

The Washington Wildlifer

Newsletter of the Washington Chapter of

The Wildlife Society



MESSAGE FROM THE PRESIDENT

Katy Stuart



Happy Fall, Washington Wildlifers! I hope your summer was enjoyable and productive (i.e., lots of pool time practice for our upcoming annual meeting at Great Wolf Lodge!). The change in seasons brings changes to the nature of our work in the field and the office, and it offers a great opportunity to reflect on changes that have occurred over the past year. New

wildlife policies, including the Recovering America's Wildlife Act, are gaining momentum, while other existing laws are expiring (e.g., the Farm Bill), or are in the process of being updated (e.g., the Endangered Species Act). New research findings are changing the way habitats and species are managed, new wildlife corridors are being created, and the general public is becoming increasingly engaged in wildlife recovery efforts for iconic species such as orca whales. There have been some great changes happening within the Washington Chapter of the Wildlife Society as well.

The theme for this year's Joint Annual Meeting is **Connecting Science and Management Through Communication** (see [Lisa's piece below](#) for more exciting details!). Increasing communication among wildlife professionals in our organization has been a goal for this year, and we are off to a great start! Our Vice President, Sara Hansen, has been hard at work keeping our website content up to date and our social media channels active. WA-TWS members have volunteered to fill in vacancies on committees. Many of these members are serving on a committee for the first time! Thank you to these members for being brave and trying something new. Our representative to the Northwest Section (Lisa Dowling) and our Conservation Review and Education and Information committees have been increasing communication between WA-TWS, the Northwest Section, and the Conservation Affairs Network.

WA-TWS is also increasing communication and strengthening our relationship with the Washington Department of Fish and Wildlife. Stay tuned for more details in the spring newsletter!

There are still plenty of opportunities to get involved with WA-TWS. Boost your own level of communication and create change!

- **Share your photos!** We desperately need wildlife photos for our newsletters, social media posts, and membership emails. Any and all wildlife species are acceptable for photos, as are landscapes, native plants/flowers/trees, and wildlife biologists engaged in our work. We now have a shared Google drive for storing photos and WA-TWS documents. Contact Teresa Lorenz (our chapter secretary) or myself for details on how to contribute photos.
- **Run for a board position** (see [Sara's piece below](#) for 2019 election opportunities). Think of the networking and leadership opportunities!
- If you don't have time to volunteer right now, **nominate someone** who does, and **make your voice heard** by voting in our next election before the 2019 Meeting.
- **Nominate a colleague for an award** (see [Bill Vogel's piece below](#)).
- Share what you are working on with an **oral or poster presentation** at the Annual Meeting! The joint meeting planners have scheduled additional space for contributed papers and posters this year, so we can hear from you!
- If you don't want to present a poster or a full 20-minute talk, **consider presenting an Ignite talk**. These 5-minute presentations are fast-paced and lots of fun!
- **Attend the annual membership breakfast** at the Joint Annual Meeting.

I look forward to seeing you in Grand Mound at the end of February!

Autumn 2018

In This Issue:

Message from the President.....	1
2019 Joint Annual Meeting.....	2
Student and Early Career Professional Incentives.....	2
Conservation Communication Workshop at Joint Meeting.....	4
Be A Meeting Sponsor.....	4
News of Note from National.....	4
Upcoming Election.....	6
We Have Money for You!.....	6
Awards and Recognition.....	7
Northwest Section Representative News.....	8
Regional Reports.....	11

2019 JOINT ANNUAL MEETING

Lisa Dowling

Planning for our Joint Annual Meeting with the Society for Northwestern Vertebrate Biology and Northwest Partners for Amphibian and Reptile Conservation is well underway. Mark your calendars for February 25 through March 1, 2019, and plan to meet us at the Great Wolf Lodge in Grand Mound, Washington. Our theme this year is **Connecting Science and Management Through Communication**, and we are excited to offer a wide variety of technical workshops and sessions.

We invite all students and professionals to submit abstracts for presentations and posters, as well as ideas or concepts that you would like to see included in this year's meeting. Current workshops include

- A two-day workshop on **chemical immobilization**,
- A full-day workshop on **conservation communication** (see [Bruce's piece below](#) for more about that), and
- Half-day workshops on **scientific illustration** and **Federal wildlife law**.

Space in these workshops will be limited, so be on the lookout for more details regarding these exciting opportunities and plan to register early to beat the crowd.

Are you a student or an early career professional? We will be offering incentive programs to help offset the cost for you to attend this meeting. See [Bruce's other piece below](#) and visit our website for further application information beginning in mid-November.

Are you an artist who would like to showcase their artwork on the 2019 program cover? Please visit our website to learn more about this amazing opportunity to showcase your work.



Come to the meeting and bring the whole gang!
(Photo of Hooded Merganser and brood on Lake Quinault by Andrew Annanie, Quinault Indian Nation. See more great photos in Andrew's contribution to the [Olympic regional report](#).)

Finally, if you are interested in volunteering for this event, please contact ldowling@pheasantsforever.org and we will find out where your skills will fit in best.

STUDENT AND EARLY CAREER PROFESSIONAL INCENTIVES

Bruce Thompson

Washington Chapter of The Wildlife Society, Society for Northwestern Vertebrate Biology, and Northwest Partners in Amphibian and Reptile Conservation are collaborating to provide some free student lodging and Early Career Professional registration waivers for use during the 2019 Joint Meeting. That meeting will be at Great Wolf Lodge near Centralia, Washington from February 25 to March 1, 2019.

Undergraduate and graduate students in biological and natural resources programs (wildlife, forestry, conservation biology, zoology, environmental communication, etc.) that have an interest in attending the Joint Meeting are encouraged to apply. The incentive is free lodging for 3 nights (February 26, 27, and 28) at Great Wolf Lodge, the host facility for the Joint Meeting. Any students selected will be expected to volunteer 4 hours of time prior to or during the Meeting to help with the program. Up to 20 students may be selected for free lodging.

Early Career Professionals are those wildlife and natural resource professionals who are in a professional position less than 5 years following completion of their most recent academic degree related to their profession. This incentive will be a waiver of the applicable registration fee for the Joint Meeting. Up to 15 early professionals will be selected for waived registration.

These incentives are part of efforts by the partner organizations to promote student and early professional participation in the Joint Meeting by making cost of meeting attendance more affordable.

To be considered, **complete and submit the Application Form** included in organization newsletters or posted on the Meeting Website (<http://wildlife.org/washington-chapter/annual-meeting/>) by **January 7, 2019**.

Hey! Be sure to check out next year's **International Urban Wildlife Conference**, right in our own back yard: **June 2-5, 2019, Portland, Oregon.**

<http://urban-wildlife.org/>

Application for Student Lodging Incentive/Early Career Professional Support

(for natural resources students at educational institutions in North America)

(for Early Career Professionals (ECP) within 5 years since starting work following most recent degree)

2019 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, WA

February 25 – March 1, 2019

Applicant Information:

Name: _____ Gender: _____

Address: _____

Telephone and E-mail: _____

Educational Institution or Employer Name: _____

Academic Major OR Professional Position: _____

Advisor/Supervisor Name: _____

Education/Employee Level: Undergraduate Masters Doctoral ECP

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 26, 27, and 28 February 2019. 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.
- Early Career Professional Recipients will be provided a Registration Fee Waiver
- Any student or ECP 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 27-28 February.

Submit completed application (electronically preferred [e.g., .pdf]) to arrive **by January 7, 2019** to:

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

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

CONSERVATION COMMUNICATION WORKSHOP AT JOINT MEETING

Bruce Thompson

Please consider participating in a Conservation Communication Workshop scheduled in conjunction with the 2019 Joint Meeting of the Washington Chapter of The Wildlife Society, the Society for Northwestern Vertebrate Biology, and Northwest Partners in Amphibian and Reptile Conservation. The workshop will be at Great Wolf Lodge on Tuesday, February 26, 2019 from 8:00am to 5:00pm. The workshop objective is to introduce and explore key facets of effective communication processes in natural resources conservation settings among a variety of resource backgrounds to help participants think and judge as professionals. Exercises and discussion among workshop participants and the leader will emphasize examples of communication influences in our profession, including:

- Elements of effective communication
- Attitudes toward wildlife as communication influences
- Decision-making in the work place and groups
- Thinking strategically and forming effective objectives
- Working with other disciplines and citizenry
- Working with media professionals
- Diffusing innovation
- Exploring advocacy in the professional setting

The workshop is applicable to students, academic staff, faculty, biologists, managers, and other professionals engaged in any aspect of education, research, management, restoration, or other dimensions of natural resources conservation. Workshop leader is Dr. Bruce Thompson, recent Past President of The Wildlife Society, past state wildlife agency director, former federal research wildlife biologist, conservation and management programs administrator with multiple state wildlife agencies, and Conservation Communication course instructor for 12 years at New Mexico State University. Class size will be limited to 30 registrants to promote effective interchange during the workshop, so plan to get registered early. Workshop registration (\$30) will be available in conjunction with Joint Meeting registration, which will open by early December 2018. Be watching partner organization websites for registration announcements and procedures.

BE A MEETING SPONSOR

Katy Stuart

WA-TWS, SNVB, and NW PARC are seeking sponsors to help us provide more opportunities for student engagement and other conservation endeavors associated with the 2019 joint meeting in Grand Mound. Sponsors can participate at the following levels:

- Platinum (\$2,400+)
- Gold (\$1,800 - \$2,399)
- Silver (\$1,200 - \$1,799)
- Bronze (\$500 - \$1,199)
- Supporting (\$100 - \$499)
- Raffle/Auction Item Donation (any item and value)

Each level entitles the sponsor to different benefits depending on the type and amount of the contribution. Supporting sponsors may choose whether their pledge should (a) help a student attend the meeting or (b) go toward the travel expenses of a plenary speaker. All sponsors are acknowledged in program materials as well as visually and verbally throughout the joint meeting. Please help by identifying prospective sponsors that may be contacted with more detailed information and the necessary forms. The deadline to arrange sponsorships is December 31, 2018, so act soon. Please send contact info (name, address, phone/email) to WA-TWS Past President Bruce Thompson (bcthompson248@gmail.com).

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

Nancy Sasavage, TWS Director of Publications and Communications

TWS' three premier wildlife journals—*The Journal of Wildlife Management*, *Wildlife Monographs* and the *Wildlife Society Bulletin*—support our mission to achieve a positive impact on the sustainability of wildlife populations through the dissemination of science-based wildlife conservation and management.

With online access now included as a membership benefit, TWS members are increasingly engaging with the latest research findings in wildlife science.

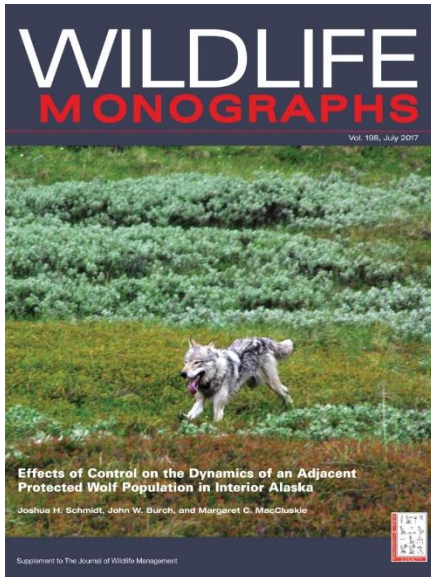
See the next page for a list of the 20 most-downloaded papers in 2017.

Did you know?

Membership in The Wildlife Society now includes free, online access to *The Journal of Wildlife Management*, *Wildlife Monographs*, and *Wildlife Society Bulletin*. Learn more about TWS' journals by [clicking here](#), or visit wildlife.org to see the complete list of membership benefits.

TWS top downloads from 2017

1. [Free-roaming cat interactions with wildlife admitted to a wildlife hospital](#)
2. [Polar bear attacks on humans: Implications of a changing climate](#)
3. [Determining kill rates of ungulate calves by brown bears using neck-mounted cameras](#)



4. [Effects of control on the dynamics of an adjacent protected wolf population in interior Alaska](#)
5. [Predicting eagle fatalities at wind facilities](#)
6. [How publishing in open access journals threatens science and what we can do about it](#)

7. [Clarifying historical range to aid recovery of the Mexican wolf](#)
8. [Bat mortality due to wind turbines in Canada](#)
9. [Online hunting forums identify achievement as prominent among multiple satisfactions](#)
10. [Inefficiency of evolutionarily relevant selection in ungulate trophy hunting](#)
11. [Investigating impacts of oil and gas development on greater sage-grouse](#)
12. [The role of domestic cats in the admission of injured wildlife at rehabilitation and rescue centers](#)
13. [Consumption of intentional food subsidies by a hunted carnivore](#)
14. [How open access is crucial to the future of science](#)

15. [Predators, predator removal, and sage-grouse: A review](#)
16. [Annual elk calf survival in a multiple carnivore system](#)
17. [Demography of an increasing caribou herd with restricted wolf control](#)
18. [Manipulations of black bear and coyote affect caribou calf survival](#)
19. [Winter diet and hunting success of Canada lynx in Colorado](#)
20. [Overpasses and underpasses: Effectiveness of crossing structures for migratory ungulates](#)



Log into [Your Membership](#) to read these papers by going to the “Publications” tab.

We want to thank these authors for choosing to publish with TWS.

Next time you are ready to submit a paper, we hope you will choose a TWS journal as your publication outlet! Here’s just a few reasons why you should:

- Universal author guidelines
- Rapid, rigorous peer review
- Discounted page charges for members
- Open access option available



Did you know?

Tired of paying an arm and a leg for the latest wildlife science and management textbooks and manuals? [The Wildlife Society](#), in cooperation with Wiley publishing and Johns Hopkins University Press, offers select titles to our members at a significant discount of 25-30 percent off. Check out a few of the titles at the [TWS book store](#).

UPCOMING ELECTION!!

Sara Hansen

If you would like to play a larger role in WA-TWS, build leadership experience, and help promote the good science being done by our members, please consider running for one of the positions up for election this year!

- **Vice President**
- **Treasurer**
- **Board Member (2 positions)**

VICE PRESIDENT – The Vice President will serve 4 years. The first year will be shadowing the President-elect to learn about building the annual meeting and looking for opportunities for the following year. The VP will also be in charge of updating the website. After the first year, the VP will then become the President-elect for one year, then President the following year, and then Past President for 1 year.

Time commitment is generally minimal (~1-2 hours per month) during the summer and picks up in fall as annual conference organization begins (~1-4 hours per month). Greatest demand is in winter directly preceding the conference. While I don't have a good guess on the conference time commitment, it is much lower than in the past because the workload is now split among 4 people (VP, Pres-elect, Pres, and Past Pres).

TREASURER – The Treasurer serves a 2-year term and is responsible for the funds of the Chapter, maintenance of the membership rolls, and submittal of complete financial reports to the last annual Chapter meeting of his/her term of office (brief updates are also provided during quarterly Board Meetings). Duties also include the receipt and disbursement of funds.

Time commitment is generally minimal (up to 1 hour per month) during the summer and picks up in fall as annual conference organization begins (~1-2 hours per month). Greatest demand is in winter, directly preceding and following the conference, as more financial transactions are happening (~1-4 hours per month).

BOARD MEMBER – Board Members serve a 2-year term and assist with committees and other activities as need or interest allows. Two positions need to be filled this year.

Time commitment is often minimal but depends on how involved an individual wants to be, generally more in months preceding the annual conference.

WE HAVE MONEY FOR YOU!

(STUDENTS, ARE YOU READING THIS?)

The deadlines for submitting applications for scholarships, research grants, and conservation funding are fast approaching. Don't miss out on these opportunities!

Scholarships

The Richard E. Fitzner Memorial Scholarship Fund provides up to \$2,500 toward tuition for wildlife-oriented biology students during the fall of their junior or senior year. The fund honors the late Dick Fitzner, a wildlife biologist, educator, artist, hunter, fisherman, naturalist, and past president of the Washington Chapter of the Wildlife Society.

Applicants must be biology students entering their junior or senior year in the fall of 2019 at a college or university in the state of Washington. Preference will be given to students with a demonstrated need for financial aid; a history of experiences, activities, and interests in the field of wildlife biology; college course work applicable to field biology; and superior grades.

An application form and instructions can be found under the heading "Scholarships" at the Washington Chapter web site: <http://wildlife.org/washington-chapter/grants-scholarships/>. College transcripts and two letters of reference from instructors or past employers must accompany the application form. Applications for Fall Semester 2019 must be received by **December 15, 2018**.

Please address questions and applications to the Scholarship Committee Chairperson:

John Grettenberger
3138 Wilderness Dr. SE
Olympia, WA 98501
360-923-1424
grettenbergerj@gmail.com



Yellowhead bumblebee (*Bombus flavifrons*), male (left) and female (right). Photo by Karen Holtrop.
See more in Karen's contribution to the [Olympic regional report!](#)

Research Grants

WA-TWS provides **grant money for wildlife research projects** in Washington State each year. Funding requests cannot exceed \$2,500. Student proposals are encouraged. The Grant Committee reviews proposals and the Board makes final funding decisions.

Proposals should be 2-3 pages in length (not including *curricula vitae*) and include the following information: Introduction, Methods, Timetable, Budget, Work Products, and a *curriculum vitae* for each proposer.

Proposals will be rated based on the following criteria:

- The importance of the question.
- Adequacy of proposed methods to meet project objectives.
- Likely success of achieving objectives given question, design, funding, and time period.
- Species management priority (e.g. threatened, endangered and sensitive species, important game species, etc.).
- Publication potential.
- Researchers' experience.
- Relative importance of the TWS monetary contribution to achieving research goals.

Grant recipients will be expected to present results of their project at a future annual meeting of the Chapter and/or provide a write-up for this newsletter. Recipients are also expected to be (or become) members of the Washington Chapter at the time the funds are received. Membership information is available at <http://wildlife.org/washington-chapter/membership/>.

To Apply: Send your proposal (pdf or MS Word document) Tony Fuchs (tony.fuchs@pse.com) by **December 15, 2018**. The grant recipient will be announced at the 2019 joint meeting.

Conservation Funding

WA-TWS will provide up to \$2,500 for a qualifying conservation project in Washington that advances interests of the Chapter. The next round of funding will be for work to be completed by end of calendar year 2019.

Conditions to qualify:

- Project will be conducted somewhere primarily in Washington (may include portions of neighbor states immediately adjacent to the Washington border).
- Project can be new or part of a conservation effort already underway.

- Work funded must be completed by end of calendar year 2019.
- Submission must be by a WA-TWS member or clearly indicate involvement of a WA-TWS member.
- A single project effort for the available amount is preferred, but Chapter will consider funding multiple conservation efforts at lesser amounts totaling the amount available.
- Funded activity can be on-the-ground actions or communication and outreach activities.

The project description should contain:

- Project title
- Objective(s)
- Location and spatial extent of the project
- Description of how work will benefit wildlife populations and/or habitat conservation
- Species and/or habitats to be benefited
- Identity of any project partners
- Brief statement of how WA-TWS participation and funding will be acknowledged as part of project outreach or other awareness building
- Digital images may be included to illustrate project
- Contact name, address, phone, and e-mail for person submitting.

To Apply: Send a project description (.pdf or MS Word document, no more than 3 pages) to Tony Fuchs (tony.fuchs@pse.com) by **December 15, 2018**. Funding approval will be communicated by January 2019. If you have questions, please contact Tony via e-mail or call him at 425-831-4323.



Burrowing owl using a Seibert stake as a perch.
Photo: Katie Gauthier
What's a Seibert stake?
Read about it in the [Southeast region report](#).

AWARDS AND RECOGNITION

Bill Vogel

Lots of great people are doing lots of great work, and their efforts deserve to be recognized. Do you know someone who makes a substantial contribution to conservation, does more than they need to, uses foresight and anticipation to address problems early, shows their dedication, makes valuable contributions, creates effective partnerships, or any number of other valuable contributions to our field? Well, tell us about them!

We are always on the lookout for people and organizations whose achievements merit recognition for any of the following WA-TWS chapter awards:

- Conservation
- Stewardship
- Partnership
- Outreach
- Foresight
- Support to the Chapter
- Special Achievement
- Leadership in Conservation

Check out the descriptions of the award categories at <http://wildlife.org/washington-chapter/awards/>, think about the people you know, and tell us about your nominees. All it takes is a brief message to Bill Vogel, our awards committee chairperson. If you have **ANY** questions or want to discuss ideas, please call Bill at 360-753-4367 or write him an e-mail (william_o_vogel@yahoo.com).

NORTHWEST SECTION REPRESENTATIVE NEWS

Harriet Allen

Hi All,

Fall Council Meeting – The TWS Fall Council meeting was held October 6-7, 2018, in Cleveland, Ohio, in conjunction with the 25th Annual Conference. Council consists of the Executive Committee and Representatives of the 8 TWS Sections. New Executive Committee officers are: President Darren Miller, President-Elect Gary White, Vice-President Carol Chambers, and Immediate Past President John McDonald. Colleen Hartel is the Student Liaison to Council.

Washington Chapter member **Bruce Thompson** completed his 4-year term from TWS Vice-President to Immediate Past President. He deserves a huge round of applause for all of his dedicated work on behalf of The

Wildlife Society and its members over the last several years. I know he'll be continuing to contribute at all levels of the Society. **Thanks for all you've done, Bruce!!**

Membership – The Wildlife Society CEO Ed Thompson reported at the Fall Council meeting that TWS had **10,147** paid members; with **595** Give Back Program members, the total member count was **10,742**. If you haven't taken advantage of it yet, the Give Back Program is an opportunity for members to give a free 6-month TWS membership to someone when you renew your membership. It's a great chance to share the benefits of TWS membership with your colleagues! <http://wildlife.org/giveback/>. TWS also proceeded with a pilot rollout in the Northeast of an "Affiliates" monthly e-Wildlifer to connect with chapter and section members who are not currently TWS members.

Finances & Operations Plans – There was great news on the financial front at the Fall Council meeting. TWS has not only achieved but has surpassed its goal of having the permanent reserve fund (aka "the rainy day fund") with enough funds set aside to cover 6 months of operating costs, should the need should ever arise. We also received glowing reports from the auditors on our financial status and reporting. We will be approving the TWS FY20 budget (July 2019 – June 2020) and 2020 Operations Plans at the Spring 2019 Council meeting.



Annabelle Pfeffer, ONF Special Uses Resource Assistant, with a Beller's ground beetle (*Agonum belleri*). Photo: Karen Holtrop. See more critters, large and small, in the [Olympic regional report](#).

Strategic Plan – The Strategic Plan Review Ad Hoc Committee presented a draft of the next 5-year Strategic Plan (2019-2023), building upon the current (2015-2019) Plan. The draft will be sent out to members for a 60-day review, and a final version will be presented to Council at the March 2019 meeting for approval. The current Strategic Plan can be found on the TWS website at <http://wildlife.org/operations-and-finance/>.

Bylaws Changes – Two bylaws changes were approved by TWS membership during the summer: 1) elimination of Council members voting by proxy; and 2) changing the quorum for Council meetings from 5 to 9 members. These changes established consistency with Washington DC codes for non-profit organizations such as TWS.

Government Relations – Keith Norris, TWS Director of Wildlife Policy and Programs, has been working with staff to communicate with policy makers on wildlife issues important to TWS. One of the most important current issues is getting support for the **Recovering America's Wildlife Act** (H.R. 4647). Caroline Murphy, TWS Government Relations Program Coordinator, has been working with congressional delegations and the TWS Conservation Affairs Network of chapters and sections to garner support for the Act, which would dedicate \$1.3 billion annually for state fish and wildlife agencies to implement state wildlife action plans. TWS chapters and sections across the country have signed letters, organized support or partnerships and encouraged members of Congress to support the legislation. As of the first week of October, the House version of the bill had reached 100 cosponsors. Other TWS policy priorities include the Farm Bill reauthorization, Lacey Act authorities re: invasive species, and the Endangered Species Act. The TWS Policy Library, with policy briefs and fact sheets, is online at <http://wildlife.org/engage/policy/policyresources/>.

Position Statement – The TWS Position Statement on *Incorporating Wildlife Needs in Land Management Plans*, underwent a 60-day review by members. Comments were addressed, and it was approved by Council at the October meeting. The position statement combines a number of previous habitat position statements into one. Others that weren't incorporated into this position statement will have separate issue statements developed. Council also approved a charge to the Position Statements ad hoc Committee to move forward with developing an Issue Statement on Wildlife Killing Contests.

Certification – The Certification Liaison Ad Hoc Committee, which I chair, worked during the summer on evaluating the requirements for Certified Wildlife Biologist

renewal. This was in response to member concerns expressed to President McDonald regarding the requirements. After review, the committee proposed adding 4 new categories of professional development activities, in addition to the new category of Mentoring, for a total of 6 categories of activities that could count toward renewal. The change was approved by Council and the new applications will be posted on the TWS website, along with a revised application for AWB extension that include changes approved by Council in March.

The Certification Liaison Ad Hoc Committee will also be working prior to the March 2019 meeting to recommend a single Code of Ethics violation process for Council approval. Currently there are two processes, which differ from each other – one in the Code of Ethics and one in the Policies and Procedures Manual for Certified Wildlife Biologists. The goal will be to have a single process that addresses both.

TWS International Involvement – The Ad Hoc Committee on the Future of TWS International Involvement has been examining ways for TWS to engage in international involvement and what TWS hopes to achieve through international involvements. The Ad Hoc Committee is working with the TWS International Working Group to look for ways that TWS can achieve its objectives for international involvement. Current activities include:

- TWS provided support (\$5,000) for the 1st Annual Conference of Wildlife Conservation and Management in Mexico, which will be held November 14-16, 2018, in San Luis Potosi, Mexico.
- TWS will submit its application for membership in the International Union for the Conservation of Nature (IUCN) prior to December. This is one avenue for TWS to engage in international involvement.
- The TWS International Working Group is looking at the potential to submit a symposium proposal for the Society for Conservation Biology 29th International Congress for Conservation Biology, July 21-25, 2019, with an emphasis on Community-based Conservation.

2018 Annual Conferences – The **2018 TWS 25th Anniversary** conference was held in Cleveland, with the opening reception at the Rock & Roll Hall of Fame! There were about 1,650 attendees and networking opportunities were highlighted. TWS CEO Ed Thompson said, "Networking seems at an all-time high level and we're very, very proud of the results. We hope all conference attendees

walk away feeling they had a memorable, enriching experience that they will share with their colleagues and friends.” A common theme heard in many arenas was the importance of leadership and mentoring at all stages of our careers, from student to career to retirement.

Wini Kessler, the 2017 Aldo Leopold Award winner, gave an inspiring keynote address entitled *The Gifts of the Dying Wolf and other 'Aha' Moments*, which highlighted the importance of shifting perspectives throughout her career (<http://wildlife.org/wini-kessler-a-pioneer-for-women-in-wildlife/>).



She emphasized “the critically important role that everyone can play in helping ignite the scientific minds of the future.” “Whether it’s your own kids, your siblings or nephews and nieces, or grandkids or neighbor kids or your friends’ kids, whoever, please get them out of doors into nature. Get them to zoos and aquariums, natural history museums—all the places where curiosity can be fired up and your imagination run wild.” Wini is a former Northwest Section Representative to Council.

This year’s Aldo Leopold Award Winner, **Leigh Fredrickson**, has been instrumental in waterfowl management since 1942. He will speak at next year’s annual conference, which will be held jointly with the American Fisheries Society in Reno. It will be a great opportunity for cross-pollination and learning about common resource issues members of both societies are addressing. Council approved Louisville, Kentucky, as the site of the 2020 Conference.

2018 TWS Awards – Terra Rentz, WDFW, and **Jennifer Bakke**, Oregon Chapter member, were Northwest Section recipients of TWS Fellows awards. Congratulations! A new Wildlife Restoration Award for Pittman-Robertson projects was approved by Council, and clarifications were made to criteria for the TWS Fellows and Distinguished Service awards.

Nominations for 2019 National TWS Awards are due by May 1. PLEASE CONSIDER NOMINATING YOUR PEERS FOR THESE AWARDS – IT’S A GREAT WAY TO RECOGNIZE THEIR CONTRIBUTIONS! See wildlife.org/awards for the list of national awards and find out how you can nominate deserving colleagues. It would be great to have Washington Chapter members nominated for these awards.

If you’re not already a TWS member, there are lots of good reasons and great benefits to becoming a member of The Wildlife Society:

- Online access to all TWS journals, at no additional cost
- 6 issues per year of *The Wildlife Professional*
- Online Member directory to facilitate networking
- The eWildlifer e-newsletter, sent weekly to your inbox, providing you with links to the latest news from TWS headquarters, policy issues that impact wildlife and wild places, updates on activities and conferences from our TWS Local Network of sections and chapters across North America and wildlife news
- More than 100 TWS Talks from the most recent Annual Conference; members receive links to two presentations per week in the eWildlifer
- 25% discounts on Wiley scientific books and 30% discounts on Johns Hopkins books
- Increasing the impact of your voice on important wildlife policy issues by joining other TWS members in organized efforts to contact policymakers through our Action Alerts and Conservation Affairs Network
- Access to 25 members-only Working Groups (small additional annual fee) on a wide range of topics.

Northwest Section Representative – Heads up! My second 3-year term expires in October 2019 – I can’t believe how fast these two terms have gone!! Please be thinking if you, or members you know, might be interested in running for Northwest Section Representative. Two nominations will need to be submitted by the Northwest Section Board to TWS before March 1, 2019. If you or someone you know is interested in running, you can let the Northwest Section Board know. Nominees must be voting members of TWS.

From the 2015-19 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, 1939-40

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

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. If you do not see your important work represented here please consider contributing to the next newsletter by contacting your regional representative. Contact information is on the back page of this newsletter.

SOUTHWEST REGION – William Ritchie, USFWS

Willapa Bay Shorebird and Waterfowl Survey

Willapa Bay is a critical area for migratory waterbirds, including shorebirds and waterfowl, along the Pacific Coast. Despite the great importance of the Bay for these birds, natural resource managers lack basic information on how different species use habitats such as mudflats and eelgrass. This information is needed to improve conservation efforts for waterbirds and help identify potential ecosystem threats. To increase our understanding of how birds use Willapa Bay, a grid-based nearshore waterbird survey is being conducted around the entire Bay using primarily volunteer surveyors. Waterbird surveys will occur monthly in the fall (September, October, and November) and spring (March, April, and May) for the next 2 years.

The goal of this research is to collect baseline avian and habitat data for the Willapa Bay estuary. The study will be fundamental in tracking the responses of birds to habitat changes in the Bay and evaluating the health and vitality of



A flock of Red Knots on Willapa Bay. Photo: Kim Starke

the ecosystem and our trust species. Objectives include developing a standardized avian survey protocol integrating traditional and unmanned aircraft system (UAS) methods, constructing a habitat suitability model, and producing probability density maps for Willapa NWR and the entire

Willapa Bay estuary. The study is being funded through a Science Support Partnership grant between USGS and USFWS. Additional partners include WDFW, USDA Agricultural Research Service, Washington State University, and the Willapa/Grays Harbor Oyster Growers Association.

Willapa Bay and Long Beach Peninsula Bird Festival

The inaugural Wings over Willapa Bird Festival was held September 28-30. Hosted by The Friends of Willapa National Wildlife Refuge, the festival consisted of a weekend full of classes, workshops, guided tours, art, and more. The keynote speaker at a dinner and silent auction was Joan Walsh, former director of bird monitoring at Massachusetts Audubon Society. By the close of the festival at least 78 species of birds had been observed by participants.

SOUTHEAST REGION – Jason Fidorra, WDFW

Burrowing Owl Monitoring and Management on the Yakima Training Center

Kevin White, Stell Environmental Enterprises

Burrowing owl populations have declined across their range, including Washington State, where they are listed as a species of greatest conservation concern under the state's wildlife action plan. In the last decade, the Department of Defense (DOD) has taken a proactive approach to identify and implement conservation efforts (e.g., identify migratory movements) to protect this species from further declines. To support this effort, we initiated annual monitoring of burrowing owls beginning in 2009 to assess their distribution and status across DOD's Yakima Training Center (YTC). Since then, we have conducted 2,314 roadside broadcast calling surveys, resulting in 12 new nests located using this method; however, results have varied among years. We abandoned calling surveys this year in an attempt to improve our survey methodology and hopefully increase owl detections by focusing on walking-transect surveys within habitat that we modeled in 2017 as having a high probability of being occupied by burrowing owls. We surveyed 9.25 km² and have located 1 new nest burrow and 319 intact burrows that have the potential to be used by burrowing owls in the future. We learned that walking surveys were no better than calling surveys at detecting burrowing owl nest burrows, and in 2019 we will likely use a combination of broadcast calling and transect walking surveys.

In addition to surveying for burrowing owls, we began trapping and banding them in 2012 to obtain estimates of return rates, site fidelity, and overall nesting productivity. To

date, we have banded 94 individuals (26 after-hatch-year females [AHY], 13 AHY males, and 55 juveniles) with an average owl return rate of 10.6%. We captured 39 owls from 11 occupied burrows in 2018, of which we banded 7 females, 6 males, and 23 juveniles, and recaptured 3 that we had banded in previous years. We used remote cameras outside nest burrows to document the various stages of nesting and to obtain better estimates of the number of young fledged. Previous observer-based methods of counting chicks would have resulted in 41% fewer chicks observed compared to what we detected with the remote cameras. All nests in 2018 were successful, produced an average of 5.27 young per nest, and fledged 58 young.



Breeding pair of burrowing owls standing below a T-post topped with a Seibert stake.

Burrows used by burrowing owls on YTC are susceptible to collapse from military vehicle training activities. To protect these natural burrows on the landscape, we began installing Seibert stakes at occupied burrows in 2012. Seibert stakes are distinctively colored markers for areas off limits to military training for various purposes (e.g., to protect a rare plant population), and they have been working well to protect burrowing owl burrows. We place Seibert stakes within 10 m of each burrow to minimize impacts to training lands while maintaining burrow integrity. To date, we have Seibert-staked 24 burrows. Additionally, burrowing owls appear to use the Seibert stakes as perches because they provide added height beyond the natural surrounding vegetation making it easier for them to detect predators.

OLYMPIC REGION – Betsy Howell, USFS

Pacific Marten Surveys, Olympic National Forest (ONF) and Olympic National Park (ONP)

Betsy Howell, USFS

This has been a good summer for getting much survey work done for Pacific marten in ONP and ONF. Early in the season, we checked six stations we had installed during summer 2017, all of which were baited with lure dispensers developed by Robert Long at Woodland Park Zoo. These dispensers mete out a small amount of lure on a daily basis, thereby keeping a station “fresh” during the long months of winter when sites cannot be checked easily due to access issues and safety concerns. Two of the stations in the Upper Hoh watershed of ONP had photos of martens (possibly the same animal), so we were very pleased about this. This brings the total to 10 verified marten records in the Forest and Park. After checking these sites, the ONP wildlife crew of Liz Graham and Annie Doss refreshed the stations and also set up hair snares in the hopes of getting some genetic material; these will be checked again in October 2018.



Bushnell CameraName 53°F 11°C 09-27-2017 06:06:08



Bushnell CameraName 44°F 3°C 12-07-2017 00:34:01

Photos of Pacific marten in the Upper Hoh near Mt. Olympus

Though no martens were photographed on the ONF, we did have two stations capture pictures of two different fishers (one still with a radio collar and one without). The last release we did of fishers was in February 2010, so this collared animal is likely at least 9 years old. Additionally, all but one of the dispensers were still functioning, and while one had run out of lure, it still enticed one of the fishers to drop by anyway.



Fisher without collar (above) and with collar (below).

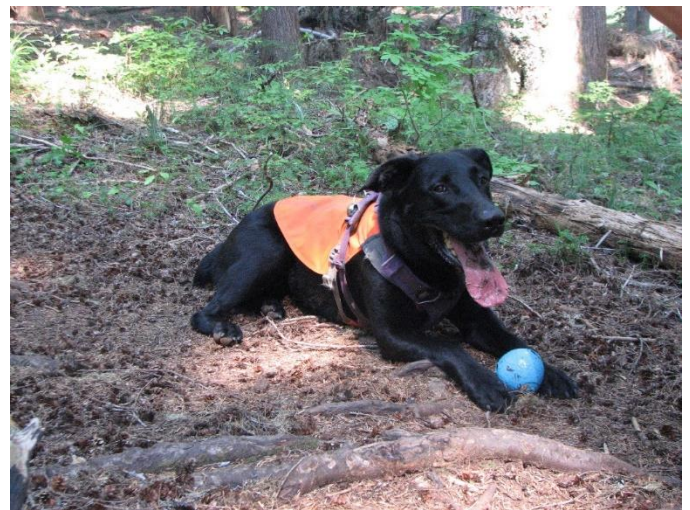
Later in the summer, with generous funding provided by the Forest Service/Bureau of Land Management Sensitive Species Program, we were able to install 24 more cameras with 12 lure dispensers. These were all placed in the National Park in areas near the verified records and other locations we felt would be good possibilities for martens. Crew members Brent Barry, Alyssa Roddy, and Matt Delheimer did an awesome job getting these stations installed in some very remote, challenging places. Much

gratitude goes to them, as well as Katie Moriarty for organizing their availability.

Last, but definitely not least, again with funding from the Sensitive Species Program, we were able to contract with University of Washington's Conservation Canines program to have dog teams survey trails for carnivore scat. The teams conducted surveys on 19 trails on the National Forest in August and collected 45 scat samples. Of these 45, only 3 rated as "high confidence marten" (DNA results still to come), but given we know we're dealing with what seems a very low-density population of the species on the Peninsula, this is still great news. Surveys of three trails had to be postponed due to the Maple Fire; we hope to see more positive results when we get to these trails in October.



Jake Lammi and Ranger examining one of the scats that appeared to be marten. Photo: Betsy Howell



Ranger the dog is a rescue animal who has been with Conservation Canines for about four years. When he finds a scat, he is rewarded with his toy. Photo: Betsy Howell

Updates from ONF

Karen Holtrop, USFS

An Olympic National Forest contract for cavity-nester habitat improvement is ongoing this fall in the Humptulips River watershed and Quinault Ridge area. Tree treatments include snag creation by topping and girdling trees and cavity creation. These habitat improvements are funded by timber receipts in commercial thinning areas.

The Forest continues to work with WDFW to conduct surveys for bats and to restore habitat for Taylor's checkerspot butterflies. In June, ONF and WDFW staff completed two bat exit surveys at the Quilcene Ranger District and counted about 60 bats. Results back from guano testing were negative for white-nose syndrome. Additionally, the Washington Conservation Corps crew is working at Taylor's checkerspot habitat areas this fall clearing slash and spreading genetically local native seed of host plant harsh paintbrush (*Castilleja hispida*), larval food plant blue-eyed Mary (*Collinsia parviflora*), and nectar plants sea blush (*Plectritis congesta*), spring gold (*Lomatium utriculatum*), and woolly sunflower (*Eriophyllum lanatum*). Monitoring in habitat restoration areas in the summers has revealed pre-diapause larvae in the areas.

ONF staff also conducted bumblebee surveys at more than 20 sites throughout the Forest in the summers of 2017 and 2018, with help from Student Conservation Association interns, WDFW, and The Xerces Society. We identified 11 species of bumblebees. The most abundant species were *Bombus flavifrons* (yellowhead bumblebee), *B. mixtus* (fuzzy-horned bumblebee) and *B. vosnesenskii* (yellow-faced bumblebee). The most wide-ranging was *flavifrons*; this species was detected in almost every survey, in a variety of habitats. We confirmed the presence of the western bumblebee (*B. occidentalis*), which is a Sensitive species, at Mount Townsend in both 2017 and in 2018.



B. occidentalis at Mt. Townsend, ONF, Summer 2018.
Photo: Karen Holtrop

Also in 2018, with funding provided by the Regional Interagency Sensitive Species Program, the Forest, along with WDFW partners, started surveying for bog-associated beetles. Beller's ground beetles (*Agonum belleri*) were confirmed on the Olympic Peninsula for the first time, at a sphagnum bog on the north Olympic National Forest.



Beller's ground beetle, May 3, 2018, ONF.
Photo: Karen Holtrop

Quinault Waterfowl Study

Andrew Annanie, Wildlife Biologist, Quinault Indian Nation

Beginning in November 2016, the Quinault Indian Nation embarked on a multi-year grant-funded waterfowl study. Having just received our third grant, we are currently able to fund the study through the summer of 2019. The primary goal of the study is to document waterfowl species occurrence, distribution, relative abundance, and habitat use within the Quinault Indian Reservation (QIR). Waterfowl are important indicator species of wetland health. They are also important propagators of wetland plants and macroinvertebrates. Waterfowl represent a group of organisms that are expected to be heavily impacted by the effects of climate change. Changes in weather patterns alter the availability of wetland habitats. Increases in global temperature have caused a rise in sea levels, which in turn has resulted in the inundation of coastal marsh habitats, making them unavailable for use by waterbirds. In addition, more frequent and intense storms can alter the timing and routes of waterfowl migration. These are just some of the factors that make waterfowl susceptible to the effects of climate change. It is for this reason that the long-term monitoring of waterfowl populations is important.



Greater white-fronted geese and cackling geese, Queets River, QIR. Photo: Andrew Annanic

As the Quinault Indian Nation is data-deficient with respect to the waterfowl communities occurring on the reservation, they deemed it necessary to fill that data gap. My goal is to establish a baseline dataset of waterfowl occurrence within the QIR that can be used to look for long-term changes in population dynamics and distribution over time, as well as changes in habitat quality and availability. The aim of my study is to establish which species are occurring on the QIR, their relative abundance across the various habitat types available, the timing and duration in which they occur, and which habitats are being used most readily and by the greatest number of birds. I am also looking to characterize (albeit to a lesser extent) what types of habitats are available on the reservation and how those habitats change over the course of my study (this is accomplished by taking habitat photos at the conclusion of each survey as well as using ArcGIS to conduct land cover classification and change detection). Another component of my study involves collecting Traditional Ecological Knowledge of historic waterfowl resource use and cultural significance. My primary means of acquiring this information is through interviews with tribal elders and reviewing literature on Quinault tribal history. A new component of the study that will be added, having recently received additional funds, will be to conduct an aerial mid-winter waterfowl survey of the entire Olympic coastline. This survey will be conducted in conjunction with WDFW as part of their annual mid-winter waterfowl survey of the Puget Sound, Strait of Juan de Fuca, and Strait of Georgia.

Data collection is underway. A set of 23 survey sites was established (3 marine sites, the estuary at the mouth of the Queets River, a portion of Lake Quinault, and 18 inland freshwater sites) and are surveyed over the course of a 2-week iteration. Between January 30 and June 26, 2017, a total of 10 survey iterations were conducted, within another 18 between September 5, 2017, and June 18, 2018. As of

June 2018, a total of 48 species have been recorded (this includes not just waterfowl but also grebes, loons, cormorants, pelicans, alcids, etc.). This past summer, I was able to manually delineate a suite of training sites that will be used to delineate land cover classification maps for each of the survey sites (I plan to run a random forest, CART, and SVM classification in ArcGIS to see which produces the most accurate map). Surveying will continue through January and February of 2019, at which point we will begin data analysis in preparation for the final report.



Harlequin Duck, Quinault River, Olympic National Park. Photo: Andrew Annanic



Wood Duck, Tributary to Quinault River, QIR. Photo: Andrew Annanic

PUGET SOUND REGION – Steve Hall, Point Environmental Consulting Network

A Message from Steve

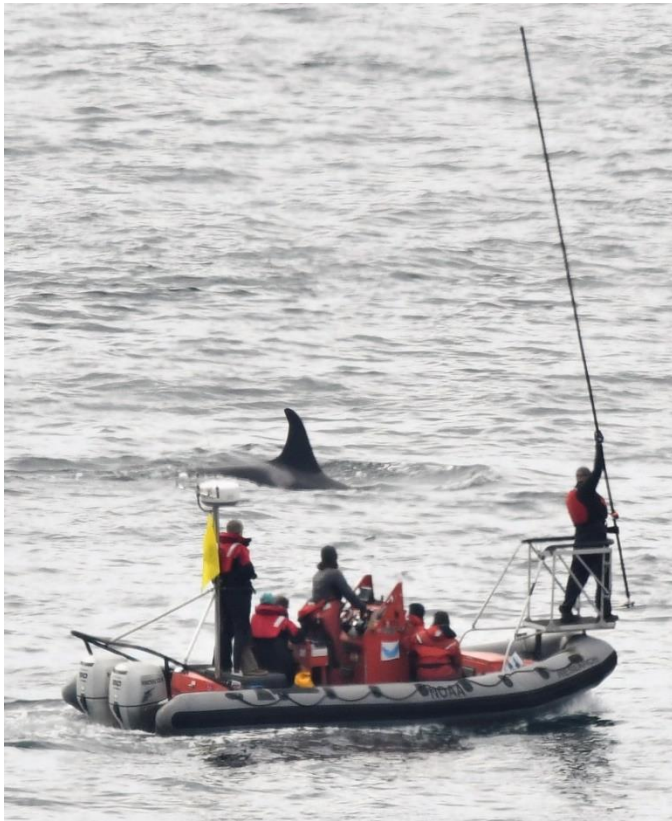
Dear fellow WATWS members: Sorry, but I had to take a break this issue from our Puget Sound Regional Report. I have been “deployed” on two forest restoration NEPA projects and a spotted owl/marbled murrelet Habitat Conservation Plan, and I haven’t had much time for anything else. Adding to this challenge, I only received one response to my request to Puget Sound area members for stories (Thanks, Kersti Muul, for responding!). This is probably at least in part due to the fact that you all are also

very busy. But if you do have a moment right now, PLEASE put a reminder in your calendars for February to consider preparing a story for our regional report about all of the great wildlife work I know you are doing in our Puget Sound region! And I promise to return with a report for our spring newsletter.

SRKWs after Dark

Kersti Muul

NOAA just finished the first year of a new digital acoustic recording tag (D-tag) study, focusing on the behavior of southern resident killer whales (SRKWs) at night. Previous D-tag data collection efforts were limited to daytime hours, given the need to collect detailed vessel data. This study uses new technology that was not used in other previous studies. The main goal of this study is to see what the whales are doing and experiencing at night, from the whales' point of view, including how they perceive noise. Daytime data are collected from the tags opportunistically as well. (The tags usually stay on for less than 24 hours.) The tags are attached to the whales via suction cups, which are considered non-invasive.



Jeff Hogan (with pole) preparing to tag J17 near San Juan Island. Photo: Kersti Muul.

Jeff Hogan is the NOAA Northwest Fisheries Science Center research associate who deploys the tags. Over the years, he has gained a deep understanding and perspective on the procedure. Despite the common perception that tagging is an invasive procedure, Jeff notes that the whales usually return to the behavior they were engaged in before being tagged; some even come right back to the boat after a tag deployment or attempt. If the whales behave as if they do not want to be approached, the crew curtails the tagging attempt. Raw data from the tag is available to the researchers immediately, affording them a real-time look at what the whales experience during tagging. The data show that dive behavior returns to normal within minutes.

Jeff says, "The welfare of the animals in the short and long term is of primary concern and is a priority of the project."



SRKW J19, as seen from shore(!). Photo: Kersti Muul.

More details on the new study can be found here:

[Nighttime research on endangered killer whales may help protect them from noise – Northwest Fisheries Science Center](#)

In addition to his field research work, Jeff also shares these data with thousands of children a year through his non-profit organization, Killer Whale Tales. This award-winning program uses science and storytelling to inspire children and their families to become actively involved in the conservation and recovery of this critically endangered population of killer whales.

[Killer Whale Tales | Environmental education through storytelling and experiential science activities](#)

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).

NORTHEAST REGION – Annemarie Prince, WDFW

Happenings on the Colville National Forest

Mike Borysewicz, USFS

Food storage lockers

These structures are intended to reduce the potential for bears to access human food, which can lead to human-bear conflicts. The lockers provide campers with a convenient, secure place to store food, beverages, and other attractants so that they are unavailable to wildlife. We have found the number of incidents pertaining to improper food storage at campsites declines significantly when these structures are available. Campers appear to love them. By the end of this week we will have installed a total of 22 lockers in six different campgrounds on the Forest.

Grizzly bear demography study

We cooperated with the USFWS, WDFW, Idaho Panhandle National Forest, and the Kalispel Tribe in ongoing research of grizzly bear demography and population trends in the Selkirk Mountains Grizzly Bear Recovery Area. This involved setting out 12 hair snag corrals over the course of the summer and re-visiting 12 permanent “rub posts.” Hair samples and remote camera photos were sent in to Wayne Kasworm, the research lead with the USFWS. We obtained photos (below) of a sow grizzly with two small cubs at one corral site.



Whitebark pine seedling monitoring

This month I assisted Dan Omdal, Washington DNR Forest Pathologist, with mapping seed lots and monitoring survival of whitebark pines that had been planted on the top of Hall Mountain in October 2017.

Outhouse vent covers



We continued installing metal vent caps in vault toilets across the Forest. We partnered with the Pend Oreille County Parks Department and the PUD to install caps on their toilets in two campgrounds, a scenic overlook, and a highway rest area. In total, 45 caps were installed in 2018.

The vent caps are indeed intended to prevent cavity nesters from flying into the vent pipe and becoming trapped in the toilet vault. Small owls seem to be most susceptible (see below), but other taxa are vulnerable. Our campground concession manager told me that, while working on the Sawtooth NRA in Idaho, he found a dead red fox in a vault. The fox had tried mightily to get out. Apparently, the winter snow had drifted up against the roof of the toilet to the point that the animal could get into the vent pipe.



This Northern Saw-whet Owl was rescued from a vault toilet in the Hume Lake Ranger District in Sequoia National Forest. Photo: Diane Diebold, courtesy of the Teton Raptor Center's Poo-poo Project

Closed Road Monitoring / Maintenance

We continued to monitor road closures in the grizzly bear recovery area for effectiveness and maintenance needs. We completed four projects intended to improve closure effectiveness such as replacing a vandalized gate with earthen berms, as well as installing concrete posts on the sides of gates to block off-highway vehicle access.

Visitor Contact Patrols

We continue to complete weekend visitor contact patrols, focusing on the summer holidays and hunting season openers. Most patrols are completed in the grizzly bear recovery area and adjacent campgrounds. Primary objectives are to educate campers about the Forest's food storage order and bear safety, and to educate hunters about grizzly bear presence and identification.

Presentations

The East Zone Biologist gave presentations on bear ID, ecology, and safety to the following groups;

- 22 campground hosts
- 30 local FS employees (including pepper spray training)
- 18 trail maintenance volunteers (WTA, PNTA)
- 10 campground volunteers (NWYC)
- 130 5th graders and 10 parents (Boundary County, ID school district)

Northern Leopard Frogs – Reintroduction Efforts for a State Endangered Species

Ella Rowan, WDFW Asst. District Wildlife Biologist



Northern Leopard Frogs (NLF) have been listed as endangered in Washington since 1999; many other states across the western U.S. have also listed this species. Declines are due to loss of wetland habitat, predation by introduced American bullfrogs and fish, competition with bullfrogs, diseases such as Chytrid fungus and Ranavirus, pesticides, herbicides, changes in water quality, and other known and unknown causes. In Washington, the last known endemic population is found in the Moses Lake region of Grant County. A good deal of research and monitoring for

this species has transpired in Washington over the last few decades. Surveys over the last 10 years appear to indicate continued population declines. WDFW, in collaboration with USFWS Columbia National Wildlife Refuge and Washington State University, are planning to reintroduce NLF to the Refuge over the next few years in an attempt to reestablish a population within its former range. By doing so, we hope to mitigate future losses within the current range due to identified causes and stochastic events.

Surveys for NLF over the past decade have included searches for egg masses, metamorph surveys, and chorus call surveys. While these surveys have not been performed as formal research projects, attempts were made to follow a systematic approach and informative design. WSU completed a formal population analysis and evaluated disease occurrence using genetic material acquired from toe-clips and environmental DNA. WDFW received funding from the Washington Department of Ecology between 2014 and 2016 to perform a NLF reintroduction feasibility assessment. This work demonstrated the Refuge would be an acceptable location for reintroduction. Three years of searching for egg masses has proven futile, although they are the preferred specimen for head-starting in zoos and relocation. We will likely need to capture tadpoles and head-start them in a zoo.

WDFW has received a Competitive State Wildlife Grant for 2018-2020, in partnership with Idaho and British Columbia, which are also suffering NLF declines. Washington's funding will allow us to hire a biologist to focus on the Recovery and Habitat Management Project. We have many partnering entities in Washington, including Oregon Zoo who will help head-start tadpoles to metamorph stage, Washington State University who will provide expertise and assist with genetic analysis work, and the USFWS Columbia National Wildlife Refuge who will perform habitat preparation and other work as their capacity allows.



Measuring an adult northern leopard frog. Photo ©WDFW

This project is the first stage in reestablishing NLF on the Refuge, and we foresee it taking over a decade to develop a sustainable population. We hope to learn more about our remaining population and improve habitat conditions in Grant County. We also intend to reestablish additional populations over the next 20 years. For additional information about the plight of Northern Leopard Frogs and WDFW efforts, please visit:

<https://wdfw.wa.gov/publications/00378/>

<https://www.fws.gov/ecological-services/highlights/04222015.html>

<https://www.cbc.ca/news/canada/calgary/amphibian-translocation-1.4580734>



Searching for metamorphs. Photo ©WDFW

Bonus frog photos from Ella!



© 2004 William Leonard



© 2000 William Leonard



Gary Nafis

Northern Leopard Frog, egg mass, tadpole, brown and green phases. © William Leonard, Brian Zinke, Gary Nafis

The Wildlife Society—Washington Chapter

BOARD

President

Katy Stuart

watws.President@gmail.com

President-Elect

Lisa Dowling

watws.presidentelect@gmail.com

Vice President

Sara Hansen

watws.vicepresident@gmail.com

Past President

Danielle Munzing

danielle.munzing@dnr.wa.gov

Secretary

Teresa Lorenz

watws.Secretary@gmail.com

Treasurer

Sarah Kindschuh

Sarah.Kindschuh@dfw.wa.gov

Board Position #1

Kevin White

watws.sagethrasher@gmail.com

Board Position #2

Annemarie Prince

watws.grizzly@gmail.com

Board Position #3

Clint Robins

watws.squirrel@gmail.com

Board Position #4

Dominic Bachman

watws.wildturkey@gmail.com

Representative to NW Section

Lisa Dowling

watws.presidentelect@gmail.com

Northwest Section Representative to

TWS Council

Harriet Allen

hallen2009@comcast.net

Student Chapter Liaisons

Julia Dahlquist

julia.dahlquist@wsu.edu

Mara Huang

mara.huang@wsu.edu

COMMITTEE CHAIRS

Audit

Vacant

Awards / Workshops

Bill Vogel

360-753-4367

william_o_vogel@yahoo.com

Conservation Review

Vanessa Pepi

pepichel@yahoo.com

Education and Information

Jen Syowitz

jens@washingtonoutdoorwomen.org

Grants

Tony Fuchs

mailto:tony.fuchs@pse.com

Membership

Alicia Higgs

ahiggs@hntb.com

Nominations and Elections

Vacant

Newsletter Editor

Mike Hall

mhall@parametrix.com

Program

Katy Stuart

watws.president@gmail.com

Resolutions and Public Statements

Vacant

Scholarship

John Grettenberger

grettenbergerj@gmail.com

Sponsorship

Bruce Thompson

bcthompson248@gmail.com

Student Activities

Dominic Bachman

watws.wildturkey@gmail.com

REGIONAL REPRESENTATIVES

Olympic Peninsula

Betsy Howell

blhowell@fs.fed.us

Southwest

William Ritchie

william_ritchie@fws.gov

Puget Sound/Northwest

Steve Hall

shall@pointconsulting.us

Northeast

Annemarie Prince

Annemarie.Prince@dfw.wa.gov

Southeast

Jason Fidorra

Jason.Fidorra@dfw.wa.gov