 26, 2019, biologists with WDFW led an effort to translocate sharp-tailed grouse from an area near 70-Mile House, British Columbia, to Okanogan County. Participants included Research Scientist Michael Schroeder, Wildlife Biologists Derek Stinson, Jeff Heinlen, Michael Atamian, Scott Fitkin, Carrie Lowe, Sidra Blake, Jim Olson, Bryan Dupont, Ellen Heilhecker, and Chris Sato, Veterinarian Dr. Katy Haman, Colville Confederated Tribes Wildlife Biologists Oz Laspa and Jarred Erickson, Douglas County PUD Wildlife Biologist Jason Schilling, Okanogan Conservation District Biologist Allisa Carlson, National Wild Turkey Federation Biologist Dominic Bachman, retired British Columbia Wildlife Biologist Doug Jury, British Columbia Recreational Fisheries and Wildlife Programs Deputy Regional Manager Dave Reedman, and British Columbia Recreational Fisheries and Wildlife Programs Ecosystems Biologist Shauna Jones.

The translocated birds included 19 females and 19 males, with approximately half fitted with radio transmitters. The transmitters included two solar PTT transmitters donated to WDFW by a volunteer, Leslie Robb. The logistics of the translocation have been improved so that birds can be released approximately 10 hours after they are captured, despite the extended processing time, long travel distance (300 miles), and international border crossing. Birds will now be monitored for movement, habitat use, productivity, and survival. Translocations such as these are important for augmenting populations and for maintaining genetic diversity.



Translocation lead Biologist Jeff Heinlen setting up traps in British Columbia. Photo: M. Schroeder



A translocated male sharp-tail wearing one of the new high-tech solar transmitters.



WDFW Scientist Michael Schroeder banding a sharp-tail prior to translocation. Photo: S. Fitkin



Week one participants in the sharp-tailed grouse translocation included (from left) Biologist Atamian, Research Scientist Schroeder, Biologist Heinlen, Biologist Lowe, Biologist Blake, Biologist Stinson, PUD Biologist Schilling, Biologist Fitkin, and Biologist Olson. Photo: WDFW

BE A MEMBER!

For more information about the Chapter, including membership forms, please visit our [website](#). If you have questions regarding your membership status, our Chapter Secretary, Teresa Lorenz, will be happy to help you out (watws.secretary@gmail.com).

The Wildlife Society—Washington Chapter

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What's with all the committee vacancies?

It's a mystery.

Help us solve the mystery! See page 9.



Bonus photo! Up close and personal with a female sharp-tailed grouse.
Photo: S. Fitkin, WDFW.

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