

CALL FOR PAPERS

66th Annual Meeting

February 4-8, 2019

**The Western Section of The Wildlife Society
Tenaya Lodge at Yosemite -- Fish Camp, California**



Tentative schedule

Monday, February 4

1:00pm to 8:00pm	Western Section Executive Board Meeting
12:00pm to 9:00pm	Wilderness First Aid with Foster Calm*
1:00pm to 6:30pm	Fire Ecology & Forest Health in the 21st Century Symposium*
8:00pm to 9:00pm	Registration Packet Production

Tuesday, February 5

7:00am to 8:00pm	Registration Open
8:00am to 6:00pm	Wilderness First Aid with Foster Calm* (concludes)
8:30am to 12:30pm	Fire Ecology & Forest Health in the 21st Century Symposium* (concludes)
8:30am to 2:30pm	Board Leadership Training
12:30pm to 4:30pm	Wildlife Biologist Construction Awareness Training (WildC.A.T.)*
1:00pm to 5:00pm	State Research Permitting Training with the California Department of Fish and Wildlife*
1:00pm to 3:00pm	Marketplace/Exhibit Hall Setup
1:00pm to 4:00pm	Southern Sierra Nevada Fisher Working Group Meeting
3:00pm to 4:30pm	Chapter Leaders Meeting New Time!
3:00pm to 8:00pm	Marketplace/Exhibit Hall Open
4:30pm to 6:00pm	U.S. Forest Service Biologists and Researchers, Meet & Greet
5:00pm to 6:00pm	Elevator Speech Training for Students Interested in Attending Graduate School New Time!
6:00pm	Official Meeting Opening
6:00pm to 8:00pm	Welcome Reception, Photo Display

Wednesday, February 6

7:30am to 9:30am	Breakfast Roundtable Discussion*
7:30am to 7:00pm	Registration Open
8:00am to 10:00am	Publishing Papers and Peer Review Workshop
9:00am to 7:00pm	Marketplace/Exhibit Hall Open and Vendor Demos New!
10:00am to 5:00pm	Speaker Practice Room
10:00am to 12:00pm	Keynote Address & Dialogue
12:00pm to 1:30pm	Lunch break
12:30pm to 1:30pm	Retirees Meeting
12:30pm to 1:30pm	Workshop: How *Not* to Give a Scientific Presentation
1:30pm to 5:30pm	Scientific Concurrent Sessions
2:00pm to 4:00pm	Poster Setup Hours
4:00pm to 7:00pm	Poster Viewing and Judging
3:30pm to 5:30pm	Resume Workshop
5:30pm to 6:30pm	HSU Reunion
6:00pm to 7:00pm	No-Host Cocktail Reception
7:00pm to 10:00pm	Annual Members Banquet, Awards Ceremony, and Bucket Raffle*

Thursday, February 7

7:00am to 8:00am	Breakfast Social*
7:30am to 8:00pm	Registration Open
7:30am to 8:30am	Western Wildlife Planning Meeting
8:00am to 9:00pm	Marketplace/Exhibit Hall Open and Vendor Demos
8:00am to 8:00pm	Poster Viewing and Judging
8:00am to 12:00pm	Scientific Concurrent Sessions
9:00am to 5:00pm	Speaker Practice Room
10:00am to 12:00pm	Resumé Workshop
12:00pm to 1:30pm	Lunch break
12:00pm to 1:30pm	Chapter Meetings ^{New Time!}
1:30pm to 3:00pm	Plenary Session: <i>Death And Taxas: Extinction and Speciation During the Anthropocene</i>
3:15pm to 4:15pm	Member Engagement Committee Meetings <ul style="list-style-type: none">- Diversity Committee- Awards and Grants Committee- Conservation Affairs Committee- Student Affairs Committee- Early Career Professionals Committee- Mentoring Committee- Professional Development Committee- Member Communications Committee
4:30pm to 6:00pm	Annual Business Meeting and Members Forum
6:00pm to 7:00pm	No-Host Cocktail Reception and Silent Auction Ends at 7pm
7:00pm to 9:00pm	Poster Reception

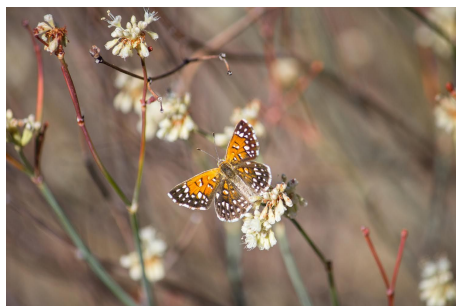
Friday, February 8

7:00am to 8:00am	Breakfast Social*
7:30am to 1:00pm	Registration Open
8:00am to 12:30pm	Scientific Concurrent Sessions
8:00am to 12:00pm	Resume Critiques, by appointment
8:00am to 11:00am	Marketplace/Exhibit Hall Open
9:00am to 11:00am	Wildlife Career Symposium for Students & Graduate Student Speed Round
11:15am to 12:15pm	Job Interview Panel
12:30pm to 1:30pm	"Taking your elevator speech on the road: What to do after a conference" ^{New!}
1:00pm to 2:00pm	Meeting Planning Committee Wrap-Up

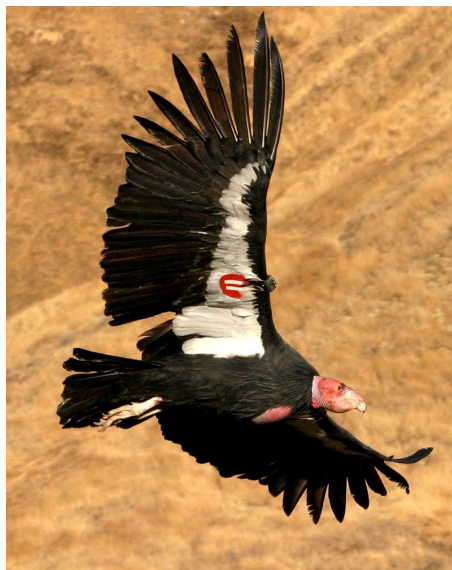
* Requires extra fee

Plenary Session Theme:

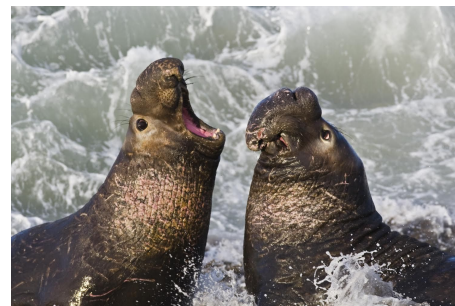
Death And Taxes: Extinction and Speciation During the Anthropocene



Lange's Metalmark Butterfly
Photo by Sarah Bettelheim



California Condor
Photo by USFWS



Northern Elephant Seal
Photo by Michael L. Baird

We are closing in on a decade since the concept of the "Anthropocene" first took root. The term stems from the Greek words for human (Anthropo-) and new (-cene) and represents a backward glance—as far back as the beginning of the Agricultural Revolution—and a prophetic gaze forward—into our LCD mobile phones, the modern crystal ball. This burgeoning geologic epoch is one steeped in enough controversy that it has yet to be formally adopted by the appropriate parties. But there is little question among scientists that the proposed Anthropocene (or, conservatively, our current Holocene) has recently become an epoch indelibly defined by humankind's impact on Earth's climate, biogeography, biodiversity, geomorphology, and stratigraphy.

Because we are scientists, we recognize that the systems above are as reliant on each other as wildflowers are to pollinators. But because we are also wildlife biologists, we have the privilege of focusing our studies on the species that comprise Earth's biodiversity. The trickledown effects of humankind's impact can be seen in wildlife through range shifts, the spread of pathogens and invasive species, habitat loss, extirpations and extinctions, and more. The effects we see are so pervasive, it seems appropriate that wildlife have become our canary in the coalmine. But it is unseemly that today we have grown numb to the deafening silence of each canary lost to the coalmine.

And so, we find ourselves faced with death, the plight of declining to extinct taxa, the discovery of new taxa, and the rediscovery of taxa thought to be extinct. Extirpation, recovery, extinction, and rewilding: one thing they have in common is humans, one thing that differentiates them is the passage of time. To reach extinction, to resort to rewilding, means we've waited too long. In the Anthropocene, time is money, and the costs to rebuild a species from genes and spare parts can be exponentially greater than those necessary to manage a species in decline.

Today, we extoll the efforts spent to recover the California condor and hang our head over the loss of the Xerces blue butterfly, extinction's cautionary poster child. Stories like these force us to ask ourselves when is it appropriate to step in, and is it ever too late? Are we ready to learn from past mistakes in time to prevent future ones? Because at some point, in the not-too-distant future, we'll learn whether action or inaction bears a steeper price to pay.

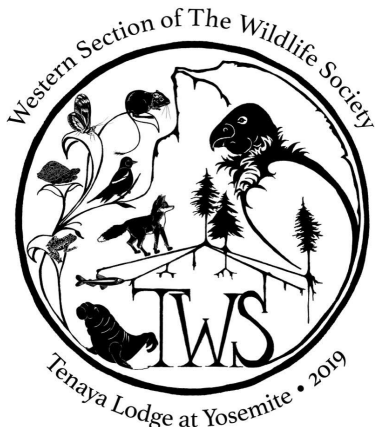
These are sobering thoughts in trying times, but the challenges are not insurmountable. Even as science marches forward, there is still time to remember the past so that we are not condemned to repeat it. These are the questions we'll be exploring, using case studies from the past - the elephant seal, California condor, Xerces blue butterfly - to inform crises in the present - Sierra Nevada red fox, Lange's metalmark butterfly, mountain yellow-legged frog.

As we stand at the crossroads of a geologic epoch that portends permanency, as scientists it seems unquestionable that in this world nothing can be said to be certain except death and "taxas". One is inevitable, the other enviable. That humankind will continue to leave our indelible mark on the planet seems inescapable, but that doesn't mean it can't be one of beauty. Of a planet - and its "taxas" - made whole again for future generations.



This sea elephant knows his stuff, 1936
Photo by Acme Newspapers

Behind the Logo:



DEATH & TAXAS
Extinction and Speciation During the Anthropocene

Laura Duffy is a San Francisco Bay Area wildlife biologist with experience in wildlife science, marine and coastal ecology, marine protected areas, and education and outreach - plus, a heretofore hidden talent in the arts. When she's not at work, you can find Laura volunteering, painting, running, skiing, hiking, swimming, and exploring the coast. Weeks after accepting the assignment to take on the logo for this year's annual meeting, Laura also accepted a FEMA deployment to Puerto Rico to help respond to the devastation wrought by Hurricane Maria. In between work and the not-infrequent intra-island moves required to help Puerto Rico recover, Laura is hard at work putting the finishing touches on the logo that will accompany the meeting's theme, "Death and Taxas: Extinction and Speciation During the Anthropocene." The logo will feature species not only on the brink of extinction (Lange's metalmark butterfly, Delta smelt) or extirpation (Sierra Nevada red fox), but also those that have been successfully recovered (California condor, elephant seal), all set against the magnificent backdrop of Yosemite's Half Dome.

Call for Papers and Posters:

We are soliciting abstracts for posters and 20-minute oral presentations for the concurrent technical and poster sessions. Abstract content should be related to technical session topics listed below, but additional topics may be entertained if sufficient presentations are submitted. Presentations may consist of either final or interim original research results. The conference program and session chairs will evaluate submitted abstracts to determine final concurrent session topics.

All papers associated with the general meeting will be presented Wednesday afternoon through Friday morning, February 6 to February 8, 2019. In general, presenters should expect to speak for no more than 17 minutes, allowing for an introduction and limited Q&A after each presentation.

Concurrent Technical Session topics may include, but are not limited to:

- Ecology and Conservation of Amphibians and Reptiles
- Ecology and Conservation of Mammals
- Ecology and Conservation of Birds
- Ecology and Conservation of Invertebrates
- Ecotoxicology & Cannabis
- Wildlife Techniques and Technologies
- Wildlife Professionals: Agency Coordination & Collaboration
- Wildlife Professionals: Consultant Case Studies
- Wildlife Professionals: Trials in Research & Academia
- The Anthropocene: Decline & Extinction
- The Anthropocene: Speciation & Hybridization
- The Anthropocene: Pathogens & Invasive Species
- The Anthropocene: Recovery & Re-Wilding
- Other

Note: Session titles may be added or changed at a later date based on papers received. If a group has the desire and sufficient participants to create a unique session please contact the program chair (Matthew Bettelheim, blackfish@nasw.org)

Check <http://twswest.org> for an updated list of technical sessions and schedule.

A poster session will be held on Thursday, February 7, 2019. The Thursday poster session will be an evening reception from 7-9pm with hors d'oeuvres and a no-host bar. Presenters are asked to be available at their poster during the poster session to discuss their work with interested viewers. Posters should be set up on Wednesday between 2-4pm. They will be available for viewing Wednesday afternoon through the Thursday evening poster reception. Posters should be no more than 44" tall by 44" wide. Display boards will be provided. Posters should be removed on Thursday evening at 9pm.

Abstract Submission Process:

The **deadline** for submission of both Oral Presentation and Poster abstracts is **Friday, October 26, 2018**.

Please submit abstracts electronically by filling out the interactive form on the Section website at: https://www.wildlifeprofessional.org/western/ac2019_abstract_submit.php

Abstracts should not exceed 200 words and must adhere to format and layout elements provided in the example below. Indicate whether the paper will be an oral presentation or a poster, and if an oral presentation, indicate your preferred session.

Oral and Poster Presenters are expected to pay the conference registration fee and cover their own travel and lodging expenses. See the Western Section website for registration and other conference information (coming soon).

We will review the submitted abstracts and will notify the submitters of their status by December 3, 2018. Thank you, in advance, for your time and effort in the submission process.

ABSTRACT EXAMPLE:

Preferred Session: Ecology and Management of Shorebirds

Type of paper: Oral presentation

If a student, indicate if you intend to participate in the Student Judging.

Paper Title: **Status and Habitat Use of Long-Billed Curlews in the Central Valley in Fall**

W. David Shuford, PRBO Conservation Science, 3820 Cypress Drive #11, Petaluma, CA 94954, dshuford@prbo.org, (415) 868-0371x310;

Co-authors: Gary W. Page; Gary M. Langham; and Catherine Hickey

Abstract: The long-billed curlew (*Numenius americanus*) – a large shorebird of conservation concern at the continental level – is a migrant and winter resident in California's Central Valley, where it concentrates primarily in agricultural lands. Despite recent estimates of the size of the curlew's North American breeding population, little is known about its abundance and habitat needs at migratory stopovers and wintering areas. To help fill these gaps, we coordinated three broad-scale surveys of curlews in the central and southern portions of the Central Valley in fall and winter in 2007-2008 and a more comprehensive survey of the entire Central Valley in August 2009. On the latter survey, we recorded 20,775 curlews in 197 flocks. In all years in autumn, the vast majority of curlews were found in irrigated croplands, primarily alfalfa and irrigated pastures, during this otherwise arid season. More frequent surveys at the local level in Solano County and more recent radio-telemetry studies indicate that some curlews shift their distribution from fall to winter. More work on fine-scale habitat preferences and movements in the Central Valley is needed to aid in the conservation of this at-risk shorebird.

Competition for Student Awards at the TWS Western Section Annual Meeting:

The Western Section of The Wildlife Society is pleased to offer six cash awards for students who speak in an oral session or present a poster at our annual meeting. "Student" is defined as any individual, any age, who is currently enrolled or has received a degree within six months of the meeting date from any high school, accredited college, or university (not limited to those within the Western Section). From high school to post-doc, we welcome your participation!

The value of the cash awards varies slightly, based upon the number of students in the competition. In general, the more students who compete, the more cash we award! Please be sure to indicate when you submit your abstract whether you intend to compete in the student judging competition. It is your responsibility to express your intent to participate. By participating in the competition, you will receive positive remarks and constructive criticism from the judges (typically at least three), telling you what they liked and how you can improve your next presentation.

OTHER INFORMATION:

CALL FOR SESSION CHAIRS: We are seeking individuals who are interested in volunteering to serve as the chairperson for the technical sessions. The session chair will help select abstracts to accept and coordinate with presenters. They will moderate the technical session at the conference. If you are interested, please contact President-Elect and Meeting Chairperson: Matthew Bettelheim, blackfish@nasw.org

PRE-CONFERENCE SYMPOSIA AND WORKSHOPS: We have several pre-conference workshops and symposia in development and will announce the final schedule by the end of the summer. We are also excited to announce that we are working on setting up a restoration field event in Yosemite National Park. Stay tuned for more information!

SPONSORSHIPS: We welcome organizations, agencies, consulting firms, chapters, nonprofits and individuals to sponsor our meeting! Sponsors qualify for exhibit space, public demos, discounted or free event registrations, acknowledgment in the program and more. We also encourage groups to host sponsored events within the meeting (or pre-meeting) events. Opportunities start at \$1,000.

PHOTO SHOW: We will display our annual Wildlife Slideshow at the Tuesday Welcome Reception. The content is up to you! Please send your photos of wildlife, coworkers, TWS workshops, study animals, unexpected situations, beautiful locations, etc. to us to help celebrate wildlife and the wildlife profession! Please send photos in .jpg format to evelarrucea@gmail.com. Each person submitting photos for the slideshow will be entered in a raffle for a \$200 REI Gift Card.

VOLUNTEERS: Our meeting is organized by an incredible team of volunteers, and we'd love to have you join our team. Make new friends and help TWS-WS at the same time! We are looking for committee members for our Annual Meeting Planning Committee, plus we are also looking for Session Chairs for our Concurrent Sessions. The planning committee will start up at the end of the summer. Please contact candace.renger@gmail.com for more information. Also, a limited number of student volunteers may work up to 8 hours for a full or partial reimbursement of their student registration fees. More information on student volunteer sign-ups coming soon! We will work with student volunteers to set up a volunteer schedule that allows them to participate in the top events they are interested in attending during the meeting so that volunteers have an incredible conference experience. Please contact ryan.baumbusch@oregonstate.edu for more information on the student volunteer program.

AWARD NOMINATIONS: The Western Section recognizes outstanding individuals and organizations that have exceeded normal contributions toward the Western Section's goals. If you know of a nominee deserving of any of the below awards please contact Award and Grants Committee Chair richard.burg@wildlife.ca.gov by 12/7/2018.

1) Raymond F. Dasmann Award for the Professional of the Year The "Dasmann Award" is presented by the Western Section to Professionals who have made an outstanding contribution to wildlife resources management and understanding in California, Nevada, Hawaii or Guam.

2) Conservationist of the Year Award The "Conservationist of the Year Award" is presented by the Western Section to a person or group, engaged in wildlife conservation either as a profession or as an avocation, who has made an outstanding contribution to wildlife conservation in California, Nevada, Hawaii or Guam.

3) Barrett A. Garrison Outstanding Mentor Award The "Barrett A. Garrison Outstanding Mentor Award" is bestowed to a professional within California, Nevada, Hawaii, and Guam who has contributed to our profession by assisting the continued development of students and/or young professionals.

STUDENTS: Our meeting offers students and early career professionals numerous career development and mentoring opportunities beginning with the Tuesday night Welcome Reception where we'll play a student-professional mixer game to encourage new conversations and networking. We'll repeat our successful student workshops such as "How NOT to Give a Scientific Presentation", Peer Review & Publishing Workshop, Resume Workshops, resume critiques, summer job recruiters, Job Interview Workshop, and a Wildlife Career Symposium geared towards undergrads who want to know more about the different job opportunities in the wildlife field. Students and early career professionals are encouraged to apply for [travel scholarships](#) and grants (more information coming soon). These workshops and events are all included in the meeting registration fee.

GRANTS: The Western Section encourages member participation by financially assisting professional meetings, conferences, symposia, and other continuing education activities. For more information: <http://twswest.org/grants.php>

PROFESSIONAL DEVELOPMENT: Members will be eligible to earn credit hours for Professional Development Certificates and for TWS Certification renewal (note: meetings such as this do not normally qualify for an initial TWS certification application, but pre- and post-conference symposia and workshops can!). Additional information will be provided in the final conference program.

WORKING GROUPS: The Western Section is pleased to help facilitate the meeting of working groups during the Annual Meeting, as has been done in the past. To ensure space is available and to help minimize scheduling conflicts, if you are interested in holding a working group meeting, please contact Candace Renger by December 7, 2018 at candace.renger@gmail.com

MEETING REGISTRATION: On-line registration for the Western Section Annual Meeting is expected to open approximately November 1, 2018. <http://twswest.org/>

VENUE INFORMATION AND HOTEL ACCOMMODATIONS: The 2019 Annual Meeting will be held at the Tenaya Lodge at Yosemite in Fish Camp, CA. An elegant resort in the California High Sierra.



We have pre-purchased a limited block of non-smoking hotel rooms at a low nightly rate for TWS-WS members. *These rooms are first come, first serve and we expect that our room block will sell out. We encourage meeting attendees to reserve their rooms early. Do not wait until the last minute as this hotel is also popular with Yosemite tourists and the hotel could sell out completely as the date approaches.* The hotel is pet friendly so bring your dog! Our room block rate is available until January 11, 2019 or until the rooms in our block are sold out, whichever comes first.

Online Reservations for rooms at the Tenaya Lodge:

- Rate for TWS-WS Annual Meeting Attendees (and federal employees) - \$113/night: [Link to rate](#)
- Rate for State Employees (California, Nevada and Hawaii -- Must Present ID at Check-in) - \$90/night: [Link to rate](#)

Telephone Reservations: (800) 635-5807. Identify that you are with the Western Section of The Wildlife Society Annual Meeting to receive our negotiated rate.

- The group code for TWS-WS Annual Meeting Attendees is 3180CS, \$113/night.
- The group code for State Employees with State ID is 3180DO, \$90/night.

TWS-WS meeting attendees who book as part of our room block will have the \$30/night hotel resort fee waived and will receive the following complimentary amenities:

- Wi-Fi (high speed internet); Toll Free and Local Telephone Calls
- Overnight Parking
- Two Bottles of Water Daily
- Full Access to the Fitness Room, Steam Rooms, and Saunas in Ascent Spa
- Access to the Resort Pools and Spas
- Business Center Access; Newspaper Available Daily in the Lobby

SHARED HOTEL ROOMS: We encourage TWS-WS meeting attendees to share their hotel room with friends and colleagues so that more people can attend the Annual Meeting! We will setup a room sharing bulletin board on our meeting website so that meeting attendees can find a roommate. Our meeting website will be up by September so check back soon for more information.

CAMPING: For those interested in winter camping, there are sites nearby in either Wawona and Bass Lake. Each campground is approximately 20 minutes from the Tenaya Lodge by car.

TRANSPORTATION: Tenaya Lodge at Yosemite is located 62 miles north of Fresno International Airport (FAT) on California State Highway 41 and 2 miles from the south entrance to Yosemite.

During the winter months, snow chains may be required on State Highway 41 or Highway 49. For highway information and snow chain requirements, please call 800-427-7623.

When chain control is in effect, all vehicles (including four-wheel drive) must carry tire chains. In extreme weather conditions, even four-wheel drive vehicles will require chains. We will set up an online bulletin board so that meeting attendees can connect about carpooling and room shares.

[Link to driving directions to Tenaya Lodge](#)



Questions about the 2019 Annual Meeting?

- **Matthew Bettelheim**, Conference Chair and TWS-WS President-Elect - blackfish@nasw.org
- **Janine Payne Schneir**, Professional Development Committee Chair - pdcc@twswest.org
- **Candace Renger**, Meeting Planner - candace.renger@gmail.com or (510) 684-8590
- **The Western Section of The Wildlife Society** - www.twswest.org PO Box 6756. Albany, CA 94706