



CALL FOR PAPERS

64th Annual Meeting of The Western Section of The Wildlife Society
 Vineyard Creek Hyatt -- Santa Rosa, California

Tentative schedule

Monday, February 5

9:00am to 5:00pm Extinction or management of owls: the dilemma of the barred owl invasion in California*
 1:00pm to 9:30pm Wilderness First Aid with Foster Calm* (Includes s 1-hour dinner break)
 2:00pm to 5:00pm Registration Packet Production **New Time!**

Tuesday, February 6

8:00am to 6:00pm Wilderness First Aid with Foster Calm* (Concludes)
 8:00am to 2:00pm Watershed Restoration Event
 8:00am to 2:00pm Western Section Executive Board Meeting
 8:30am to 5:30pm Effects of Marijuana on Wildlife and Habitat Symposium*
 12:00pm to 2:00pm Exhibit Hall Setup
 12:30pm to 3:30pm Southern Sierra Fisher Working Group
 1:00pm to 5:00pm Wildlife Biologist Construction Awareness Training (WildC.A.T.)* **New Time!**
 2:00pm to 8:00pm Exhibit Hall Open
 2:00pm to 5:00pm Story Circles Narrative Training DEMO DAY with Randy Olson*
6:00pm Official Meeting Opening
 6:00pm to 8:00pm Welcome Reception, Photo Display* **New Time!**

Wednesday, February 7

7:30am to 9:30am Breakfast Roundtable Discussion*
 8:00am to 7:00pm Exhibit Hall Open
 8:00am to 10:00am Publishing Papers and Peer Review Workshop **New!**
 8:30am to 9:30am Western Section Member Communications Committee Meeting
 10:00am to 5:00pm Speaker Practice Room
 10:00am to 11:30am Keynote Address & Dialogue
 11:30am to 1:00pm Lunch break (on your own)
 12:00pm to 2:00pm Poster Setup Hours
 1:00pm to 5:00pm Scientific Concurrent Sessions
 1:00pm to 2:00pm How *Not* to Give a Scientific Presentation
 2:00pm to 7:00pm Poster Viewing and Student Paper Judging
 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*
Tentative schedule, continued

Thursday, February 8

7:00am to 8:00pm

Exhibit Hall

7:00am to 8:30am

Coffee with Poster Presenters **New!**

7:00am to 4:00pm

Poster Viewing

7:00am to 8:30am

Retirees Meeting (No host, Location TBD)

7:30am to 8:30am

Professional Development Committee Meeting

7:30am to 8:30am

Western Wildlife Planning Meeting

8:30am to Noon

Scientific Concurrent Sessions

9:00am to 5:30pm

Speaker Practice Room

10:30am to 12:30pm

Resumé Workshop:

A Beginner's Guide: The Basics of a Resume, C.V. and Interview Skills

Noon to 1:30pm

Lunch break (on your own)

Noon to 1:30pm

Chapter Leaders Meeting (Location TBD)

1:30pm to 3:00pm

Plenary Session: **Communicating Science**

1:30pm to 3:30pm

Resume Critiques (by appointment)

3:15pm to 4:15pm

Member Engagement Committee Meetings **New!**

- Diversity Committee

- Awards and Grants Committee

- Conservation Affairs Committee

- Student Affairs Committee

- Early Career Professionals Committee

- Mentoring Committee

4:30pm to 6:00pm

Annual Business Meeting and Members Forum

6:00pm to 8:00pm

Poster Reception (and Silent Auction Ends at 7pm **New Time!**)

8:00pm

Exhibit Hall Closes **New Time!**

8:00pm to 9:30pm

Chapter Meetings

Friday, February 9

7:00am to 8:30am

Student-Professional Mixer and Breakfast **New Time!**

8:30am to 12:30pm

Scientific Concurrent Sessions

8:30am to 10:30am

Wildlife Career Symposium for Students **New!**

8:30am to 10:30am

Resumé Workshop:

Advanced Resume, C.V. and Interview Skills

8:30am to 11:30am

Career Fair and Recruiters

11:00am to Noon

Job Interview Panel

11:30am to 2:00pm

Resume Critiques, by appointment

1:00pm to 2:00pm

Meeting Planning Committee Wrap-Up Lunch

1:00pm to 3:00pm

Student Poster Session for Emerging Researchers Sharing

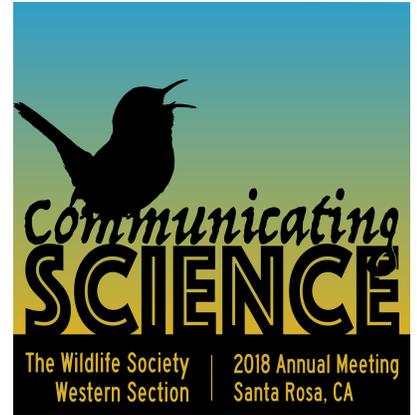
Work-in-Progress **New!**

* Requires extra fee

Plenary Session Theme:

Communicating Science

When we polled the breakfast roundtable participants at our 2017 annual meeting about future discussion topics and therefore meeting themes, science communication emerged overwhelmingly as the leading suggestion. Perhaps a sign of the times, we seem to be clamoring for ways to more effectively communicate science to peers, the public, and policy makers. The March for Science event that we sponsored in April 2017 is a case in point. Coincidentally, one of the Western Section's objectives is to encourage communication between and among members and non-members. After all, science is not science until it's communicated. The problem is that we tend to assume that when we present people with the facts, they will understand what we are saying and why it's important. But they often don't.



Our plenary panelists have devoted a lot of time to thinking about why that is, and they have developed ways to overcome this problem. **Randy Olson**, taking cues from the creative storytelling power of Hollywood, focuses on the importance of narrative structure in communicating science. Recognizing that learning anything well requires training and practice, Randy will also be presenting a workshop on recognizing and using narrative structure. Participants will then have the opportunity to join a 10-week post-conference story circle to hammer in this concept.

Jon Hooper strives to help us give more compelling presentations by identifying what to do and what *not* to do. In that regard, Jon will also give a workshop on how not to give a scientific presentation. **Mike Gil** and **Sara ElShafie** make science accessible to broad audiences, Mike through popular media like YouTube, and Sara by character development, conflict-resolution, and other Pixar-inspired storytelling techniques. Although not part of the plenary panel, Western Section President **Rocky Gutiérrez** will lead a workshop on how to prepare papers for scientific publication and the peer review process.

I'm inspired by these individuals and their ideas. I hope they will stimulate you to rethink and refine the way you communicate science, help you more effectively communicate what you know, and ultimately contribute to making the world a better place.

—Jeff Davis, President-Elect

Behind the Logo

Our meeting logo combines the photographic talents of [Gary Woods](#) with the digital artistry of [Marcus England](#). The silhouette is of a Bewick's wren. Bewick's wrens are masters of communication, famous for their large vocal repertoires and regional dialects.

Put it before them briefly so they will read it, clearly so they will appreciate it, picturesquely so they will remember it, and above all, accurately so they will be guided by its light.

—Joseph Pulitzer



The Plenary is Sponsored by [Colibri Ecological Consulting](#)

2018 Plenary Speakers



Randy Olson Once upon a time... Randy Olson was a humble, mild-mannered professor of marine biology at the University of New Hampshire. But then his brain sort of turned inside out and he shifted from scientist to artist. It happened in his first year as a professor. He hit a point where he realized that after fifteen years of telling stories OF science he had grown more interested in telling stories ABOUT science.

Despite his Harvard Ph.D., four years of post-doctoral research in Australia and Florida, and years of diving around the world from the Great Barrier Reef to Antarctica, he tossed it all in, resigned from his tenured professorship, and moved to Hollywood to explore film as a medium for communicating science.

Today he is an INDEPENDENT FILMMAKER and no longer considers himself a scientist, but is now fluent in the two languages of science and cinema. In addition to writing and directing his **own feature films** about major issues in science, he has worked with **a variety of clients** to assist them with the use of visual media in communicating science to the general public. Through his writings he has both **related his journey** and **continues his exploration** into the role of storytelling in the mass communication of science.



Mike Gil Dr. Mike Gil, Ph.D., is a National Science Foundation (USA) Postdoctoral Research Fellow (University of California, Davis) and a TED Fellow. Dr. Gil has studied various marine ecosystems in the USA, the Caribbean, French Polynesia and Southeast Asia, from coastal coral reefs, seagrass meadows, and salt marshes to plastic pollution in the middle of the Pacific. His diverse research efforts are unified by a common goal: better understand how natural communities of organisms function and provide invaluable services to humankind in a changing world. In addition to his scientific research, Dr. Gil is an award-winning science communicator with broad interests in connecting the public with the process of scientific discovery and all that it offers to individuals and to humankind, as a whole. To this end, Dr. Gil founded and runs a 501(c)(3) non-profit organization, SciAll.org, which uses mass science communication to diversify interest in science.



Jon Hooper Dr. Jon Hooper's professional "mission" is to help people better understand how ecological systems truly function (i.e., replacing fallacies with facts) so they can make ecologically-sound decisions on environmental issues. Jon has taught wildlife education and environmental communication workshops for more than 40 years throughout the U.S. for more than 35 agencies and organizations. He has published more than 40 wildlife communication publications. Jon is a Certified Wildlife Biologist via The Wildlife Society as well as a Certified Interpretive Trainer and "Fellow" with the National Association for Interpretation. He is a professor emeritus from the Department of Recreation, Hospitality, and Parks Management at California State University, Chico. Jon has worked for Wildlife Extension (Cooperative Extension Service) in both Colorado and California as well as for the Colorado Division of Wildlife where he did fisheries biology field work in -47-degree weather! Jon taught the Western Section's "Natural Resources Communication Workshop" (NRCW) for more than 40 years (from 1975 until 2016) and received the Raymond F. Dasmann Professional of the Year Award from the Western Section in 2002.



Sara ElShafie Sara ElShafie is a doctoral candidate in Integrative Biology at the University of California, Berkeley. Her research, based at the UC Museum of Paleontology at Berkeley, investigates climate change impacts on animal communities over time. Sara is passionate about making research accessible and exciting for the masses. She works with artists, scientists, and educators around the country to develop programs that train professionals to engage the public with their work. Sara is currently piloting a story training workshop series for scientists, which she developed in collaboration with artists at Pixar Animation Studios. She is also organizing a symposium, *Science Through Narrative: Engaging Broad Audiences*, for the 2018 Annual Meeting of the Society for Integrative and Comparative Biology in San Francisco.

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 7 to February 9, 2018. 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:

- Wildlife and Climate Change
- Ecology and Conservation of Amphibians and Reptiles
- Ecology and Conservation of Birds
- Ecology and Conservation of Seabirds
- Ecology and Conservation of Shorebirds
- Ecology and Conservation of Mammals
- Wildlife Techniques and Technologies
- Endangered Species Recovery
- Wildlife Health and Disease Ecology
- Wildlife and Renewable Energy
- Communicating Science to Diverse Audiences
- Urban Wildlife Management
- Genetic Techniques in Wildlife Research and Management
- Wildlife and Managed Forests
- Wildlife, Pollution, and Ecotoxicology
- Conservation Banks and Easements
- Public Policy and Wildlife Management
- Human Diversity and Wildlife Conservation

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 (Jeff Davis, jdavis@colibri-ecology.com).

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

Two poster sessions will be held at the 2018 Annual Meeting. Both poster sessions will be held on Thursday, February 8, 2018. The first will be a morning poster session with coffee/hot drinks and a continental breakfast buffet from 7-8:30am. The second will be an evening poster session from 6-8pm with hors d'oeuvres and a no-host bar. Presenters are asked to be available at their poster at one or both of these poster sessions to discuss their work with interested viewers. Posters should be set up on Wednesday between Noon and 2pm. 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 8pm.

Abstract Submission Process:

The deadline for submission of both Oral Presentation and Poster abstracts is **Thursday, October 26, 2017**.

Please submit abstracts electronically by filling out the interactive form on the Section website at: https://www.wildlifeprofessional.org/western/ac2018_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.

Student presentations may be eligible for cash awards. Students must indicate their intent to compete for these awards. Additional eligibility information available at www.tws-west.org.

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.

We will review the submitted abstracts and will notify the submitters of their status by December 4, 2017. 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.

Call for Session Chairpersons:

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: Jeff Davis, jdavis@colibri-ecology.com

OTHER INFORMATION:

CONFERENCE SYMPOSIA AND WORKSHOPS: Events in development include a symposium on Extinction or management of owls: the dilemma of the barred owl invasion in California, a symposium on Marijuana Cultivation Effects on Wildlife and Habitats, a Wildlife Biologist Construction Awareness Training (WildC.A.T.), a Story Circles Narrative Training DEMO DAY with Randy Olson and a Wilderness First Aid certification class. Also in development is a Tuesday morning restoration field day.

Story Circles Narrative Training DEMO DAY with Randy Olson Tuesday, February 6, 2018 - 3-5pm.
Santa Rosa Vineyard Creek Hyatt: STORY CIRCLES is a new form of communications training developed by scientist-turned-filmmaker **Randy Olson**, author of, "Houston, We Have A Narrative: Why Science Needs Story." The training focuses on narrative structure, which is the central challenge of effective communication. It consists of two parts — the full training (10, one-hour sessions) and an introductory Demo Day to familiarize the participants with the training program. We will offer a Demo Day at the 2018 TWS-WS Annual Meeting. After participating in the Demo Day, participants may choose to sign up for the full training (the 10, one-hour weekly sessions, which can be run through teleconferencing). The Demo Day consists of a three-hour session. The first half of the session is Narrative Analysis in which groups are given materials to analyze using the ABT Narrative Template and other narrative tools developed for Story Circles. The second half of the Demo Day is Narrative Development, where the tools are used to develop the core narrative of projects that participants are working on. The training is now being implemented by several government agencies (USDA, USFWS, NPS, USGS), universities (Tufts, Yale, Univ Maryland, UCLA), and corporate clients (Genentech). There have been 26 Story Circles completed, with many more scheduled. More details on Story Circles can be found at: www.StoryCirclesTraining.com

SPONSORSHIPS: We welcome organizations, agencies, consulting firms, chapters, and individuals to sponsor our meeting! Sponsors qualify for exhibit space, 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 free GoPro!

VOLUNTEERS: Opportunities abound! 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. 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.

PLANNING COMMITTEE: Thank you to our 2018 Annual Meeting Planning Committee Team. We are recruiting for additional team volunteers. Please email candace.renger@gmail.com for more information on open positions. [Link to 2018 Committee Roster](#)

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 12/4/2017.

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: As usual, our meeting has much to offer students and early career professionals! New for 2018 is our Friday student day where we will host back-to-back workshops geared towards students at all different stages of their education. We will have an ongoing Career Fair, Resume Workshops, a Job Interview Workshop, a Student-Professional Breakfast Mixer, plus the opportunity for extensive networking with professionals. New this year are a Career Symposium geared towards undergrads who want to know more about the different job opportunities in the wildlife field, plus we are also developing a student-only poster session on Friday afternoon where emerging researchers can share their work in progress. Students are encouraged to apply for [travel scholarships](#).

GRANTS: The Western Section encourages member participation by financially assisting member participation in professional meetings, conferences, symposia, and other continuing education activities. For more information: <http://tws-west.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 4, 2017 at candace.renger@gmail.com

MEETING REGISTRATION: On-line registration for the Western Section Annual Meeting is expected to open approximately November 1, 2017. <http://tws-west.org/>



VENUE INFORMATION AND HOTEL ACCOMMODATIONS: The 2018 Annual Meeting will be held at the Hyatt Vineyard Creek in the historic heart of downtown Santa Rosa, CA. The Tuscan villa-style hotel is a short walk to shopping and dining in Historic Railroad Square and the restaurants and tasting rooms of Santa Rosa.

We have reserved a limited block of non-smoking hotel rooms at three different Santa Rosa Hotels during the dates of our meeting.

1. **Hyatt Vineyard Creek - \$179/night:** *We encourage meeting attendees to book their rooms at the Hyatt as TWS-WS is contractually obligated to sell a large number of Hyatt hotel rooms in exchange for free use of the Hyatt meeting facilities.* All rooms were recently renovated and are near the meeting space we will be using for our meeting. TWS-WS meeting

attendees who book as part of our room block will receive free internet access in the sleeping rooms and free parking. Pet friendly rooms and airport shuttle service are available for an additional fee. This rate is available until January 22, 2018 or until the rooms in our block are sold out, whichever comes first. Please indicate that you are attending the TWS-WS Annual Meeting to receive our negotiated rate. The Vineyard Creek Hyatt has a lovely outdoor fire pit, local wine tasting in the lobby, a full service restaurant and lounge onsite offering farm to table menus, and jogging/bike trails right out the door. Link to reservations website: <https://aws.passkey.com/e/15689174>

2. **Hilton Sonoma Wine Country- \$148/night:** We have a large courtesy block of rooms on hold for us at the Santa Rosa Hilton for your convenience with no contractual obligations to TWS-WS. This hotel is 3.6 miles from the Hyatt/TWS-WS Annual Meeting, which is a 7-minute drive or a 30-minute bus ride using the Santa Rosa City Bus. These rooms have free wifi, and the \$10 nightly parking fee will be waived if we book a minimum number of group reservations. Rooms are first-come, first-serve until January 5, 2018. [Hilton Link for TWS-WS Rate](#) (Or, Phone Reservations at 1-800-486-1542. Our Group Code is: WSWS)

TRANSPORTATION: Santa Rosa is 65 miles from both the San Francisco or Oakland Airports. [Airport Express](#) offers low cost rides to Santa Rosa from both airports. You may also ride Amtrak to Santa Rosa -- the Amtrak bus connects Santa Rosa to the California Amtrak train routes. We will set up an online bulletin board so that meeting attendees can connect about carpooling and room shares.

Questions about the 2018 Annual Meeting?

- **Jeff Davis**, Conference Chair and TWS-WS President-Elect - jdavis@colibri-ecology.com or (559) 246-3272
- **Jessica Martini-Lamb**, Professional Development Committee Chair - pdc@twswest.org
- **Candace Renger**, Meeting Planner - candace.renger@gmail.com or (510) 527-5627
- **The Western Section of The Wildlife Society** - www.twswest.org PO Box 6756. Albany, CA 94706

