

The Wildlife Society

Western Section

President's Message

Natasha Dvorak



*White-Tailed Antelope Ground Squirrel.
Photo by Natasha Dvorak.*

on Mt. Charleston (I like to think it was), and adorable white-tailed antelope ground squirrels in Red Rock Canyon, Nevada; a Texas blind snake and Texas toad at Palo Duro Canyon State Park, and vermilion flycatchers and a yellow-billed cuckoo (life list!) at Big Bend National Park, Texas; thirteen-lined ground squirrels and a baby pronghorn in New Mexico; and hundreds of elk at Mormon Lake in Arizona. We also tracked *Sauroposeidon proteles* and *Acrocanthosaurus* through the riverbeds of Dinosaur Valley State Park, and found an old porcupine jawbone (I think) in the forests of

(Dvorak, cont'd on page 2)

Howdy Wildlifers! I hope you are all enjoying summer sunshine, either through field work or vacations. For my part, I recently enjoyed a two-week road trip to Texas with my mom and daughter. In addition to family reunions, we camped 10 nights and visited at least nine national and state parks/monuments. Highlights included seeing desert pupfish in Death Valley National Park (yes, we walked the Alkali Springs Boardwalk in 118 degrees Fahrenheit); maybe a Palmer's chipmunk



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(Dvorak, cont'd from page 1)

Mt. Taylor, New Mexico.

What a diverse and beautiful nation we live in, in part preserved by a system of national, state, and local protected areas. These special places continue to be maintained and enhanced through the hard work of our contemporary park biologists and land managers. According to resources such as the Protected Areas Database of the United States/USGS Protected Area Statistics by State, the Congressional Research Service Federal Land Ownership: Overview and Data (2012), and the USDA NRCS Natural Resources Inventory 2010 Summary, 60% of California's lands and 82% of Nevada's lands are protected under GAP Status 1, 2, and 3 categories, and 37% of Hawaii's lands are protected under Status 2 and 3 categories. These categories describe lands with permanent protection from conversion of natural land cover, with Status 1 denoting greater protection than Status 3. Eighty-one percent of Nevada's lands are owned by the BLM, USFS, USFWS, NPS, or DOD, while 20% of Hawaii's lands are owned by these federal agencies. Nonetheless, more than 37% of developed land in the U.S. and Hawaii was developed during the last 28 years; between 1982 and 2010, 43 million acres of land were newly developed (bringing the 2010 total to 113 million acres of developed land). As I underscored in last year's Annual Meeting theme, and as you will read about in President-elect Don Yasuda's message, human population growth, land consumption, and climate change pose great wildlife conservation challenges. When it comes to managing our protected areas, we will achieve greater conservation outcomes by forming strong and effective working partnerships among natural resource agencies, conservation entities, and local communities. When working with others, I like to remember the adage "Seek first to understand, and then to be understood." So whatever your current wildlife professional role, I challenge you to think big and reach out. Down the road, I want to take my future road trip with my daughter and granddaughter to see desert pupfish, Palmer's chipmunks, yellow-billed cuckoos, and iconic North American wildlife flourishing within an integrated, purposeful framework of protected natural areas.

Help Needed on the Annual Meeting 2015 Planning Committee!



Please contact President-Elect and Program Chair [Don Yasuda](#) if you want to learn more about joining the planning committee for the 2015 Annual Meeting in Santa Rosa.

We are recruiting for help with Session Chairs, Audio Visual Setup, Printed Program, Student Weekend, Student Activities Sub-Committee, Student Paper Judging, Point Blue/STRAW Activity, and Live Auction.

President-Elect Message

Don Yasuda



Where is the year going? I suspect that many of you are wondering the same thing. It was just January a heartbeat ago and here we are cruising through August. I hope many of you are enjoying field work, although in a somewhat parched year like this, that also means staying cool and hydrated. I know some of you are conducting your field work for your research projects for school or are gaining valuable field experience at summer jobs and internships. For those of you more like me, field work these days mostly means looking at critters out of the window at the office or traveling to an off-site meeting at someone else's office. Oh how I miss the days where I could eat lunch in the middle of a Sierra Nevada meadow!

Regardless of our situations, I also suspect we have several other things in common besides an accelerating sense of time. First, I bet we have a passion for wildlife. It may have started for you early in life or it may be something that came over you later, but I've consistently found that it's a passion that keeps us engaged and enthused in our wildlife pursuits. Second, in our hearts if not in our actions, I believe we all strive to make wildlife, places for wildlife, and the environment as a whole better. The good news is, even if you don't realize it and even on days it doesn't feel like it, we are all making a difference. Finally, I'll touch on one more common bond between us, our connection through The Wildlife Society and the Western Section. We come to TWS and the Western Section for a variety of reasons and we stay for many more. Over the years, I've come to appreciate how TWS has helped me connect things: me to colleagues, wildlife to other resources, policy to action, and science to management.

To continue to pursue this thought further, I've set the theme for the 2015 Western Section Annual Conference as *"Advancing Wildlife Conservation through Integration and Alignment in Planning"*. With the pace of environmental, social, and global change, the scale of our conservation work must link the local site to the project to the watershed and larger regional and statewide landscapes. We have a few examples of large-scale conservation planning that took a big up front investment but are now starting to pay off dividends for resources such as the Bay-Delta Conservation Plan and the Desert Renewable Energy Conservation Plan. Local and regional land trusts are making great strides to work with farmers, ranchers, rural residents and communities to provide for sustainable agriculture through maintaining working open lands and areas that provide for conservation, recreation, and sustainable development. Government agencies are realizing the need to cooperate and collaborate to share and stretch limited resources. The result of integrated and aligned landscape conservation planning is that local, state and federal government agencies and representatives, scientists and researchers, non-governmental organizations, interest groups, and the public are talking and working to find common solutions. This will benefit us all by forcing us to tackle difficult, but ever critical questions of how to best balance competing interests while providing for ecological, social, and economic sustainability for people and resources. I hope to set the stage to engage our thinking and inspire us to work together to meet a challenge of the California Biodiversity Council (www.biodiversity.ca.gov) that in regards to conservation planning, we need to "Go Big or Go Home".

(Yasuda, cont'd on page 4)



Past-President

Douglas E. Bell

Being Past-President of the Western Section has its advantages, namely, there is suddenly more time available for other projects. This is a phenomenon I call the “Freeway Principal”, whereby back in the day, construction of new freeways was justified by saying it would alleviate traffic congestion. In reality, demand would rise to meet the available road space and “Voilà! La congestion de la circulation!”

I am sure that for many of us spring and early summer are the busiest times of the year. Locally, we have been contending with a known case and several suspected cases of a heretofore never reported outbreak of mange in golden eagles, caused by a *Knemidocoptes* mite. A female golden eagle that was suffering heavily from a case of this infestation (Picture 1) was captured by us near Brushy Peak in the Altamont Pass Wind Resource Area on August 8, 2013. She was successfully treated by Dr. Michelle Hawkins and veterinary residents at the UC Davis William R. Pritchard Veterinary Medical Teaching Hospital, who dubbed her “Mitey Might” (Pictures 2 and 3, Page 5), then rehabbed at the Davis Raptor Center by Bret Steadman and Brenton Pierce, and finally released on May 2, 2014 at Las Trampas Regional Wilderness (Picture 4, Page 6). Subsequent GSM/GPS tracking of Mitey Might indicates that she has successfully readjusted to life in the wild and is coursing around her old haunts in the Altamont and vicinity (Map 1, Page 6). Tracking updates on this eagle’s progress may be viewed at: <http://www.ebparks.org/stewardship/wildlife/gold-eneagle>. The mite outbreak is suspected to also be occurring in Nevada. Dr. Janet Foley of the Center for Vector-Borne Disease Research at UC Davis and Krysta Rogers of the California Department of Fish & Wildlife’s Wildlife Investigations Lab are closely following this situation. If you are working in areas where



Picture 1. Golden eagle (“Mitey Might”) with mite infestation. Altamont Pass Wind Resource Area, July 2014. Photo: K. Shawn Smallwood.

(Yasuda, cont’d from page 3)

I’d love to hear your thoughts on this topic. If you’d like to help organize or assist with the Conference or have thoughts or ideas on the Conference theme, please contact me at dyasudaTWS@gmail.com. Also, don’t forget to mark your calendar to join us in Santa Rosa, California the last week in January 2015 to do your part. Together, we can Go BIG!

(Bell, cont’d on page 5)

(Bell, cont'd from page 4)

golden eagles occur, please let us know if you see eagles with similar skin/feather problems.

I did get down to the Mojave for more prairie falcon banding this past spring and was greatly assisted in logistics and equipment schlepping by a host of folks, including Beth Wollf, Liana Harp, Nate Jones, Joe Barratt, Brooks Hart, Emily and Joe Mastrelli, and of course, Larry LaPre of the BLM. Sam Jones, who found several of the falcon nests we visited, was unfortunately unable to join us due to a wildfire near his home in Arizona. I greatly appreciate the help of so many people who took time from their pressing duties.

It has been great to see how active our chapters have been. I am a member of the SF Bay Area, Sac-Shasta and Hawaii Chapters, and all of them have been offering activities ranging from mixers and brown bags to fieldtrips and workshops. I highly recommend becoming a member of several chapters (if not all of them!) since this is the best way to stay connected to regions within the Western Section. Student Chapters are also doing very well, with the UC Santa Barbara Student Chapter offering perhaps the widest range and number of activities under the excellent leadership of President Allyson Gardner and their faculty advisor Sam Sweet during the 2013-14 academic year. Joselius (Louie) Ocaranza is the new President of that chapter, so I am sure he will keep things running at top speed. I would like to congratulate Louie on receiving a prestigious internship with the Directorate Resource Assistant Fellows Program of the US Fish & Wildlife Program. Check out the UCSB Chapter's report in this newsletter for more information. Closer to home, I am happy to report that the fledgling SF State University Chapter has found a faculty advisor, Dr. Vance Vredenberg, who has done ground-breaking research on amphibians and chytrid fungus, among many topics. I am sure he will keep his chapter hopping, as it were. I mention these chapters to point out the many activities and the breath of expertise and experience in The Wildlife Society on so many levels. As intimated above, we are all very busy, but the more people get involved in our chapters, the better will be the Western Section and The Wildlife Society!

I look forward to continuing to serve the Western Section as Past-President in 2014. Please free to contact me or any other Board member to voice your concerns or simply say "hi". Thank you for your efforts and keep up the good work.



Picture 2. Golden eagle (Mitey Might) after capture undergoing exam at U.C. Davis Veterinary Hospital, August 9, 2014. Photo courtesy of UC Davis School of Veterinary Medicine.



Picture 3. Golden Eagle "Mitey Might" after nearly 4 months of treatment for mite infestation, Nov. 25, 2013. Photo courtesy of UC Davis School of Veterinary Medicine.



Picture 4. Golden eagle, aka "Mitey Might", held by Brenton Pierce of the Davis Raptor Center, ready for release on May 2, 2014 at Las Trampas Regional Preserve. Photo: Doug Bell, East Bay Regional Park District.

Map 1. Flight tracking of Mitey Might, during the tenth week after her release, showing her use of the Altamont Pass Wind Resource Area and vicinity. Dots show GPS locations, blue lines depicting shortest distance between successive locations (not actual flight paths). The eagle icon indicates her last recorded position as of data download on July 7, 2014. Highway 580 and Livermore, CA, are in the lower portion of the map. Map compiled by Camille Nowell, EBRPD.



Picture 5. Prairie falcon nestlings after banding, Mojave Desert, May 2014. Guess the number of birds in this picture? Photo: D. Bell.

Annual Meeting

CALL FOR PAPERS

The Western Section of The Wildlife Society - Annual Meeting 2015
January 26-30, 2015 -- Vineyard Creek Hyatt, Santa Rosa, CA

Tentative schedule:

Monday, January 26

8:30am to 5:30pm:

Noon to 6:00pm:

1:00 to 5:30pm:

7:00-9:00pm:

Spotted Owl /Barred Owl Interactions Symposium*

Southern Sierra Nevada Fisher Working Group

Technical Writing Workshop (Day 1 of 2)*

Registration Packet Production

Tuesday, January 27

8:30am to 5:30pm:

8:30am to 5:30pm:

8:30am to 5:30pm

8:30am to 4:00pm

4:00-7:00pm

6:00 to 9:00pm:

7:00 to 9:00pm:

Effects of Marijuana Plantations on Wildlife and Wildlife Biologists*

Amargosa Vole: Emergency Conservation Symposium*

Technical Writing Workshop (Day 2 of 2)*

Western Section Executive Board Meeting (all members welcome)

Exhibit Hall Setup

Official Conference Opening Registration and Exhibit Hall Open

Welcome Reception, Photo Display, Taco Buffet and No-Host Bar *

Wednesday, January 28

7:00am to 7:00pm:

7:30am

9:00 to 10:00am:

10:00am to Noon:

11:00am to 1:00pm:

Noon to 1:00pm:

1:00 to 7:00pm:

1:30 to 5:30pm:

3:00 to 5:00pm:

5:30 to 6:30pm:

6:00 to 7:00 pm:

7:00 to 10:00pm:

Registration and Exhibit Hall Open

Breakfast Roundtable *

Conservation Affairs Committee Meeting

Keynote Address & Dialogue

Poster Setup Hours

TWS-WS Retirees Meeting

Poster Viewing and Student Poster Judging

Concurrent Sessions

Resume Workshops for Undergrads

HSU Reunion

No-host Cocktail Reception

Annual Awards Banquet & Raffle* **NEW DATE!**

Thursday, January 29

7:00am to 8:00pm:

7:00am to 4:00pm:

7:30 to 8:30am:

7:30 to 8:30am:

8:30am to 12:30pm:

10:00am to Noon:

10:00am to Noon:

2:00 to 5:00pm:

5:00 to 6:00pm:

6:00 to 8:00pm:

8:00 to 9:30pm:

Registration and Exhibit Hall Open

Poster Viewing and Student Poster Judging

Professional Development Committee Meeting

Western Wildlife Meeting

Concurrent Sessions **NEW TIME!**

How Not to Give a Scientific Presentation

Resume Workshop for Undergrads (Repeat)

Plenary Session **NEW TIME!**

Annual Member's Meeting **NEW DATE!**

Poster Reception **NEW DATE!**

Chapter Meetings **NEW DATE!**

Friday, January 30

7:00am to 12:30pm:

8:00 to 10:00am:

8:30am to 12:30pm:

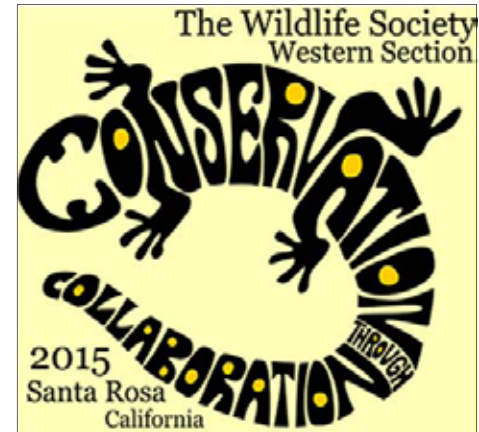
10:00 to 11:00am:

Registration and Exhibit Hall Open

Resume Workshop for MS/PhD Students

Concurrent Sessions

Job Interview Panel



Annual Meeting 2015

10:00 to 12:30pm:	Career Fair
10:30am to Noon:	Resume Critiques
1:00 to 5:00pm	Student-Professional Creek Restoration Project with Point Blue NEW!

Saturday and Sunday January 31 - February 1, 2015

8:00am to 5:00pm each day: Wilderness First Aid *

Student Weekend*

* Requires separate registration fee

Plenary Session Theme:

Advancing Wildlife Conservation through Integration and Alignment in Planning

With the pace of environmental, social, and global change, the scale of our conservation work must link the local site to the project to the watershed and larger regional and statewide landscapes. We have a few examples of large-scale conservation planning that took a big upfront investment but are now starting to pay off dividends for resources such as the Bay-Delta Conservation Plan and the Desert Renewable Energy Conservation Plan. New efforts such as Regional Advanced Mitigation Planning show great promise. Local and regional land trusts are making great strides to work with farmers, ranchers, rural residents and communities to provide for sustainable agriculture through maintaining working open lands and areas that provide for conservation, recreation, and sustainable development. Government agencies are realizing the need to cooperate and collaborate to share and stretch limited resources. The result of integrated and aligned landscape conservation planning is that local, state and federal government agencies and representatives, scientists and researchers, non-governmental organizations, interest groups, and the public are talking and working to find common solutions. This will benefit us all by forcing us to tackle difficult, but ever critical questions of how to best balance competing interests while providing for ecological, social, and economic sustainability for people and resources. We hope to set the stage to engage our thinking and inspire us to work together to meet a challenge of the California Biodiversity Council (<http://biodiversity.ca.gov>) that in regards to conservation planning, we need to "Go Big or Go Home".

Concurrent Technical Sessions in Development Include:

- Web and GIS Technologies for Wildlife Science and Conservation
- Wildlife Techniques and Technologies (non-GIS)
- Designing and Implementing Climate Adaptation Strategies
- The Effects of Drought and Water Management on Wildlife
- Collaboration in Support of Wildlife Conservation
- Linking Research to Policy and Management

The following may be expanded into multiple sessions based on papers received:

- Ecology and Conservation of Birds
- Ecology and Conservation of Amphibians and Reptiles
- Ecology and Conservation of Mammals

Note: Session titles may be added or changed at a later date based on papers received.
Check <http://twswest.org> for an updated list of technical sessions and schedule.

Annual Meeting 2015

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 above 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 through Friday, January 28 to January 30, 2015. In general, presenters should expect to speak for no more than 17 minutes, allowing for an introduction and limited Q&A after each presentation.

A poster session will be held on the evening of Thursday, January 29, 2015. At this time, authors will be available to answer questions about their posters. Hors d'oeuvres will be served and a no-host bar will be available. Posters will be displayed starting at 1pm on Wednesday, January 28 and will be available for viewing through the Thursday evening poster reception. Posters should be no more than 3 feet high by 4 feet wide. Presenters must bring their own supplies (T-pins, push pins, etc.) to attach posters to the display boards. Display boards will be provided.

Call for Session Chairpersons:

We are seeking individuals who are interested in volunteering to serve as the chairperson of each technical session. 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 Don Yasuda at dyasudaTWS@gmail.com.

Abstract Submission Process:**The deadline for submission of both Oral Presentation and Poster abstracts is October 20, 2014.**

Abstracts should not exceed 200 words, excluding title and author addresses, should be in Arial 12-point font, and must adhere to format and layout elements provided in the example below. Indicate the preferred session and whether the paper will be an oral presentation or a poster. Student presentations are eligible for cash awards. Students should indicate their intent to compete for these awards.

Please submit abstracts electronically by filling out the interactive form on the Section website at <http://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 1, 2014. Thank you, in advance, for your time and effort in the submission process.

ABSTRACT FORMAT 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.

OTHER INFORMATION:

PRE- AND POST- CONFERENCE SYMPOSIA AND WORKSHOPS: The Professional Development Committee is developing pre-conference symposia including a Spotted/Barred Owl Symposium, a Marijuana Safety Workshop, an Amargosa Vole Conservation Workshop, a Technical Writing Workshop and a Wilderness First Aid Class. Stay tuned for more details!

SPONSORSHIPS: We welcome potential sponsors to the meeting, individual events within the meeting or the pre-conference symposia. Organizations, agencies, consulting firms, chapters or individuals... let us know if you're interested. Sponsors can qualify for exhibit space, discounted or free event registrations, acknowledgement in the program and more. Opportunities start at \$250.

PHOTO SHOW: A slideshow will be displayed at the Welcome Reception at our upcoming annual conference. The content is up to you! Send in your photos of wildlife, coworkers, TWS workshops, study animals, unexpected situations, beautiful locations, etc. Help us celebrate wildlife and the wildlife profession! Please send photos in jpg format to ewelarrucea@gmail.com.

VOLUNTEERS: Opportunities abound. We are looking for Session Chairs and Planning Committee Members as well as helpers to work onsite during meeting in January. Please contact candace.renger@gmail.com for more information.

AWARD NOMINATIONS: The Western Section recognizes outstanding individuals and organizations that have gone above and beyond to make contributions toward the Western Section's goals. If you know of a deserving nominee for any of the below awards please contact the Award and Grants Committee Chair richard.burg@wildlife.ca.gov by 12/1/2014.

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) The 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, we will have lots to offer! Career fair, resume workshops, job interview workshops, networking with professionals and travel scholarships. Check our website under "Resources" for more information.

Annual Meeting 2015

GRANTS: In pursuit of the objective to encourage high standards of professional achievement, the Western Section has established an honoraria fund to assist our members' 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, Professional Development Certificates and for TWS Certification renewal (note: meetings such as this do not normally qualify for an initial TWS initial certification application, but pre- and post-conference symposia and workshops can!). Additional information will be provided in the final conference program.

TRANSPORTATION: Horizon Air, part of Alaska Airlines, operates a non-stop service to Santa Rosa from Los Angeles. Oakland International and San Francisco International are each a 1.5 hour drive from the hotel. Also, the Hyatt hotel is a short 1 block walk from the Santa Rosa Amtrak station which offers a bus connector from the Capital Corridor Amtrak Line.

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. In order 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 1, 2014 at candace.renger@gmail.com

MEETING REGISTRATION: On-line registration for the Western Section Annual Meeting is expected to open approximately November 1, 2014. <http://tws-west.org/index.php>

VENUE INFORMATION AND HOTEL ACCOMMODATIONS: The 2015 Annual Meeting will be held at the Vineyard Creek Hyatt in Santa Rosa, CA. We think you will enjoy the lovely outdoor areas adjacent to our meeting space and the wonderful greenway and creek located behind the hotel where you can run, walk or bike in your free time. The hotel is located in the Railroad Square District which is listed in the National Register of Historic Places. Railroad Square is the beautiful and historic section of Santa Rosa filled with old town ambiance, a hip urban vibe along with authentic old stone buildings, brick-paved streets and incredible restaurants and bars.

Please stay at the Vineyard Creek Hyatt and use our room block so we can meet our contractual obligations with the hotel.

We have negotiated a limited number of hotel rooms at \$84/night. This rate is available for single or double occupancy rooms and includes complimentary internet and parking. This rate is available until January 12, 2015 or until the rooms in our block are sold out, whichever comes first. Please indicate that you are a member of The Western Section of The Wildlife Society to receive our negotiated rate.

Vineyard Creek Hyatt

170 Railroad Street. Santa Rosa, CA 95401

Phone: 707-284-1234

<http://vineyardcreek.hyatt.com>

Click below to book your hotel room online using our discount code:

https://resweb.passkey.com/Resweb.do?mode=welcome_ei_new&eventID=10508139



Questions about the 2015 Annual Meeting?

- **Don Yasuda**, Conference Chair and TWS-WS President-Elect - dymasudatws@gmail.com
- **Candace Renger**, Meeting Planner - candace.renger@gmail.com or (510) 527-5627

Conservation Affairs Committee

Erin Aquino-Carhart



The Conservation Affairs Committee (CAC) Chairs for the Southwestern, Southeastern, North Central, Canada, and Western Sections of The Wildlife Society met recently by phone with the new TWS Government Affairs and Partnership Assistant Director, Keith Norris, to discuss the Conservation Affairs Network (CAN) Newsletter, the soon-to-be-released CAN website and a newly developed Policy Tool Kit. The 2nd issue of the CAN Newsletter will be released in August, and the 1st issue can be accessed <http://tinyurl.com/q64vb7l>. The CAN Website is currently being developed and it will house information about the purpose and actions of CACs and the CAN and it will provide guidance on how to participate in conservation affairs (e.g., how to form new committees, comment on letters, develop partnerships, etc).

The TWS-WS Conservation Affairs committee will be meeting soon and we are always looking for new members. Please email me if you would like to join our mailing list. I can be reached at: erinaquino@gmail.com.

Did you know that we can provide a Webinar for you to show at your next Chapter meeting so your members can learn more about the CAN and CAC and to facilitate discussion about conservation issues?

SEEKING PRESIDENT-ELECT

We are currently accepting nominations for the Western Section President-Elect.

If you know someone who would make a great leader of the Western Section (including yourself), please send contact information to the Elections Committee Chair, [Douglas Bell](#).

Donate to the Western Section Endowment Fund

The Donaldson Endowment Fund was established in 2007 with a \$38,000 bequest from the estate of Section member Douglas Donaldson.

Interest generated from the fund is used to support the Section's education, outreach, and scholarship programs.

The Endowment Fund principal receives input from all bequests, life membership dues, and donations specifically made for the fund.

Please consider adding to the Endowment Fund by making a donation or becoming a Lifetime Member of the Section. Donations to the fund are tax-deductible. A lifetime membership is only \$450, which may be paid in up to three installments.

Research Grant Awarded to Justin White

The Executive Board of The Western Section of The Wildlife Society has chosen to award **Justin White**, a graduate student at the University of Nevada-Reno with a grant of \$1,000 for his study, "Phylogenetics, morphology, and habitat selection for seven Testudine species in the Sperrgebiet in the Namib Desert, Namibia."

TWS-WS congratulates him on his grant award. His vision, commitment, and hard work will pay off as he uses this grant to collect and report important new information on the population genetic structure, morphological characteristics, and habitat selection of various Testudine species in Namibia, Africa.

TWS Fellows Award Announced - Congratulations to Brian Cypher

The Wildlife Society Council has selected **Brian Cypher** a TWS Fellow in recognition of his exceptional service to the wildlife profession. This award recognizes members who have distinguished themselves through exceptional service to the wildlife profession. TWS Fellows are appointed for life and serve as ambassadors of The Wildlife Society. The Award Ceremony will be held on Sunday, October 26, during The Wildlife Society's 21st Annual Conference in Pittsburgh, Pennsylvania. Brian has a long history with TWS-WS and we wish to congratulate him on this achievement.

Did you know?

TWS-WS Grant Money is Available to Members

In pursuit of the objective to encourage high standards of professional achievement, the Western Section has established an honoraria fund to assist participation in professional meetings, conferences, symposia and other continuing education activities.

Additionally, each year The Wildlife Society-Western Section makes funds available to students to encourage their participation. These funds can be used for partial reimbursement of transportation, lodging, registration and meal expenses. Travel grants of up to \$300 will be awarded to a limited number of students.

For more information visit our website at: <http://www.tws-west.org/grants.php>

Professional Development Committee

Rhys Evans



At our January-February meeting in Reno, we presented four major Professional Development workshops. Just wait until you learn what we are planning for 2015! But since Reno, the section has once again presented several workshops, including Bat Ecology and Acoustic Monitoring for Bats. We've just concluded cooperating with Cal Poly San Luis Obispo for a second iteration of Field Techniques in Wildlife Studies. Finally, Advanced Remote Cameras (co-sponsored with the SF Bay Chapter) is coming up very soon....

Late January (and into early February), in association with the 2015 annual meeting, we're planning 5 significant workshops/symposia (and counting?). Monday (full day) we'll have a detailed investigation of Spotted Owl / Barred Owl interactions. On Monday afternoon and all-day Tuesday, we'll repeat (from 2012 and 2013) the Technical Writing workshop. Tuesday, we'll have two concurrent symposia, one on Amargosa vole ecology and status and another on the dangers of marijuana cultivation to both wildlife and wildlife biologists. We apologize in advance for making your scheduling and choices rather difficult! On Tuesday alone, you'll need to select which of the three events is most important to you and your career (but that's an apology I really don't mind offering).

Wilderness First Aid will be repeated immediately after the annual meeting (i.e. Saturday and Sunday). Many more details will be provided in the coming months – so keep an eye on our website, and if you haven't for some bizarre reason signed up for our TWS Western Section Members e-mail messaging system...do it!

Questions on any of this stuff? Contact your Professional Development Committee. Ideas for other events?

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Western Wildlife 1:1-7 • 2014
Submitted: 1 October 2013; Accepted: 5 December 2013

SEASONAL SPATIAL PATTERNS OF TWO SYMPATRIC FROGS: CALIFORNIA RED-LEGGED FROG AND AMERICAN BULLFROG

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Abstract.—The introduced American Bullfrog (*Lithobates catesbeianus*) has been implicated in the decline of native amphibians. Bullfrogs have become widespread in California and are a threat to the native California Red-legged Frog (*Rana drynostris*). The two species are ecologically similar, and the bullfrog is a predator to the red-legged frog that may influence its habitat use patterns. We analyzed the spatial and temporal locations and body sizes of both frog species within a large, fishless seasonal marsh during 1996. Overall, California Red-legged frogs and American Bullfrogs showed similar spatial distributions; however, seasonal changes were observed. California Red-legged Frogs increased their mean distances between conspecifics in the marsh seasonally from winter through summer while frog numbers decreased. In contrast, bullfrogs showed the opposite pattern where mean distances between conspecifics decreased over time, but the abundance of bullfrogs increased from winter through summer. During each season the mean distances between red-legged frogs and bullfrogs was greater compared to distances to their respective conspecifics, except for spring when bullfrog conspecifics were slightly more distant than red-legged to bullfrog distances. American Bullfrogs were significantly larger than California Red-legged Frogs at our site. Our findings suggest that frog abundance, which is strongly influenced by breeding behavior, changing habitats, and possibly predation risk of red-legged frogs by bullfrogs are the dominant factors driving the spatial patterns observed at Lodi Marsh. Also, once winter breeding was completed, California Red-legged Frogs seemed to avoid predation by American Bullfrogs by spatial separation within the marsh or by leaving the marsh altogether.

Key Words.—amphibians; distribution; *Lithobates catesbeianus*; predator avoidance; *Rana drynostris*; size

INTRODUCTION

Unlike most birds and reptiles, ecologically similar species of amphibians have been found to overlap spatially more often than expected at random (Hofer et al. 2004). This spatial overlap is likely due to limited resources such as breeding ponds (following the resource tracking hypothesis), suggesting that resource effects override direct interspecific competition or predation (Hofer et al. 2004). However, ecologically similar species should spatially partition the use of these resources at a microhabitat scale if predation, in fact, influences amphibian assemblages (Scoll and Collins 1992).

The American Bullfrog (*Lithobates catesbeianus*) [*Rana catesbeiana*] is native to eastern North America and are among the largest amphibians on the continent (Ilary and Whelan 1984). Adult bullfrogs are a gape-limited, sit-and-wait predator that can take relatively large prey (Ilary and Whelan 1984). Within their native range, bullfrogs play an important role in structuring amphibian assemblages through intraspecific predation and competition (Werner 1994; Hecnar and McCloskey 1997).

In its introduced range, the American Bullfrog has been implicated in the decline and extirpation of many native pond frogs (Licht 1974; Nussbaum et al. 1983; Hayes and Jennings 1986; Kiesecker and Blaustein 1997; Kupferberg 1997; Rosen and Schwalbe 2002) and is an invasive species in the western United States (Moshaka 2005). In California, American Bullfrogs were first in-

troduced in 1896 (Jennings and Hayes 1985) and now occur throughout the state except in desert and alpine areas. American Bullfrogs are known to prey on a variety of native aquatic and terrestrial vertebrate species in their introduced range (Ilary and Whelan 1984; Wu et al. 2005; Govindarajulu et al. 2006), including the California Red-legged Frog (*Rana drynostris*) federally listed as threatened (Moyle 1973; Cook and Jennings 2001; Cook 2002). The California Red-legged Frog and American Bullfrog are ecologically similar. Both frog species are highly aquatic and mainly nocturnal (Lannoo 2005; Stebbins 2003; Storer 1925; pers. obs.). Maintaining endangered species populations where the invasive bullfrog is established is challenging, but is imperative for conservation efforts.

Seasonality of available habitat and animal activity play important roles in spatio-temporal frog assemblages (Kopp and Eterovick 2006) and may contribute to the persistence of red-legged frogs despite the predatory effects of the larger bullfrogs (Adams et al. 2011). Nonetheless, seasonal variation in activity of the California Red-legged Frog (e.g. breeding phenology) along with spatial distributions has not been assessed in the presence of American Bullfrogs. Complex interactions between pond breeding species are often difficult to discern, but microcosm experiments have elucidated some of these interactions (Luckinbill 1973; Morin 1986; Wilbur 1987; Kiesecker et al. 1998; Hero et al. 2001). However, few studies have examined this in a natural field setting. The



photo by H. Clark



photo by H. Clark

So Cal Chapter

Jeff Lincer



The So Cal Chapter held a well-attended Arroyo Toad Workshop in April at Mission Trails Regional Park in San Diego. This workshop was led by Ed Ervin, Andrew Borchert, and Melissa Busby.

Other upcoming events include lectures on General Insects, Raptors, and other wildlife, a lecture and field day viewing migrating birds, and workshops on Mohave Ground Squirrel Survey and Handling, Vernal Pool Invertebrates, and Arroyo Toads. The chapter is also exploring possible camping trips on the Channel Islands and the Mojave NP.

In an effort to better include members from throughout the chapter's large and elongated service area, we are planning one or more Multi-location events for Orange County, Los Angeles, Riverside, San Bernardino, and Imperial Counties. We are looking for volunteers to be the contact "chair" for those counties to help plan coordinated events. Please email JeffLincer@gmail.com if you are interested, and/or if you know of an office/agency that might be willing to host a social get together with local chapter members.

Wendy Loeffler is our Chapter Membership Chair and reports the Chapter membership now exceeds 100. We added several new members at each of our past events and others have signed up online, as well. Interested in becoming a Chapter Member? Please contact Wendy, at wloeffler@recon-us.com.

Central Coast Chapter

Wendy Knight

The Central Coast Chapter hosted a San Joaquin Kit Fox Workshop in July at Chimineas Ranch in the Carrizo Plain, San Luis Obispo County.

Next up, the Central Coast Chapter is organizing a Mammal Track and Sign Workshop in Guadalupe, CA in the Nipomo dunes which is scheduled for October 18 and 19.



In other news, we have initiated a contest for developing our logo and hope to have cool t-shirts and glasses soon!

Like our facebook page at www.facebook.com/cacentral-coastchaptertws.

Photo from Camera Trap set during the San Joaquin Kit Fox Workshop, July 2014.

San Joaquin Valley Chapter

Jeff Davis

Our annual Natural Communities Conference was held in March in Bakersfield. We had 18 talks and five posters. We were again unable to accommodate everyone who wanted to give presentations. 133 people were in attendance.

We are planning for a symposium on urban ecology to be held in Fresno in fall 2014 and a botany workshop to be held in the southern San Joaquin Valley in April 2015. We've been developing a guide to the plants of the southern San Joaquin Valley for participants of the latter.



The Chapter Board met last at Sequoia Brewing Company in Fresno at the end of July. We will meet next in September.

- Information, including our most recent newsletter, can be found on our website: <http://wildlife.org/sanjoaquin>.
- We also have a Facebook page: <http://tinyurl.com/k9ndb6o>
- And a Yahoo! Groups discussion forum: www.groups.yahoo.com/neo/groups/sjvwildlife/info.

Sac Shasta Chapter

Hal Holland

The Sacramento-Shasta Chapter offered several member activities this spring/summer. These included a student-professional wildflower hike to Table Mountain late April, a joint student-professional mixer with the UC Davis Student Chapter in May, our "Spring into Summer" mixer on June at the Fox & Goose Public House (which was very well attended), and finally the Chapter hosted a lunch-time brown bag event titled "Cosumnes River Preserve: Wetlands Management in Drought. Future activities planned include a summer event to the Rivercats minor league baseball game, an August Speaker series



brown bag, a late summer camping trip or float trip in the Shasta region, and a Natural Resources Symposium to be held this fall.

The Chapter Executive Board met in May at Kupros Craft House, and the Chapter Professional Development Committee met in June.

Information, including our most recent newsletter, can be found through <http://tinyurl.com/kp5qegw>.



UC Santa Barbara

Joseluis Ocaranza

Greetings from the UCSB Student Chapter of The Wildlife Society!

Thanks to their involvement with The Wildlife Society, the leaders of the UCSB student chapter have obtained some amazing opportunities from around the country. Current President Joseluis (aka Louie) Ocaranza is involved in a hiring-based internship through the US Fish and Wildlife Service (US FWS) in a new program called the Directorate Resource Assistant Fellows Program. He is one of thirty-one fellows around the nation, and he is stationed out in Rocky Mountain Arsenal National Wildlife Refuge (RMA NWR) in Commerce City, Colorado. Past President Allyson Gaarder is interning for the Santa Barbara Audubon Society for an educational program called “Eyes in the Sky”, where she's researched the decline and recovery of the American Peregrine Falcon, developed PowerPoint presentations narrating their story, and presented them with her director at local Boys & Girls Clubs.

Louie began his journey as a US FWS fellow at the National Conservation Training Center in West Virginia, where he was immersed in topics such as: geographic information systems, first-aid, CPR, AED, team building, communication skills, defensive driving training, network security, and the history and goals of the US FWS. Since his residence at RMA NWR, he's acclimated to his role as a link between the refuge and the surrounding Spanish-speaking community. Over one quarter of the Denver metropolitan population speaks Spanish at home. The RMA NWR staff is interested in developing bilingual programs to encourage a new conservation community.

His role is to reach out to the Hispanic community, along with the youth in the area, to teach them about the importance of wildlife, and about how growing cities will affect wildlife in the years to come. He is working full time in the visitor's center creating bilingual programs, contacting youth group organizations, training youth organization staff on programs they could teach to their groups, and giving tours of the refuge. From time-to-time he gets to work on tasks on the refuge itself such as electro-fishing to monitor the health of the fish in the lakes, assisting with fence maintenance so American Bison don't thunder through the north end of Commerce City, and dove banding.



Louie holding a young Great Plains Toad on duty at the Rocky Mountain Arsenal National Wildlife Refuge.

(Santa Barbara Chapter, cont'd from page 18)

Louie's goals are to help some of the younger students understand and learn about careers with the US Fish and Wildlife Service, to develop activities for families, and to foster an understanding of environmental education. Because of the nature of the "hiring-based internship", management may directly hire him after he completes both the fellowship program and the requirements for his degree.

Allyson has been an intern for the Eyes in the Sky (EITS) program since February of this year. EITS is based at the Santa Barbara Museum of Natural History, where it has an aviary that houses seven injured raptors. The birds' injuries make them unable to be released into the wild, so they became educational ambassadors. The program strives to educate people, particularly kids, about the birds by presenting about them at the museum, at local schools, and at youth organizations such as the Boys & Girls Club. EITS is the only licensed raptor education program in the Santa Barbara County.

Over the past couple months, Allyson's been sifting through sources not only for information about the Peregrine Falcon, but also for intriguing pictures and videos that will attract youth to the beauty and brawn of the raptor. The goal of the program is to foster respect for the bird and to encourage environmental stewardship. She is just now in the middle of presenting the PowerPoints that she's helped develop to the Boys and Girls Clubs of the area. Each presentation has three parts: 1) the natural history of the Peregrine; 2) the journey from near-extinction to distinction; and 3) a field trip to a local habitat. Parts one and two were each accompanied by the presentation of an American Kestrel, first the female Kachina and then the male Kanati, and then in part three the Peregrine Falcon Kisa joined the kids on the field trip. These three birds are rehabilitation residents at the museum.

Allyson and Louie's involvement with The Wildlife Society truly helped them attain these opportunities. Not only did TWS provide networking, but also their leadership roles demonstrated their ability to handle complex tasks, and their duties as officers immersed them in the fields of wildlife and education, both skills that they're practicing now in their internships. Thank you TWS for helping build the careers of future wildlife professionals!

With Love and Respect,

Allyson Gaarder, ECOalition Representative of TWS@UCSB

Louie Ocaranza, President of TWS@UCSB



Allyson getting ready to present the American Kestrel Kachina at a Boys & Girls Club.

Nevada Chapter

Mackenzie Jeffress

The first Nevada Chapter newsletter was distributed to current and past members in June and it was well received! We are still looking for members to help develop and manage our website and provide articles for the next newsletter, so please contact Mackenzie Jeffress at mrjeffress@ndow.org if you are willing to help or contact Derek Hall at halldb@nv.doe.gov if you are interested in becoming a member (it's only \$10/year!). Those in the Reno area should save the date for our annual BBQ hosted by the Nevada Chapter and UNR Student Chapter. The BBQ will be held Wednesday, September 10th, from 11 AM – 1 PM on the grass between the NDOW Reno Headquarters office (1100 Valley Rd) and UNR Buildings (1000 Valley Rd). This is a great opportunity for wildlife professionals to mingle and meet students and to form mentorship bonds, discuss job opportunities, etc. And if you can't make the BBQ, stay tuned for more opportunities to get involved as we are planning a statewide symposium for 2015.



American pika in the Ruby Mountains of Nevada

SF Bay Chapter

Matthew Bettelheim



Following in the footsteps of our annual chapter mixer - where we brainstorm the events for the year-to-come, the San Francisco Bay Area Chapter leapt into spring with two BioBlitzes - Save Mount Diablo's Morgan Fire Footprint BioBlitz and the GGNRA BioBlitz - and the sold-out trip to the Sutter Buttes in April with David Wyatt to see (and trap) ringtail cats. Now that we've caught our breath, there's a great lineup in store for members this summer, beginning with a trip to Muir Beach on Saturday, July 26th, to learn about the Redwood

Creek Restoration Project's creek and wetland restoration activities underway.

Once we're done removing invasive vegetation, we'll break for some bangers and mash at the Pelican Inn, and then take a hike to Green Gulch Farm or hike the Coastal Trail.

In October, the chapter is hosting the next in a series of workshops - the Advanced Camera Trapping Workshop set for October 3-5th at Pepperwood Preserve. And make sure to save the date for the first annual Gourmet Greens and Beasts Feast October 12 in Tilden Park, the much-talked-about, fabled fête pitting wildlife biologists (The Wildlife Society members) against botanists (The Native Plant Society members) in a battle of wits, muscle, and gourmet grub. Feast attendees will each be asked to bring a potluck dish featuring a native (or non-native) ingredient: acorn bread, venison, rose hips, trout, miner's lettuce salad, wild boar sausage. This family-friendly event will feature games galore - treasure hunts, tug-of-war, gunny-sack races - as well as raffles and bake-offs. Details to follow!

Other upcoming events include a reprisal of the tule elk hike in August, a September tarantula hike, kayaking Big Break, a birding trip, and a trip to the coast to see butterflies and barnacles. So stay tuned!

TWS-WS Working to Improve Email Communication

The Western Section will soon move away from our Yahoo Group email communication system in favor of more dynamic emails hosted by Constant Contact. The new system will provide better service to our members by allowing us to send more personalized (and attractive!) emails that are friendly to mobile devices. Coming your way soon!

**Announcement!****NATURAL RESOURCES COMMUNICATION WORKSHOP****January 5-9, 2015**

The Natural Resources Communication Workshop, sponsored by the Western Section of The Wildlife Society and the Department of Recreation, Hospitality, and Parks Management at California State University-Chico, is designed to help natural resource workers more effectively communicate with general as well as technical audiences through personal presentations using good visual aids. The workshop focuses on the use of computer-generated images created with Microsoft's PowerPoint software. The workshop is practical-oriented and enhances participants' communication skills in planning, preparing, presenting, and evaluating presentations. Since many of the problems in natural resources management are people-oriented, more effective communication can significantly improve many management programs.

Workshop Content:

1. Discussion topics include:
 - Planning: communication principles, audience analysis, graphic design
 - Preparing: creating computer-generated graphics, photographic composition, rehearsal tips
 - Presenting: equipment setup, speaking tips, dealing with difficult audiences
 - Evaluating: evaluation of performance
2. Each participant will bring a selection of computer-generated images (ex., graphics created with PowerPoint or other presentation software programs) for organization into an illustrated talk.
3. Each participant will prepare graphics (titles, graphs, charts, maps, cartoons, etc.) to be used in their presentations.
4. Each participant will give a 5- and 15-minute presentation (which will include graphics prepared during the workshop). These presentations will be evaluated by the class and the instructors.

Instructor: Dr. Jon K. Hooper, Professor, Calif. State Univ., Chico (Certified Wildlife Biologist, Certified Interpretive Trainer, Ph.D. in Wildlife Ecology, 35+ years teaching communication workshops around the country). Dr. Hooper will be assisted by Ms. Kim Rubin, who has experience as a tour guide and environmental interpreter. She has 15 years experience facilitating the Natural Resources Communication Workshop.

Location: California State University, Chico (90 miles north of Sacramento)

University Continuing Education Credit: Participants receive 1-unit CSUC Continuing Education credit. The workshop qualifies for a maximum of 42 contact hours in Category I of The Wildlife Society's Certified Wildlife Biologist Renewal/Professional Development Certificate Program.



Application Procedure: The initial deadline for applications is October 31, 2014 (Friday). Late applications are accepted (such applicants will become participants if the workshop is not yet full; otherwise, they will be placed on a waiting list in case of cancellations). The registration fee is \$795. The workshop is limited to 16 participants. Since more applicants usually apply than there are spaces available, the registration fee is not due until an applicant has been officially accepted into the workshop (this occurs shortly after the October 31 deadline).

Since the workshop has a limited capacity, all applicants will be contacted after October 31, 2014 to notify them if they have been accepted. Instructions on paying the registration fee will be provided at that time. Payment must be received before applicants will be fully registered. Failure to make timely payment will result in alternate applicants being selected.

To apply, send a letter, fax, or email describing: (1) your current position within your agency or organization, (2) how you will use the training, (3) any special reasons why you feel you should be chosen as a participant, and (4) if you already have official agency/organization approval to attend. In your application, include your job title, address, phone number, fax number, and email. To apply or for more information, write or call:

Dr. Jon K. Hooper
 Dept. Recreation, Hospitality, and Parks Management
 California State University, Chico
 Chico, CA 95929-0560
 (530) 898-5811 or 898-6408
 fax: (530) 898-6557 e-mail: jhooper@csuchico.edu

* * * * *

FLASH!!! Participants in the 2015 workshop will not only learn professional tips for using PowerPoint, but also will gain exposure to Photoshop Elements (digital photo editing software).

*Golf Owl near Davis, CA.
Photo by Jim Rose.*



The Wildlife Society's Subunit Leadership and Conservation Affairs Training

Saturday, October 25, 2014

8:00am – 5:00pm

TWS 21st Annual Conference

David L. Lawrence Convention Center

Pittsburgh, Pennsylvania

An essential in-depth training for all

Section, Chapter, & Working Group Leaders *and* Potential Leaders

Planned presentation topics and discussions include:

TWS Subunit Benefits and Responsibilities

Engaging in Government Affairs & the Conservation Affairs Network

Member Recruitment, Retention, and Involvement

TWS Media Outlets and How to Use for Your Subunit's Benefit

Team Building and Team Management

Strategic Planning for Your Subunit

Free meeting open to current TWS Subunit officers and their designees
RSVP by October 3, 2014 to keith.norris@wildlife.org

Training Organizers: Katie Edwards, Professional Development Coordinator, katie.edwards@wildlife.org
Keith Norris, Assistant Director of Government Affairs & Partnerships, keith.norris@wildlife.org

Crowdfunding Biology Research

written by, David Wyatt, Biology Department, Sacramento City College

Finding funding for research projects can be a time-consuming (and often frustrating) endeavor. Recently, an alternative financing method for funding science research has developed from the lessons learned by crowdfunding pioneers such as Kickstarter. The crowdfunding process is the development of financing from a collection of backers (collectively known as the ‘crowd’) for some discernable ‘project’ and usually occurs through the internet. Recently, I made my first foray into this means of finding resources to conduct research...and yes, it worked beautifully.

There are several science crowdfunding websites that are successfully raising finances for projects. For my work, I chose Experiment.com to pursue my goals of insect and bat research in the Central American country of Belize. Five biologists, including myself, would establish a professional entomology collection in Belize and would also train individuals in Belize in proper collection and curation techniques. In addition, a smaller component of the project was conducting an inventory of bats from an area of the Maya Mountains in Belize. The desired timeframe for this work was the beginning of the wet season (June 2014).

After many months of trying to figure out how a project like this would be financed, I turned to Experiment.com for obtaining the funds. The website provides a platform to essentially advertise your project and to seek pledges of money from donors. If your stated monetary goal is not met within a certain timeframe, the donors are not charged for their pledge (this is all done through credit cards where the pledges are only charged after a limited time period and only after the goal is met or exceeded). Often the projects are only open for pledges for 30-40 days and it is incumbent upon the researcher to be an active participant in fundraising (telling friends and colleagues, hitting up family, doing interviews, writing articles, etc.). If you are successful in meeting your goal, shortly after the closing date and after funds from the pledges are received, the money is electronically transferred to your bank account – minus a small percentage for the website (but remember, they do all of the content hosting...you still have to come up with the content...as well as take care of all of the credit card services and also help you to advertise your project). The folks with the website were wonderful to work with and provided encouragement and suggestions every step of the way. I can’t sing their praises enough!

For my project, we exceeded our fundraising goal (remember to keep the dollar amount reasonable – you’ll only have a limited time to get the pledges and a \$5,000 project is a lot easier to successfully fund than a \$50,000 project). We purchased and shipped all of the equipment necessary to establish the entomology collection, including 24 California Academy of Science entomology drawers as well as all of the small ‘stuff’, e.g. insect pins, pinning blocks, label paper, spreading boards, nets, etc. And, we were able to fund for the five biologists most of the lodging and meals at field stations while we collected and curated specimens. Now, Belize has the beginnings of a first class entomology collection from that area of the Maya Mountains and can add this research resource as they continue to document the biodiversity of the country.

(Wyatt, cont’d on page 25)

(Wyatt, cont'd from page 24)

If you have a research project and need a small to medium amount of funding to conduct your work, you should take a look at crowdfunding. Yes you will bite your nails as you go through your fundraising period, yes you need to 'give back' to your donors by regularly communicating with your donors about how the work is going (this is pretty easy with a blogging system built into the crowdfunding site, and after all, you need to regularly report to your grant funders if you go the traditional route), and yes it was all worth it to me.

I really loved working with the people at Experiment.com and I especially loved that I felt like I really owned the research (probably better stated as co-owned along with my fellow biologists and the funding partners). If you'd like to see more about my project, go to Experiment.com and under the search function type in Belize or my name...be sure to check out the 'Lab Notes' – this is where all of the posted blogs are found. I hope that you give crowdfunding a try!

***Advanced Camera Trapping Workshop
October 3 - 5, 2014
Pepperwood Preserve, Santa Rosa, California***

Many biologists have already discovered the utility of using camera traps to conduct studies, particularly surveys for hard to detect species, but camera traps can generate data that can be analyzed in numerous ways such as using occupancy models to understand abundance and changes over time, ecosystem health, activity patterns, and indicate trends in biodiversity. This workshop is designed for wildlife biologists that are familiar with the camera trapping basics, but would like learn more about:

- designing camera trapping studies,
- managing, cataloguing, summarizing and analyzing camera trapping data effectively,
- building a useful database, and
- reporting results from camera trapping studies.

During a series of informative lectures, you'll learn everything from how to formulate a study plan with clear objectives, develop protocols, data collection, data download and batch renaming, a simple cataloguing system, to analyzing and reporting data. These lectures will alternate with field time, where you will get first-hand experience with a landscape-level camera trapping research project currently being conducted at Pepperwood Preserve as well as exposure to different camera trap models, how they work, and set up and data collection in the field. The workshop activities will begin on midday Friday, October 3rd and conclude after an early dinner on Sunday, October 5th.

For more details, and to register, please visit our workshop website:

<http://wildlife.org/SanFrancisco>



A lactating female hoary bat (*Lasiurus cinereus*) was captured in the Central Valley of California on July 5, 2014 and fitted with a radio transmitter. Tracking resulted in the discovery of a maternity roost with the female and two pups. Within a week, those pups were volant and were flying out of the roost. Has anyone had any experience with maternity roosts of hoary bats? If you have, please contact David Wyatt at wyattd@scc.losrios.edu. David has also taken about 90 hours of maternity roost video both day and night (IR lighting).



Top Photo: Adult Western Red Bat to bottom, two juveniles clinging to mom's chest.

Middle Photo: Adult female Hoary bat to bottom left, youngsters to right and second young clinging to mother's chest.

Bottom Photo: Mom bat to lower right, two pups to left and top

Photos by David Wyatt.

Upcoming Events

2014

October 3-5 - Advanced Camera Trapping Workshop. Pepperwood Preserve

October 25-30 - TWS Annual Meeting. Pittsburgh, PA

October 25 - TWS Subunit Leadership and Conservation Affairs Training. Pittsburgh, PA

2015

January 5-9 - Natural Resources Communication Workshop. Chico, CA

January 26 - Spotted Owl /Barred Owl Interactions Symposium . Santa Rosa, CA

January 26-27 - Technical Writing Workshop. Santa Rosa, CA

January 27 - Effects of Marijuana Plantations on Wildlife and Wildlife Biologists. Santa Rosa, CA

January 27 - Amargosa Vole: Emergency Conservation Symposium. Santa Rosa, CA

January 28-30 - TWS Western Section Annual Meeting. Santa Rosa, CA

October 17-21 - TWS Annual Meeting. Winnipeg, Manitoba

July 2015 - 5th International Wildlife Management Congress. Sapporo, Japan

2016

January 26-29 - TWS Western Section Annual Meeting. Pomona, CA



Yellow-headed blackbird, Photo by Cayce Wallace.



The Wildlife Society Western Section

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<http://twswest.org>

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