

# The Washington Wildlifer

Newsletter of the Washington Chapter of The Wildlife Society

Late Summer 2021



## We've Missed You!

Hello, dear WA-TWSers —

It's been far, far too long since we have seen one another in actual, three-dimensional person. For many of us, opportunities to interact with others over the last year and a half have been confined to social media, e-mail, phone calls, and virtual meetings. If you're like us, perhaps your first reaction to receiving yet another Thing To Read included a twinge of nausea. We've been there. To be honest, we're still there. But we've got some exciting news and cool stuff to share, and we're long overdue for a check-in. So dig in, read on, and check it out.

At least this isn't another Zoom!

In this issue:

- [A message from Sara Hansen, WA-TWS President](#)
- [Big! News!! about improved online services for Chapter members](#)
- [Items of interest from Bruce Thompson, WA-TWS Treasurer](#)
- [The Chapter awards we were hoping to tell you about at the 2020 annual meeting](#)
- [Regional Reports](#)
- [New e-mail addresses for Board members](#)

Congratulations to our 2020 Chapter award recipients!



Biologists in the Olympic and Northeast regions have been busy.



# President's Message

Hello WA-TWS!

I hope this message finds you and yours safe and well.

It's been a while since we last reached out to everyone with updates about the Chapter and member activities. The last 18 months have been challenging for so many of us on so many fronts, and fundamentally changed how we work, play, and engage with our world. With so much going on in 2020 and 2021, the WA-TWS board decided to approach this time of uncertainty as an opportunity to update chapter operations and develop new online resources that will help us support Washington's wildlife professionals as we all move toward a 'new normal' post-COVID.

Most notably, we have rolled out a new Chapter website featuring more detailed information about chapter committees and activities, and a membership portal for new and current members to check their member status and pay dues online. You will also find new dedicated @watws.org email addresses for board members and committee chairs to make it easier to get in touch with us and help maintain Chapter continuity as officers transition roles over time. We hope you will take the time to explore these new resources and let us know what you think.

In the pages below you will also find stories highlighting some of the great wildlife work being done by our members. These stories are my favorite part of our newsletters because I always learn something new and come away feeling more connected to my fellow wildlifers and the important work we are all doing.



throughout the state. I look forward to hearing more from everyone in our next installment in late 2021!

Thinking further ahead to 2022, WA-TWS is already working on the next WA-TWS Annual Meeting, which will be in person in spring 2022! Producing our annual meeting is one of the primary services WA-TWS provides to its members, and it's an incredible opportunity for Washington's wildlife community to come together and discuss the most pressing issues facing our field. We will be reaching out to members soon to ask for program and workshop ideas, so keep an eye on your inbox. Whether it be reviewing presentation abstracts, coordinating special sessions, or creating mentorship opportunities for the next generation of wildlifers, there's a role for everyone, and helping hands are always appreciated.

Huge thanks to the WA-TWS board for their hard work in difficult times the last two years. And thank you to all of our members who contributed articles and announcements for this newsletter. Please continue to reach out and submit items. It's never too early to send info our way.

Until next time, take care!

Best,  
Sara





—Candace Bennett

We are thrilled to announce your new WA TWS webpage!!!  
Come check it out at <https://watws.wildapricot.org/>.

The screenshot shows the homepage of the Washington Chapter of The Wildlife Society website. The header includes the chapter logo, the text "Washington Chapter of The Wildlife Society", and a Facebook page thumbnail. The navigation menu at the top includes links for Home, News, Annual Meeting, Funding, Awards, Membership, and Contact Us. Below the menu, there is a section titled "Welcome to The Washington Chapter of The Wildlife Society" with a brief mission statement and a photograph of a bighorn sheep.

These are some of the new features you can find:

- Newsletters  
<https://watws.wildapricot.org/News>
- Funding, which includes grant and scholarship information and deadlines  
<https://watws.wildapricot.org/Funding>
- A direct way to contact members of the Executive Board and Area Representatives  
<https://watws.wildapricot.org/Contact>
- Awards  
<https://watws.wildapricot.org/page-18092>
- Annual Meeting information past and present  
<https://watws.wildapricot.org/Annual-Meeting>
- Membership, including state chapter annual renewals, access to your account information, and meeting registration  
<https://watws.wildapricot.org/Membership>

To log into your Member Portal for the first time, you must use the e-mail address associated with your WA-TWS membership. Then select "forgot password," and a link will be sent to your e-mail address. This will allow you to create a password.

We are looking for your feedback on functionality of your account (including logging in), as well as the aesthetics and flow of the new page. Please provide feedback to Candace Bennett at [secretary@watws.org!](mailto:secretary@watws.org)

# Some Items of Interest

—Bruce Thompson

## Build Your Library

Chapter Member Leon Fisher has made some classic and historic books from his library available for interested Chapter members (see below). These books are available at no cost, but Leon asks that anyone interested in obtaining any book consider a modest discretionary donation to WA-TWS. Requests for a wildlife library overseen by a Chapter member will be given special consideration. Many of these books are in like-new condition. Any that aren't requested in response to this notice will be distributed at the next in-person meeting of the Chapter. For more information about book availability, arranging a related donation, or other questions about this opportunity, contact Bruce Thompson, Chapter Treasurer, at [treasurer@watws.org](mailto:treasurer@watws.org).

**Amphibians and Reptiles of New Mexico** (1996). W.G. Degenhardt, C.W. Painter, and A.H. Price. Univ. New Mexico Press.

**Deer** (1994). D. Gerlach, S. Atwater, and J. Schnell, Eds. Stackpole Books.

**Ecology and Conservation of Neotropical Migrant Landbirds** (1992). J.M. Hagan and D.W. Johnston, Eds. Manomet Bird Observatory.

**Ecology and Management of the Mourning Dove** (1993). T.S. Baskett, M.W. Sayre, R.E. Tomlinson, and R.E. Mirarchi, Eds. WMI and Stackpole Books.

**Elk of North America** (1982). J.W. Thomas and D. Toweill, Eds. WMI Book.

**Estimating Numbers of Terrestrial Birds** (1981). C.J. Ralph and J.M. Scott Eds. Cooper Ornithol. Soc.

**Game Management** (1933). A. Leopold. Scribner & Sons.

**Hawks, Eagles, & Falcons of North America** (1982). P.A. Johnsgard. Smithsonian Inst. Press.

**Life Histories of North American Birds of Prey** (1937-1938: 2 parts). A.C. Bent. Dover Publications (paper).

**Mammals of New Mexico** (1975). J.S. Findley, A.H. Harris, D.E. Wilson, C. Jones. Univ. New Mexico Press.

**The Big Game Animals of North America** (1961). J. O'Connor and G.C. Goodwin. Outdoor Life.

**The Kaibab North Deer Herd** (1964). J.P. Russo, AZ Game and Fish Dept.

**The Wild Turkey** (1992). J.G. Dickson, Ed. Stackpole Books.

**Wild Mammals of North America** (1982). J.A. Chapman and G.A. Feldhamer. Johns Hopkins Univ. Press.

**Wild Turkey in New Mexico** (1959). R.L. Spicer. New Mexico Dept. Game & Fish Bulletin No. Ten.

**Wildlife Habitats in Managed Forests: The Blue Mountains of Oregon and Washington** (1979). J.W. Thomas Tech. Ed. USDA Forest Service Handbook No. 553.

**Wildlife Management** (1948). R.E. Trippensee. McGraw-Hill Co.

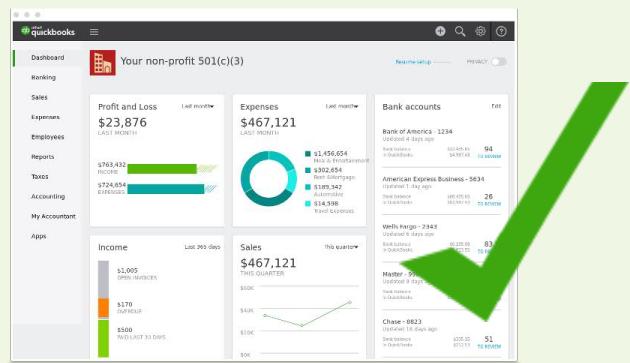
**Wildlife Techniques Manual** (1960, 1963, 1971, 1980, 1994). Various Editors: First through Fifth Editions. The Wildlife Society.



## New Treasurer Seeks a QuickBooks Helper

Bruce Thompson, recently installed WATWS Treasurer, is seeking a person with QuickBooks skills to help get recently activated Chapter accounting processes running smoothly. The Chapter is shifting to QuickBooks software to improve handling of financial processes and to enhance record-keeping. The help sought is just to be a resource for Bruce to call upon when implementation actions are needed beyond his awareness of the software. This will not be a time-consuming task or require any responsibility to manage Chapter financial matters.

If you are already experienced and capable with QuickBooks, please contact Bruce to discuss what might be possible to help the Chapter. Contact him at [treasurer@watws.org](mailto:treasurer@watws.org) or 505-660-0533 (mobile). Thanks for considering.



## 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, Candace Bennett, will be happy to help you out ([secretary@watws.org](mailto:secretary@watws.org)).

## Fitzner Scholarship Recipients – Where Are They Now?

This is a request to find information about the professional progress of past recipients of the Richard Fitzner Memorial Scholarship provided by the Washington Chapter each year. The Fitzner Scholarship was initiated in the mid-1990s to honor Richard “Dick” Fitzner, a well-regarded Washington ecologist and researcher, who died in an airplane mishap. The scholarships have evolved to be a \$2,500 payment to offset tuition costs at a Washington college/university for a student chosen through a competitive application process.

Efforts have been initiated to assess the effects of this education support work by the Chapter. Part of that assessment is to examine what past recipients are doing and how their professional background has advanced since receiving the scholarship. Chapter records are incomplete about some of the earlier recipients, and we don't have recent information about others. The table on the next page lists the recipients from 2005 through 2020. We also need information from you about scholarship recipients during 1993-2004 and 2006 (our records are incomplete).

If you are a past recipient, please consider providing a brief description of your education and professional endeavors since receiving the scholarship. If you know any of the past recipients, please encourage them to provide such information or send a brief note about their current contact information so we can follow up with them. Any related information can be sent to Bruce Thompson, Scholarship Assessment Coordinator, at [treasurer@watws.org](mailto:treasurer@watws.org).

Please help us find these promising early professionals. Information about their accomplishments will be shared in future newsletters and on the Chapter website.

<u>Year</u>	<u>Recipient</u>	<u>Education Affiliation</u>
2020	Georgia Coleman	University of Washington
2019	Sydney Potter	Washington State University
2018	Ashley Harper	Washington State University
2017	Sarah Scott	Evergreen State College
2016	Juana Maria Ordonez	University Washington
2015	Alexandria Rose-Albert	Washington State University
2014	Kimberly Cook	Washington State University
2013	Tia Monzgio	University of Washington
2012	Kristina Haycock	University of Washington
2011	Alysa Adams	Washington State University
2010	Jakob Shockey	Evergreen State College
2009	Jill Harper	Washington State University
2008	Meghan Leiper	Washington State University
2007	Aaron Gilbertson	Central Washington University
2006	???	
2005	Kevin White	Central Washington University
pre-2005	<i>we would love to hear from you</i>	



## Chapter Awards

—Bill Vogel

Well, like so many things in 2020 that were either cancelled or postponed, our awards (which would have been presented at the spring annual meeting) were also delayed. This is very unfortunate because we have a full slate of deserving recipients. We are happy to tell you a little about these people and hope to honor them one day soon in person at an annual meeting.

### Leadership in Conservation Awards

In 2020, WA-TWS was pleased to recognize two people for their long-term contributions to the field of wildlife conservation. For many years, both Dyanna Lambourn and Greg Green have made sustained and significant contributions to wildlife conservation.

## Dyanna Lambourn



Dyanna is a marine mammal research biologist and licensed veterinary technician. She has been conducting research focused on marine mammals for more than 30 years with the WDFW. She has conducted research

from Alaska to California and Hawaii. Much of her research has centered on pinnipeds, which has included significant work conducting observations, captures, tracking, and assessments of disease and health.

As WDFW's investigator with the [West Coast Marine Mammal Stranding Network](#), Dyanna coordinates numerous volunteers and has mentored many interns, several of whom have gone on to complete undergraduate and graduate degrees and now work in wildlife-related fields. She works in close collaboration with other network responders and researchers throughout the region to respond to marine mammal strandings and entanglement events, as well as investigating causes of mortality. She has co-authored more than 35 peer-reviewed publications, which have addressed topics such as emerging diseases in marine mammals and the return of Guadalupe fur seals to the Pacific Northwest. She has also participated in captures of and related research projects on other species throughout Washington, including marine birds, turtles, raccoon, opossum, black bear, bighorn sheep, elk, deer, and even sockeye salmon.

## Gregory A. Green

Greg has devoted 45 years to marine and terrestrial wildlife ecology in the western U.S. and Alaska. His career began with several years of seasonal employment with the USFS and USFWS. That work led to a consulting career that took him from San Diego to the Arctic Ocean. He has published more than 30 papers, 5 book chapters, and numerous reports on subjects as

varied as burrowing owls, sagebrush lizards, bats, and mountain yellow-legged frogs to sea turtles, sea otters, whales, and polar bears. His first publication was on the [summer birds of the Alvord Basin](#) (1978). His most recent publications are two chapters in the book, *History of Oregon Ornithology*, due out in 2021. He is currently leading a decade-long study on the genetic affinity of red foxes in eastern Oregon.

Greg has been a leader in TWS and other professional organizations. He served as President and Past-President of WA-TWS from 1990 through 1992, and he filled the same roles for the Society for Northwestern Vertebrate Biology (SNVB) from 1998 through 2000. He also served as Vice President for the Northwest Section of TWS (1992-1994), and he is a life member of SNVB. Greg chaired or co-chaired 7 annual meetings for WA-TWS, and he was instrumental in starting the meeting partnership between WA-TWS and SNVB. As an associate editor with three different scientific journals (*Northwestern Naturalist*, *Journal of Wildlife Management*, and *Herpetological Conservation and Biology*), Greg has managed over 200 manuscripts submitted for publication. He has served as board member for the Western Wildlife Outreach and the Cascade Carnivore Project and as Chairman for the Whatcom County Wildlife Advisory Committee.



Greg has touched the lives of numerous colleagues through his many collaborations and various wildlife workshops for TWS, SNVB, WSDOT, Caltrans, and native groups (e.g., Ilisagvik College, Alaska). He continues to

educate new wildlifers as an Adjunct Professor at Western Washington University's Huxley College for Environmental Science, where he teaches zoogeography and natural history.

## William H. Lawrence Special Achievement Award

### Scott Gremel



Scott has dedicated his professional life (and many of his non-working hours) to wildlife conservation, and conservation of avian species in particular. His contributions are widespread. Scott's most significant

contribution, however, has been in his role working with the conservation of northern spotted owls. He started as a member of the spotted owl research and monitoring crew in Olympic National Park in 1994. In 1999, as the Park program started the transition to a permanent monitoring program, and as a fully fledged member of the effectiveness monitoring program for the Northwest Forest Plan, Scott took over as program lead. He has continued in that role ever since, providing long-standing stability and leadership in a consistently challenging program. Monitoring in the Park is unlike programs elsewhere, due to the extensive roadless and wilderness areas in his study area. Yet year after year, his program continues with high standards of data collection and coordination with his partners.

Scott's work for and with spotted owls extends far beyond the boundary of the Park. Throughout the years, he has maintained close coordination with the Olympic National Forest and other owl monitoring partners on the Peninsula. Scott has participated in and been a co-author of northern spotted owl meta-analyses and reports since 2004.



Bonus image of Scott in action!

More than a decade ago, foreseeing that demographic monitoring was going to become unfeasible, Scott started thinking of ways to modify the effectiveness monitoring program. In 2010, he started experimenting with sound recorders in the Park. Following several years of pilot studies and collaboration with the leaders of Northwest Forest Plan, he led the implementation of a new monitoring method for spotted owls on the Olympic Demographic Study Area in 2019. He is now leading monitoring efforts on both the Park and the Forest. Check out [Scott's update from the 2020 efforts](#) in the Regional Reports, below.

## Conservation Award

### Jim Watson



Jim has been working with raptors for 4 decades. For the last 15 years, Jim has been intimately tied to studies of raptors in eastern Washington. His research has crossed boundaries into much of the western U.S., as well as into wintering grounds in Mexico. He has served on national committees and he has forged many partnerships that have made these projects possible.

Working with other raptor ecologists in the West and as a member of USFWS' Western Golden Eagle Team and Eagle Technical Assistance Team, Jim has worked to understand the distribution of golden eagles, methods for effective surveys, and the role of lead in declines of this species. To identify the distinct risk posed by lead, Jim and his teammates gathered information about food habits of adults at critical times of year, changes in prey delivered to nestlings over a 40-year time span, levels of lead in the blood of individual birds, and feeding behavior at offal piles.

Jim's studies of the seasonal movement and migration patterns of ferruginous hawks has expanded our knowledge of these wide-ranging raptors and how changes in land use may be affecting their populations. Jim and his colleagues have documented the importance of non-breeding habitats and provided critical information on seasonal movements and their implications for breeding-season surveys for monitoring population status.

The rapid expansion of wind farms across the west poses uncertain risk to our raptor communities, and Jim's research has been at the forefront of identifying those risks. In 2007, Jim began work on a series of projects that examined the effects of wind turbines on raptor behavior, space use, and nesting. This collaborative study with ODFW included wind farms in Washington and Oregon.

Perhaps Jim's longest-running partnership is with the Woodland Park Zoo in Seattle. Through the Zoo's "[Living Northwest Project](#)," Jim has obtained funding for equipment and volunteer hours to support a variety of field research projects. In return, Jim has been a resource for the Zoo on matters of raptor ecology, and he has provided outreach to the public through many presentations at a variety of venues.

## Partnership Awards

We are fortunate to be able to present two awards honoring work that established

partnerships resulting in significant advancements of wildlife conservation. One goes to Matt Blankenship of WDFW, and the other goes to the Pronghorn Reintroduction Program.

### Matt Blankenship



As a Wildlife Conflict Specialist for WDFW, Matt works with a wide variety of human-wildlife conflict scenarios, ranging from urban deer issues in metro Tacoma to elk damage of agricultural products in remote areas on the Olympic Peninsula. Matt has

built strong working relationships with his WDFW colleagues, volunteers, and agricultural communities—and with members of the public in the areas he serves. Over the past 2 years, Matt has partnered with a golf course community in Sequim to work toward finding solutions to deer conflict issues. Just recently, Matt has been working with the City of Port Townsend to introduce the concepts and strategies of Community-Based Deer Management, with the same goal in sight. His hope is that these community-based efforts today can be used as a model for other communities looking to address and find solutions for deer conflicts and concerns in the future.

### Pronghorn Reintroduction—Deborah Barrett, Jim Stephenson, and David Blodget III

Many partners deserve recognition for bringing this effort to fruition. This partnership award honors two of those organizations: the Yakama Indian Nation (YIN) and several chapters of Safari Club International (SCI). We are specifically highlighting the efforts of Deborah Barrett of SCI's Central Washington Chapter (CW-SCI) and Jim Stephenson and David P. Blodget III of the YIN Wildlife Program.

The idea behind returning pronghorn to Washington State began in a board meeting of CW-SCI in Yakima, sometime in 2003 or 2004. Deb Barrett immediately started organizing meetings and handling communications. CW-SCI reached out to other chapters, and the Seattle Puget Sound and Northwest chapters agreed to help fund the venture. The project also secured two conservation matching grants from the SCI Foundation.

The next step was logistics. CW-SCI met with WDFW to discuss the possibility of reintroduction and the process needed to initiate the project. WDFW developed a cost estimate for the project, and SCI chapters began an aggressive fundraising campaign—a campaign that continues to this day and to which you are encouraged to contribute. From 2004 through 2008, SCI chapters funded studies totaling thousands of dollars. The studies found that pronghorn reintroduction would be viable, but many felt that the project would not happen for years, if at all. Nevertheless, the folks at the SCI chapters didn't lose hope.

In 2008, Deb Barrett was approached by Jim Stephenson, a wildlife biologist with the YIN. One of the goals of the YIN Tribal Council was to return pronghorn to their lands. The YIN had already completed studies, and they were simply waiting on a funding source. The participation of the YIN was key, as was the support and time of Dave Blodgett III, a YIN big game biologist.

Together, the SCI chapters and the YIN worked to secure grants and funding, to plan and arrange logistics, and to implement and monitor the reintroduction effort. Without the partnership between SCI and the YIN, the project would not have been successful. The partners acquired stock trailers, buck boxes, collars, and tags, and they helped send a contingent of SCI volunteers and YIN wildlife personnel to Nevada. Nevada Department of Wildlife (NDOW) coordinated the helicopter flying service, veterinarians, and an enormous number of

personnel and volunteers who would staff the staging.

During the three captures near Elko, Nevada, the NDOW volunteer base included college students from Nevada, Washington, Oregon, and Idaho; members of wildlife organizations including the Rocky Mountain Elk Foundation, Ducks Unlimited, and SCI; veterinarians from several states (one flew in from Ohio); and of course an army of NDOW biologists, technicians, and game agents. Mike Cox, NDOW's lead biologist for the project, and Peregrine Wolff, lead veterinarian, played critical roles.

Through partnership and planning with SCI and NDOW, helicopter costs were reduced by addressing multiple needs at one time. The Seattle Puget Sound SCI chapter and the Seattle Sportsmen Conservation Foundation provided funding for the purchase of GPS collars and 3 years of monitoring of each collar. Over 5,000 locations have already been recorded, with data points given every 13 hours. The monitoring is being used to determine survival, dispersal, and reproduction of the released animals.



Once the initial release was complete and pronghorn moved off the YIN reservation and onto state and private lands, WDFW joined the effort. Rich Harris, WDFW's Special Species Manager, worked with biologists from his department to develop protocols for aerial surveys. SCI, the YIN, and WDFW pooled funding and personnel to complete three ground and

aerial surveys. After each survey, partners met to discuss the best options for growth of the herd.



In 2011, 2017, and 2019, the reintroduction program released a total of 198 animals in Washington. In 2019, the population here was estimated to be between 250 and 350. Jim, Deb, and David were critical advocates for this and subsequent pronghorn restoration projects. Their leadership and partnership were the reasons for the great success!

## **Stewardship Award**

### **Joint Base Lewis McChord**

JBLM is a 91,526-acre military installation located in the western Washington counties of Pierce and Thurston. The primary activities that take place on JBLM training lands are live-fire



training, tactical field exercises, and C-17 aircraft training and missions. Approximately 65,000 acres of maneuver area are used for training activities; a large portion of that area is glacial outwash prairie/grassland habitat. About 95% of the glacial outwash prairies that existed in this region before Euro-American settlement have been lost to development and other land use

activities. Nearly all of the remaining 5% is in JBLM, primarily in the artillery impact area, one of the most heavily used areas for military training. The artillery impact area also contains some of the highest-quality prairies remaining, providing habitat for three ESA-listed species: the threatened streaked horned lark (*Eremophila alpestris strigata*), the threatened Mazama pocket gopher (*Thomomys mazama*), and the endangered Taylor's checkerspot butterfly (*Euphydryas editha taylori*).

JBLM must balance its mission needs with the conservation of rare habitat necessary to ensure survival of ESA-listed species. Species conservation on JBLM is conducted through species monitoring, habitat management, translocations to various areas on and off JBLM, and constant coordination between departments on JBLM to limit damages to the species and their essential habitats. Habitat management on JBLM is achieved through many different types of restoration techniques including the use of pesticides, prescribed fire, mechanical work, seeding and plug planting, and habitat monitoring. Due to the size of JBLM, partnerships are a vital component for the success of maintaining and restoring prairie habitat. JBLM partners with many different agencies to continue working towards that goal, most notably the Center for Natural Land Management and the Sustainability in Prisons Project. In addition to the prairie habitat, JBLM also manages its lands to support ESA-listed aquatic species such as the threatened water howellia (*Howelia aquatilis*) and the threatened Oregon spotted frog (*Rana pretiosa*).

## **Chapter Award**

### **Bruce Thompson**

Dr. Bruce Thompson is being recognized for the commitment, dedication, professionalism, and service that he has contributed to the



Chapter since 2012. Bruce has been a mainstay in a wide array of Chapter activities. He works continually to emphasize and add more structure and disciplined business processes, advance engagement of students and early career professionals in Chapter activities, promote professionalism, support long-term continuity of annual meeting planning, and mentor colleagues. Bruce has made many substantive past and ongoing contributions to improve Chapter activities and outreach, from handling student lodging assistance to pursuing sponsorships. He spearheaded the development of a Financial and Investment Policies Document for the Chapter to improve continuity and reliability of Chapter financial processes, and he is always there when the Chapter needs him to stress greater recognition of bylaws and written procedures in Chapter business. He demonstrated his commitment to the Chapter by serving on the Executive Board from 2013 through 2016 (including a stint as Chapter President in 2014 and 2015). Bruce's service to the Chapter during that time is especially notable because he was an active member of the TWS Council (the governing body of the Society) from 2014 through 2018, serving as President of TWS from 2016 through 2017. That dual service exemplifies the depth of commitment that Bruce devotes to multiple levels of The Wildlife Society. Most recently, Bruce agreed to serve as the Treasurer of WA-TWS, once again stepping up to support the Chapter.

## Outreach Award

### Jeff Hogan

Since 2000, Jeff Hogan has dedicated himself to [Killer Whale Tales](#). Jeff had an idea that would pull together his orca research experience with theatrical storytelling, science, and childhood education. His decision to put everything on the line to start a nonprofit shows just how committed he is to ensuring that the next generation understands the way consumer behaviors impact the environment—and that science is cool!



For the first 10 years of the program's existence, Jeff ran the program. He created and updated the program materials, delivered the program, raised funds, analyzed data, and did the accounting, marketing, and scheduling almost entirely by himself. As the program evolved to include more-robust data reporting and communications, Jeff has been able to rely on board members to help with some of the back-end functions. But the tasks of developing and delivering program materials and building relationships with teachers, researchers, major funders, and other organizations still fall mainly on Jeff's shoulders.

Jeff has brought engaging environmental education to 125,000 elementary school students throughout the West Coast and Canada. More than 60,000 students have completed and returned "Kids Making a Difference Now" conservation worksheets, meaning they have taken action at home to reduce their family's environmental footprint and help the whales. Jeff has continuously been the driving force in this nonprofit and has sacrificed personally to keep it going. Jeff has some kind of a magical presence that inspires everyone he meets to take interest in the Southern Resident killer whales, science, and/or the environment. It is truly a remarkable talent that very few others possess. Killer Whale Tales have now converted to on-line learning due to the pandemic. As odd as it may sound, this shift has opened up a whole new set of opportunities. Jeff is now working with children and families across the globe. From India to the UK, and up and down the eastern seaboard of the U.S., he has "pods" of young future scientists sprouting up all across the planet!

## Foresight Award

### Mike Schroeder



Dr. Michael Schroeder is a passionate, dedicated, inspirational researcher and collaborator, whose contributions, achievements, and knowledge are valued by all who engage in the important issues related to conservation of grouse species in Washington, as well as more broadly nationally and internationally. Mike is currently chair of the Grouse Group within the International Union for the Conservation of Nature.

Mike began grouse research in 1981, and he has worked for WDFW as a Research Scientist since 1992. Mike's work has included studies of:

- (1) population dynamics and behavioral ecology

of greater sage-grouse and sharp-tailed grouse; (2) greater sage-grouse and sharp-tailed grouse translocations; (3) effects of wind power on greater sage-grouse and other species of shrub-steppe wildlife; (4) conservation genetics of grouse; (5) effects of farm programs on greater sage-grouse, sharp-tailed grouse, and other species of shrub-steppe wildlife; and (6) the importance of connected landscapes on the management of grouse. His many key publications document this work.

Mike is practical and effective in working with landowners, and he contributed greatly to developing trust in northern Douglas County during the early years of developing the [Multiple Species General Conservation Plan for Douglas County](#). Mike is very well respected by landowners and others. Mike anticipates information needs and understands how actions today will affect our ability to achieve conservation goals tomorrow. We are very fortunate to have the tremendous knowledge, foresight, and leadership of Mike Schroeder as part of Washington's wildlife science and conservation community.



## Regional Reports

What's going on in your neck of the woods (or sage-steppe, or other biome of your choosing)? Here's what we've heard from the Olympic and Northeast regions. Do you know any stories that are begging to be told? We'd love to know about it! Please contact your regional representative and/or [mike.hall@watws.org](mailto:mike.hall@watws.org).

### Olympic Region—Regional Representative: Betsy Howell, USFS

#### Northern Spotted Owl Monitoring Update

—Scott Gremel, Olympic National Park

Beginning in 2019, northern spotted owl monitoring in the Olympics transitioned from the long-term demography study begun in the early 1990s to a landscape-scale occupancy study using acoustic recorders to track

population trends. This decision was driven by a number of factors but was primarily due to the very low number of spotted owls remaining in the study area. In 2020, Olympic National Park crews, in collaboration with the U.S. Forest Service Pacific Northwest Research Station,

completed the second year of acoustic monitoring. After a late start due to the COVID-19 shutdown, crews began installing field recorders at the end of April and retrieved the last units in mid-October.



Protocols call for deploying four recorders for six weeks at randomly selected locations in 120 5-square-kilometer hexagons. Hexagons are on both National Park and National Forest lands, at sample sites that are capable of supporting spotted owl habitat whether they are currently old forest or not. As a result, our fieldwork ranges from sampling low-elevation second-growth forest to wilderness slopes over 25 miles from a trailhead, where recorders are packed in and out with the help of the National Park's pack mules. We successfully installed recorders at 470 of the 480 target locations. Sites missed were mostly due to timber harvest activities.

Next, the hard drives, with over 200,000 hours of field recordings from 2020 alone, will be delivered to the FS PNW Research Station in Corvallis, Oregon, where they will be processed by a machine learning model. Before analysis, all the calls identified in the model output will be validated by technicians. In addition to spotted owls, the recordings are browsed for other owl species and a growing list of other species of interest. Preliminary results for spotted owls should be completed by spring 2021.

*Editor's note: This is an excellent example of why the Chapter is so pleased to recognize Scott with a William H. Lawrence Special Achievement Award!*

## 2020 Mountain Goat Removal

Patti Happe, Olympic National Park  
Bryan Murphie, WDFW  
Will Moore, WDFW

The ground-based lethal removal program of introduced mountain goats from the Olympic Peninsula using qualified volunteers ended in October with a total of 31 mountain goats culled from the population in Olympic National Park. Ninety-nine highly skilled volunteers, organized in 20 groups of 3 to 6 volunteers per group, volunteered over 9,000 hours while participating in the program. Ten mountain goats were removed in the first round, 18 were removed in the second round, and 3 were removed in the final round. A total of 412 mountain goats have now been removed from the Olympic Peninsula. Of these, 325 were successfully released into the Cascades.

The use of highly skilled, qualified volunteers for ground-based lethal removal was requested by the public in the review process of the Final Mountain Goat Management Plan/Environmental Impact Statement (EIS). More than 1,200 groups of volunteers applied to participate. All applications were evaluated and ranked, and more than 100 very highly qualified teams applied. A random draw of 40 group applications was taken from a pool of the most highly qualified teams. Those groups were then evaluated by a team of National Park Service and WDFW staff. From that pool, 21 groups consisting of 118 volunteers were selected on June 1, 2020. By the time the program was implemented, some volunteers were no longer able to participate. The remaining 20 groups met requirements for physical fitness and passed background checks and a mandatory firearm proficiency evaluation.

Mountain goat removal was conducted in three rounds from mid-September through mid-October. In addition to the normally challenging conditions associated with accessing mountain goats in the Daniel J. Evans Wilderness of Olympic National Park, the teams also faced dense smoke from fires, heavy rain, strong

winds, snow, sleet, lightning, wasps, and persistent low clouds and fog. Nineteen mountain goats were removed from the Chimney Peak/Mt. Anderson area, six were removed from the southeastern region of the park, four were removed from Mount Olympus, and two were removed from the Bailey Range.

Lethal removal will now switch to aerial operations in 2021. Two 2-week aerial operations are planned for late July and early September 2021 as described in the [Final Mountain Goat Management Plan/EIS](#) released in May 2018.

Both the plan and the associated EIS were finalized after an extensive public review process that began in 2014. The plan outlines the effort to remove the 725 mountain goats estimated on the Olympic Peninsula in 2018 through capture and translocation and then lethal removal. The capture and translocation project was successful in meeting the objectives of the EIS. The total number of flight hours for capture (270 hours) was less than the estimated maximum hours, capture success was better than predicted, and WDFW released the number of mountain goats estimated.

Under the approved plan, the first priority was to capture and translocate mountain goats to the Cascade Range, where the populations are both native and depleted. The plan calls for ceasing captures once capture operations were no longer safe or efficient, due to the remaining goats residing in terrain that is unsafe for capture operations. As predicted in the plan, the mountain goats were harder to catch safely as the operations progressed. The growing challenges are evident in the mortality rate of captured animals, as well as in the number of flight hours needed for each capture. During the first round of captures, the average capture mortality was 5.2%. By the fourth and final round of capture and translocation in August 2020, the rate had increased to 9.1%. Similarly, flight hours per live capture increased from 0.59 hours per goat after the first round to 1.31 hours per goat during the fourth round. The remaining goats cannot be safely or efficiently captured.

As for the goats translocated in 2020, they are moving around and exploring their new territories as expected. Survival seems to be good so far. Of the 50 translocated we've had 7 mortalities, including 3 adult females, 1 adult male, 1 yearling female, and one kid of each sex. A rough estimate would be >80% survival so far, but survival will likely stabilize at around the 1-year mark. Overall survival has been just above 50% for our translocated goats.

### **Elk Hoof Disease**

—Kyle Garrison, WDFW

WDFW is continuing to collaborate with Washington State University's (WSU's) hoof disease program by collecting hoof samples from across the state, including on the Olympic Peninsula, where the disease is confirmed in Clallam, Grays Harbor, and Mason counties. The disease is suspected in Jefferson County though not confirmed. We conduct disease surveillance across the state by monitoring reports of limping or lame elk; where appropriate, we follow up on those reports for possible sampling and submission to a diagnostic laboratory at WSU.

The prevalence of the disease is tough to estimate. However, WDFW uses hunter reporting to index prevalence, and it has proven to be consistent with other more intensive sampling efforts (e.g., aerial surveys). Among successful hunters who reported in 2019 ( $n = 243$ ) in Olympic Peninsula Game Management Units (GMUs), 5% reported that their harvest had abnormalities consistent with hoof disease. That rate has remained essentially the same since 2016. Most reports of abnormal hooves come from the southern-end GMUs (figure below). The Peninsula estimates by GMU can fluctuate quite a bit because we often have few harvested animals, so just one or two reports can sway an estimate dramatically.

In terms of research, we're wrapping up analysis of a long-term survival study at Mount St. Helens focused on the impacts of hoof disease. We captured 180 individual adult female elk and instrumented them with GPS-enabled radio

collars. From 4 years of data, our preliminary results indicate that infected cow elk are in worse body condition and have lower survival and pregnancy rates compared to uninfected animals. We are still analyzing these data, but we hope to have a final report out in 6-8 months.



Female elk  
radio-collared for the  
hoof disease study at  
Mount St. Helens.

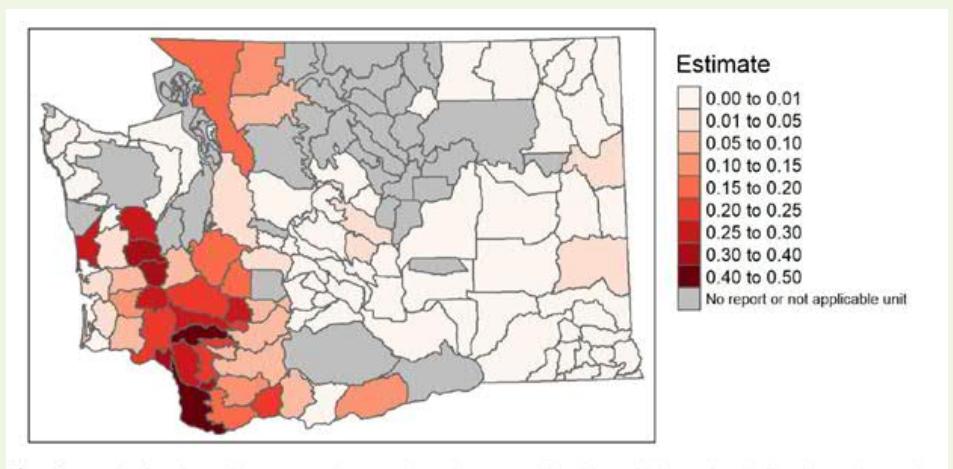


Figure 3. Proportion of Washington elk hunters answering "yes" to the question "In your opinion, did any of the hooves from the elk you harvested appear to be deformed or exhibit any abnormalities?" by game management unit, 2019 license year. Darker shades indicate higher prevalence, as indexed by hunter reporting. WDFW does not verify the actual disease status from individual hunter reports and estimates are sensitive to sample size (not displayed). GMU specific estimates available as requested (contact information below).

## Searching for Slugs & Snails

—Karen Holtrop, Olympic National Forest

When I was a young wildlife biology student long ago, I never imagined I would someday be searching for slugs and snails in the damp detritus of forest understory. But that is how I have spent a lot of my time, along with other staff and contractors of Olympic National Forest. From 2018 to 2020, we surveyed for rare terrestrial mollusks in 3,500 acres of coniferous forests proposed for commercial thinning.

It had been many years since the Olympic National Forest accomplished wide-scale mollusk surveys. The survey areas were in four watersheds situated in the northeast part of the Forest. The results were rewarding. We identified 18 mollusk species, ranging from tiny tightcoils (*Pristiloma acticum* and *P. lansingi*) to taildroppers (*Prophysaon andersoni*, *P. foliolatum* and *P. vanattae*). We commonly found Vespericola snails, beaded lancetooth snails

(*Ancotrema sportella*), and dromedary jumping-slugs (*Hemphillia dromedarius*). We also found numerous Burrington jumping-slugs (*Hemphillia burringtoni*), a Survey and Manage species of the NW Forest Plan and a Forest Service Sensitive species. In addition, the contractors of Hamer Environmental found a Ryan Lake Slug (*Zacoleus leonardi*) in the Jimmycomelately watershed, north of its previously known range.

For identification services, I mailed live specimens to the USFS Regional Office. (As a student I also never thought I'd be sending packed-on-ice mollusks through the mail.) When identification was complete, some of the specimens were preserved and some were mailed back live. The latter I safely released at their collection sites. Many thanks to Darci Rivers-Pankratz and Tom Burke for lending their identification expertise to this undertaking!

The survey results are being used to plan prescriptions for the proposed thinning stands. Pre-project surveys have been completed, but additional mollusks surveys might be done in the



**Top left:**  
Reticulate  
taildropper  
(*Prophysaon  
andersoni*).

**Bottom left:**  
Ryan Lake  
slug  
(*Zacoleus  
leonardi*).

**Right:**  
Reticulate  
taildropper  
being  
returned to  
the wild (cue  
the stirring  
theme music  
from "Born  
Free...").



future in these areas. We are particularly interested in doing additional searches for *Hemphillia burringtoni* in managed forest stands.



## eDNA Sampling at High-Elevation Lakes, Olympic National Forest

—Betsy Howell, Olympic National Forest

In 2020, Olympic National Forest (ONF), in partnership with Olympic National Park (ONP), U.S. Geological Survey (USGS), and WDFW, completed eDNA sampling at 20 high-elevation lakes ranging in elevation from 1,745 to 5,976 feet (average of 4,250 feet). The objective of the project, supported by Forest Service Regional Cost-Share funds, was to complete, for each lake, an aquatic species inventory using eDNA techniques, with a focus on native and non-native fish and amphibian species. This collaboration has included supplies and training for sampling provided by WDFW; methodology and guidance based on a pilot year of surveys in 2019 from ONP and USGS; and the collection of field samples by ONF staff.

A little more than half (11) of the 20 lakes surveyed are in wilderness; most of the lakes have a management history of repeated fish stocking.

For all lakes and ponds surveyed, we collected and filtered one liter of water at each of three locations along the shore, including one at the outlet and two others equidistant, to the best of our ability, from the outlet site. Depending on the ease of filtering, the processing at each lake took approximately one hour. We also filtered a control sample of 500 ml on site. The greater amount of time came from accessing the lakes, some of which are extremely remote and often accessible only by waytrails. We also took notes on visual observations of fish and amphibians as well as dispersed recreation use. All samples are currently with the WDFW Genetics Laboratory in Olympia and results are expected soon.

Species of interest in these high-elevation lakes include the Cascades frog (*Rana cascadae*), a USFWS Species of Concern; the rough-skinned newt (*Taricha granulosa*), a species highly susceptible to the salamander chytrid fungus,

Bsal); brook trout (*Salvelinus fontinalis*); coastal cutthroat trout (*Oncorhynchus clarkii clarkii*); and rainbow trout (*Oncorhynchus mykiss*). We will be getting presence information on these species, as well as other local native amphibians and aquatic invertebrates. This information will be included in the shared Olympic Peninsula lake inventory database currently maintained by ONP and will be used by the Forest and Park to develop a management plan for invasive species, recreation, and the conservation of sensitive species and their habitats. Our surveys will also provide baseline information about these ecosystems for future comparisons under changing climatic conditions.



Headed down to Upper Charlia Lake, ONF, August 13, 2020. Photo by Betsy Howell.



Alanna Brennan and Conor Cubit, ONF seasonal biological technicians, filtering samples at Cynthia Lake, August 4, 2020. Photo by Betsy Howell.



Adult long-toed salamander (*Ambystoma macrodactylum*) at Upper Charlia Lake. Photo by Marc McHenry



Marc McHenry, ONF fisheries biologist, scoops up water sample at Upper Silver Lake, ONF. Photo by Betsy Howell.



An inquisitive otter came to see what we were up to at Pine Lake. Photo by Betsy Howell.

## Northeast Region—Regional Representative: Annemarie Prince, WDFW

### Update on wildlife monitoring for the I-90 Snoqualmie Pass East Project

—Kristina Ernest, Central Washington University

WSDOT has captured deer, elk, coyotes, and a cougar (on camera) crossing over I-90 via the new Keechelus Lake wildlife overcrossing. Additional species at nearby undercrossings include otters, raccoons, and a porcupine. Low-mobility species monitoring (small mammals, amphibians, reptiles, cutthroat trout, bull trout) has been ongoing since 2008. This year we began monitoring bat activity through and near the overpass, nearby underpasses, and adjacent forest sites (CWU graduate student Jenna Chapman).

### Happenings on the Colville National Forest

—Mike Borysewicz, USFS

The Colville National Forest continued to assist with a grizzly bear research project led by Wayne Kasworm, Grizzly Bear Biologist with USFWS in Libby, MT. This is a multi-year effort to understand the genetic relatedness, population trends, habitat use, causes of mortality, and connectivity of the grizzly populations in the Selkirk and Cabinet-Yaak Ecosystems. We put out 10 hair snag corrals in 2020, focusing on the Salmo-Priest Wilderness in extreme northeastern Washington. We obtained hair samples and photographic evidence of two grizzly bears at these corrals. We also collected bear hair samples at 16 artificial rub posts.



Grizzly bear detected in the Selkirks of Washington

This year we also monitored our small breeding population of harlequin ducks in Sullivan and Harvey Creeks. This species is listed as sensitive for the Forest. They breed on fast-moving mountain streams and winter off the Pacific coast. In 2021 we detected 3 pairs of ducks with 8 young.



Harlequin Ducks on the Colville National Forest

### WDFW/UW Predator-Prey Project Updates – Year 4

—Melia DeVivo, WDFW

The Predator-Prey Project is closing out the fourth year of field data collection in Stevens, Pend Oreille, and Okanogan counties. Researchers from WDFW and the University of Washington conducted the last capture and collaring effort for cougars, elk, mule deer, and white-tailed deer this past winter for adult animals and in the spring for neonate white-tailed deer and elk. In total, from 2017-2020, the project has collared 278 white-tailed deer, 93 elk, 138 mule deer, 16 wolves, and 60 cougars.

While most of this research relies on collars collecting locations every four hours, other students are using complementary non-invasive methods to explore predator-prey interactions and test those techniques to survey predator and prey populations. These methods include autonomous trail cameras and audio recorders to photo-capture focal species and record wolf howls, respectively. Collars, cameras, and audio

recorders will continue to collect data through the summer of 2021, when the field component of the study will end, and researchers will process the full suite of data. Some data processing is currently underway, and the first results were expected as early as winter



*Biologists from WDFW and the Kalispel Tribe collaring the first two adult white-tailed deer in December 2019 of the last capture season for the project.*

2020/2021. More details and current progress about the project can be found at <https://predatorpreyproject.weebly.com/>.



*WDFW and UW researchers assigning a fat content score to hearts and kidneys of white-tailed deer to calculate percent body fat and determine general nutritional condition of the population.*



*Cougar recovering after being chemically immobilized and collared for the project in March 2020.*



***Bonus photo from the ONF eDNA sampling project!***  
*Juvenile long-toed salamander at Goat Lakes—North Pond (notice the long fourth toe!).*  
*Photo by Conor Cubit.*

# News Ways to Contact Your Board and Committee Chairs

Thanks to the dedicated efforts of Sara Hansen, graciously assisted by Jen Syrowitz, we now have e-mail addresses that reflect who we are! If you want to contact one of us, just send an e-mail to [position]@watws.org.

<u>Position</u>	<u>Name</u>	<u>E-mail</u>
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Vice President	Vacant	
President-Elect	Matt Wilson	president.elect@watws.org
Past President	Lisa Dowling	pastpresident@watws.org
Treasurer	Bruce Thompson	treasurer@watws.org
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Awards Committee Chair	Bill Vogel	bill.vogel@watws.org
Newsletter Editor	Mike Hall	newsletter@watws.org



Parting shot: Yakima River Canyon. Photo taken in April 2017, on the way home from the joint meeting of WA-TWS and the Washington Chapter of the Society of American Foresters. We'll meet again!