### 2012 Annual Conference

# The Western Section of the Wildlife Society



# **Program and Schedule**

February 1-3, 2012 Woodlake Hotel (formerly Radisson Hotel) Sacramento, California

### **DAY AND ROOM DESIGNATIONS**

### **TUESDAY AND WEDNESDAY**

Room	Tuesday Morning	Tuesday Afternoon	Tuesday Evening	Wednesday Morning	Wednesday Afternoon	Wednesday Evening
Foyer	Symposium	Registration		Symposium and Conference Registration	Conference Registration Setup Posters	Poster Session Hawaii Chapter Meeting
Edgewater A					Concurrent Session: Conservation Planning	SF Bay Chapter Meeting
Edgewater B					Concurrent Session: Carnivores	Welcome Mixer, Poster Session, and Mini-Quiz
Edgewater C	Scientific a	Scientific and Technical Writing Workshop			Concurrent Session: Upland Birds	San Joaquin Chapter Meeting
Edgewater D	West Coast Fisher Symposium			Concurrent Session:	Nevada Chapter Meeting	
Edgewater E					Shorebirds	California Central Coast Chapter Meeting
Edgewater F	Refreshments and Vendors		Fisher Mixer and Poster Session	Vendors, Exhibitors, Refreshments	Vendors, Exhibitors, Refreshments	Welcome Mixer, Poster Session, and Mini-Quiz Vendors, Exhibitors
Basil's Den		TWS-WS Exec. Board Meeting		Scientific and Technical Writing Workshop (cont.)	Conservation Affairs Committee Meeting	Southern CA Chapter Meeting
Executive Board Suite 116	Speaker Practice		Speaker	Practice	North Coast Chapter Meeting	
Executive Board Suite 117						Sacramento-Shasta Chapter Meeting

### **DAY AND ROOM DESIGNATIONS**

### THURSDAY AND FRIDAY

Room	Thursday Morning	Thursday Afternoon	Thursday Evening	Friday Morning	Friday Afternoon
Foyer	Conference Registration Poster Viewing	Conference Registration Poster Viewing	Poster Viewing	Conference Registration Poster Removal	
Edgewater A	PLENARY SESSION:		Keynote Program	Concurrent Session: Climate Change	Concurrent Session:  Renewable Energy
Edgewater B	Conservation in the Age of Litigation Edgewater B		Awards Banquet and Raffle	Concurrent Session:  Implementation of Mitigation Measures	Concurrent Session: Diseases and Pathology
Edgewater C		Concurrent Session: Songbirds		Concurrent Session:  Mammal Ecology	Concurrent Session:  Reptiles and Amphibians
Edgewater D		Concurrent Session:  Waterfowl and Wetlands	Annual Business Meeting/ Member's Forum	Career Fair and	1 Student Lunch
Edgewater E		Concurrent Session:  Military Lands		Career Fair and Student Lunch	
Edgewater F	Vendors, Exhibito	ors, Refreshments	No-host Cocktail Reception Vendors, Exhibitors	Vendors, Exhibitors, Refreshments	
Basil's Den		Effective Oral Presentation Workshop Student Résumé Workshop		Job Interview Panel	
Executive Board Suite 116	Speaker	Practice		Speaker Practice	
Executive Board Suite 117		California Bat Working Group HSU Alumni Association Meeting		Student Résumé Workshop (Repeat)	TWS-WS Exec. Board Meeting

### PO Box 6756 Albany, CA 94706 http://joomla.wildlife.org/Western/

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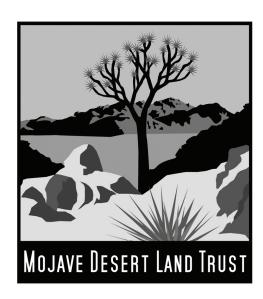
# **Conference Sponsors**













### **SCHEDULE AT A GLANCE**

### **MONDAY, JANUARY 30**

8:00 a.m. to 5:00 p.m. Wilderness First Aid (Room 305) 6:00 p.m. to 9:30 p.m. Adult CPR (Room 305)

### **TUESDAY, JANUARY 31**

8:00 a.m. to 5:00 p.m. Wilderness First Aid continues (Room 305) 8:00 a.m. Registration (Foyer) Coffee (Edgewater F) 8:15 a.m. to 9:00 a.m. 8:30 a.m. to 4:30 p.m. Speaker Ready Room (get key at Registration) 8:50 a.m. to 5:15 p.m. West Coast Fisher Symposium (Edgewater D, E) 9:00 a.m. to 5:00 p.m. Scientific and Technical Writing Workshop (Edgewater C) Vendors and Exhibitors (Edgewater F) 10:00 a.m. to 5:00 p.m. 10:30 a.m. to 10:50 a.m. Break (snacks provided) (Edgewater F) 12:15 p.m. to 1:30 p.m. Lunch Break (on your own) 3:15 p.m. to 3:45 p.m. Break (snacks provided) (Edgewater F) 3:00 p.m. to 5:00 p.m. TWS-WS Executive Board Meeting (Basil's Den, members welcome) 5:30 p.m. to 7:00 p.m. West Coast Fisher Symposium Reception and Poster Session with light hors d'œuvres, No-Host Bar (Edgewater F)

### WEDNESDAY, FEBRUARY 1

7:45 a.m. to 5:00 p.m.	Registration (Foyer)
7:45 a.m. to 8:30 a.m.	Coffee (Edgewater F)
8:30 a.m. to 12:10 p.m.	West Coast Fisher Symposium continues (Edgewater D, E)
8:30 a.m. to 12:10 p.m.	Scientific and Technical Writing Workshop continues (Basil's Den)
8:30 a.m. to 4:00 p.m.	Speaker Ready Room (get key at Registration)
10:00 a.m. to 7:45 p.m.	Vendors and Exhibitors (Edgewater F)
10:00 a.m. to 10:20 a.m.	Break (snacks provided) (Edgewater F)
12:15 p.m. to 1:00 p.m.	Lunch Break (on your own)
1:00 p.m.	2012 Annual Meeting Opening
1:00 p.m. to 4:45 p.m.	Concurrent Session: Conservation Planning (Edgewater A)
1:00 p.m. to 4:45 p.m.	Concurrent Session: Carnivores (Edgewater B)
1:00 p.m. to 4:25 p.m.	Concurrent Session: Upland Birds (Edgewater C)
1:00 p.m. to 5:05 p.m.	Concurrent Session: Shorebirds (Edgewater D, E)
2:45 p.m. to 3:00 p.m.	Break (snacks provided) (Edgewater F, Foyer)
3:00 p.m. to 5:00 p.m.	Conservation Affairs Committee (Basil's Den)
3:30 p.m. to 5:00 p.m.	Poster set-up (Foyer)
5:30 p.m. to 7:30 p.m.	Welcome Reception, Poster Session, Mini-Quiz (Edgewater B, F, Foyer)
	(hors d'œuvres, No-Host Bar requires ticket or
	symbol on name badge indicating payment)
7:30 p.m. to 9:00 p.m.	Chapter Meetings (various locations; see Day and Room Designations for details; see inside front cover and page 1)

### **THURSDAY, FEBRUARY 2**

7:30 a.m. to 5:00 p.m. 7:30 a.m. to 7:00 p.m. 7:30 a.m. to 8:30 a.m. 8:25 a.m. to 11:50 a.m. 10:00 a.m. to 10:20 a.m. 11:50 a.m. to 1:00 p.m. 1:00 p.m. to 4:05 p.m. 1:00 p.m. to 4:25 p.m. 1:00 p.m. to 5:05 p.m. 1:00 p.m. to 3:00 p.m. 1:30 p.m. to 3:45 p.m. 2:45 p.m. to 3:00 p.m. 4:00 p.m. to 6:00 p.m.	Conference Registration (Foyer)  Vendors, Exhibitors, and Posters (Edgewater F)  Coffee / Light Breakfast (Edgewater F)  Plenary Session (Edgewater A and B)  Break (snacks provided) (Edgewater F, Foyer)  Lunch Break (on your own)  Concurrent Session: Songbirds (Edgewater C)  Concurrent Session: Waterfowl and Wetlands (Edgewater D)  Concurrent Session: Military Lands (Edgewater E)  Speaker Ready Room (get key at Registration)  California Bat Working Group (Executive Suite 117)  Oral Presentation Workshop: How NOT to Give a Scientific Presentation (Basil's Den)  Break (snacks provided) (Edgewater F, Foyer)  Résumé Workshop (Basil's Den)  HSU Alumni Meeting (Executive Suite 117)			
	THURSDAY EVENING			
5:10 p.m. to 6:00 p.m. 6:00 p.m. to 7:00 p.m. 7:00 p.m. to 10:00 p.m.	Annual Business Meeting and Member's Forum (Edgewater D) No-host Cocktail Reception (Edgewater F) Banquet, Keynote Program,* Awards Ceremony, Raffle (Edgewater A and B) requires ticket or symbol on name badge			
FRIDAY, FEBRUARY 3				
7:30 a.m. to 1:00 p.m. 7:30 a.m. to 3:00 p.m. 7:30 a.m. to 8:00 a.m. 8:00 a.m. to 11:25 a.m. 8:00 a.m. to 11:45 a.m. 8:00 a.m. to 11:45 a.m. 8:00 a.m. to 2:00 p.m. 8:15 a.m. to 9:45 a.m. 9:45 a.m. to 10:00 a.m. 10:00 a.m. to 12:00 p.m.	Conference Registration (Foyer) Vendors, Exhibitors (Edgewater F) Coffee / Light Breakfast (Edgewater F) Concurrent Session: Climate Change (Edgewater A) Concurrent Session: Mitigation Measures (Edgewater B) Concurrent Session: Mammal Ecology (Edgewater C) Speaker Ready Room (get key at Registration) Job Interview Panel: I Got a Job Interview, Now What? - Getting Jobs in a Tough Job Environment (Basil's Den) Break (snacks provided) (Edgewater F) Résumé Workshop (Repeat) (Executive Suite 117) Career Fair (Edgewater D, E)			
11:45 a.m. to 1:00 p.m. 12:00 p.m. to 1:00 p.m.	Lunch Break (on your own) Student/Professional Lunch (Edgewater D, E) Free to students and professionals			

Break (snacks provided) (Edgewater F)

but requires ticket or symbol on name badge

Concurrent Session: Renewable Energy (Edgewater A)

Concurrent Session: Diseases and Pathology (Edgewater B) Concurrent Session: Reptiles and Amphibians (Edgewater C)

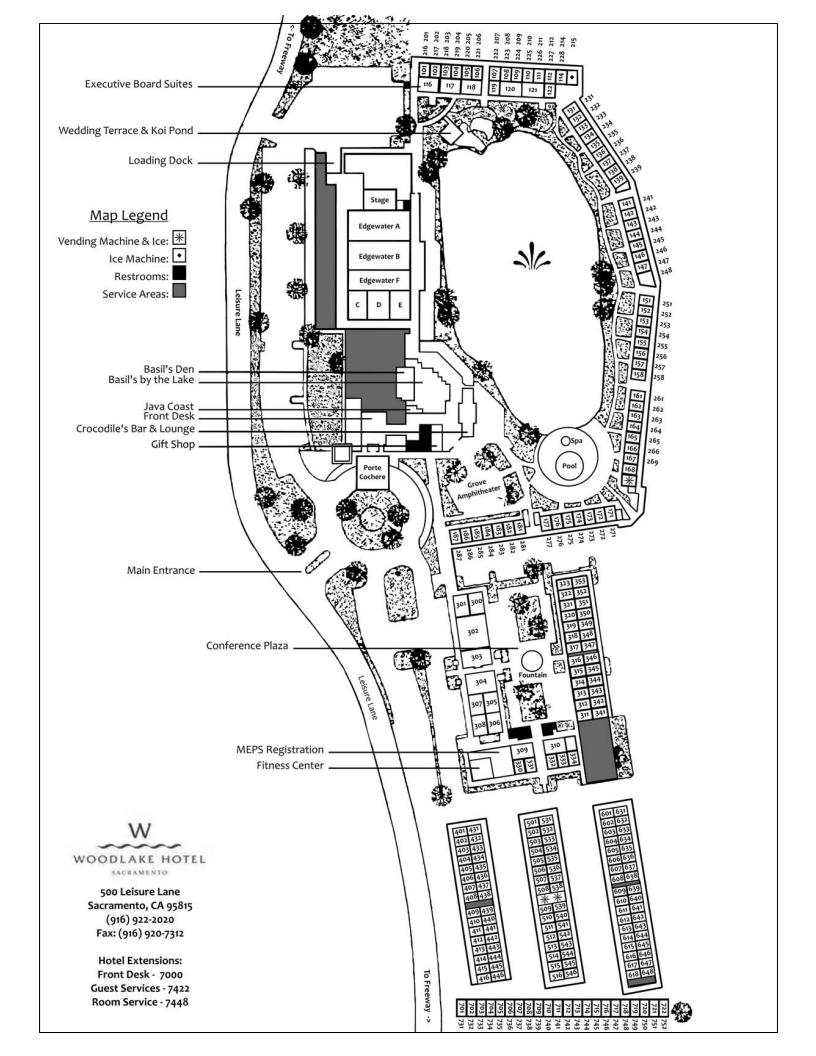
1:00 p.m. to 3:05 p.m.

1:00 p.m. to 4:25 p.m.

1:00 p.m. to 4:25 p.m. 3:05 p.m. to 3:20 p.m.

<sup>4:30</sup> p.m. to 5:30 p.m. Western Section Executive Board Meeting (Executive Suite 117)

<sup>\*</sup> Conference registrants are welcome to attend the keynote address without a banquet ticket. Limited seating will be provided starting at 8:15 p.m. in the back of the Edgewater B. The keynote address will begin at approximately 8:30 p.m.



### **GENERAL INFORMATION**

**Annual Business Meeting and Member's Forum.** The Annual Business Meeting and Member's Forum will be held on Thursday, February 2 from 5:10 p.m. to 6:00 p.m. in Edgewater D. Officers and committee chairs of the Western Section will provide reports for membership information and discussion, and new officers and Executive Board members will be introduced. Attendance by all members is encouraged!

Career Fair and Student/Professional Lunch. The Career Fair will be held on Friday, February 3 from 10:00 a.m. to 2:00 p.m. in Edgewater D and E. This is an opportunity for students to meet prospective employers and discuss careers in the wildlife sciences. Professionals from state and federal agencies and several consulting firms will be present. Student/Professional Lunch, served at noon, is free to students and professionals who have indicated they will attend on their registration form, but a ticket or name badge symbol is required. All are invited to attend the Career Fair.

**Cell Phone Informal "Policy."** The Western Section of The Wildlife Society strongly encourages all meeting participants to silence their cellular phones and similar devices prior to entering meeting rooms! The informal policy of the Western Section "Sergeant-at-Arms-for-Life" (Rhys Evans) is that, if your device makes an audible noise during any session, you will be expected to purchase a beverage for every person in your seating row at that evening's social function. Seriously...you beep, you buy!

**Concurrent Sessions.** Concurrent sessions will be held on Wednesday afternoon, Thursday afternoon and all day Friday (see Day and Room Designations for locations; inside front cover and page 1).

**Exhibits and Vendor Displays.** Exhibits will be displayed approximately 10:00 a.m. to 7:45 p.m. Wednesday, 7:30 a.m. to 7:00 p.m. Thursday, and 7:30 a.m. to 3:00 p.m. Friday in Edgewater F.

Field Trip: Sampling for Federally Listed Species in Vernal Pool Landscapes. Please join us on Friday February 3, from 1:00 to 5:00 p.m. for a half-day field trip to a natural northern California vernal pool landscape! The field trip will occur on a private ecosystem preserve one hour drive from Sacramento that is home to federally and State-listed species including vernal pool fairy shrimp, tadpole fairy shrimp, Conservancy fairy shrimp and California tiger salamanders. The trip will include carpool transit to and from the site from the Woodlake Hotel, introductory talk by a recognized expert on vernal pools and local species, and hands-on aquatic surveying in the numerous onsite features. Light snacks and water will also be provided. The maximum amount of attendees for this site visit is 20 people. You must sign up by Thursday, February 2, 5:00 p.m. at the registration desk and let us know if you are willing to drive. PLEASE COME PREPARED FOR THE FIELD. There are no trees or other cover and the site is subject to high winds and rain. You will need appropriate footwear, windbreakers and potentially raincoats/rain pants. If you plan on participating in the aquatic sampling, please bring knee-high (or higher!) rubber boots.

**Job Board**. Post and view job announcements the job board in the Foyer area near the Registration Desk. Please do not post résumés as we cannot be responsible for the security of your personal information.

Job Interview Panel: *I Got a Job Interview, Now What? - Getting Jobs in a Tough Job Environment.* Join us in a panel discussion about the skills employers desire to see in prospective new hires and what those candidates can expect in the interview process. Panelists include biologists from Federal and State Agencies and from private industry. Questions will also be fielded from the audience. The panel discussion will be held on Friday, February 3, from 8:15 a.m. to 9:45 a.m. (Basil's Den).

**Keynote Program and Awards Banquet.** The Keynote Program and Awards Banquet will be held on Thursday, February 2 from 7:00 p.m. to 10:00 p.m. in Edgewater A and B. A no-host cocktail reception will begin at 6:00 p.m. in Edgewater F and the Foyer. A ticket or name badge symbol indicating payment is required for the banquet. Charlton Bonham, Director, California Department of Fish and Game will present the Keynote Address: "DFG, Wildlife Management, and a Look Forward." Registrants of the conference can attend the keynote address without purchasing a banquet ticket; seating will be provided at 8:15 p.m., with the keynote to begin approximately at 8:30 p.m. Awards to be presented include the Raymond F. Dasmann Professional of the Year, Conservationist of the Year, Barrett A. Garrison Outstanding Mentor Award, James D. Yoakum Outstanding Service Award, and Chapter of the Year. The annual raffle will follow.

**Local Services.** A listing of local services (banks, pharmacies, grocery stores, hospital, etc.) is available at the Woodlake Hotel Concierge Desk.

**Logo for Conference.** This year's conference logo was designed and donated by Cynthia Clark, Scientific Illustrator. The logo reflects the conference theme "Conservation in the Age of Litigation." We greatly appreciated Cynthia's time and talent in this elegant and effective logo. You can view her online portfolio: https://picasaweb.google.com/megatherium/Sciencelllustration?authuser=0&feat=directlink or contact her at megatherium@gmail.com.

**Messages and Announcements.** Post and view messages and announcements at the message board in the Foyer near the Registration Desk.

**Odor Sensitivity.** Please be courteous to those who may be sensitive to chemical smells, and refrain from wearing perfumes, colognes and strong-smelling hand lotions.

**Oral Presentation Workshop:** *How NOT to Give a Scientific Presentation.* Whether you're just starting out or looking to improve, this informative (and likely humorous) mini-workshop will provide you with helpful tips for presenting your research work to your peers. Instructor Jon Hooper will provide demonstrations on how to give an effective presentation....and how NOT to. Thursday, 2:30 to 3:45 p.m. in Basil's Den.

**Plenary Session.** The plenary session, titled "Conservation in the Age of Litigation," will be held on Thursday, February 2 from 8:25 a.m. to 11:50 a.m. in Edgewater A and B. There will be no concurrent sessions during the plenary session.

**Poster Sessions.** Conference posters will be available for viewing on Wednesday, February 1, starting at 5:30 p.m., concurrent with the Conference Welcome Reception in Edgewater B and F. Authors will be available to answer questions about their posters during these times. Most posters will also be available for viewing in Edgewater F and the Foyer throughout the week.

**Professional Development.** The number of contact hours for each workshop and contributed paper session is equal to the number of actual hours spent in a workshop or session and does not include time allotted for breaks or lunch. Generally, attendance at a meeting such as this is not creditable for an initial application for Certified Wildlife Biologist or Associate Wildlife Biologist (but the pre-conference Symposia may be); however, hours may be credited "one for one" toward CWB Renewal. For example, if you attend four 2.5 hour technical sessions (sorry, social events don't count!) you may claim 10 hours toward a Professional Development Certificate (in category 1) or toward Certified Wildlife Biologist renewal. Speaking in or chairing a session is usually credited at 1 hour = 2 hours. Additional information on the TWS Professional Development Certificate and Certified /Associate Wildlife Biologist programs is available from the TWS-Western Section Professional Development Committee or on the national TWS website: <a href="https://www.wildlife.org">www.wildlife.org</a>

Raffle and Silent Auction. The annual raffle will be conducted during Thursday evening's banquet, after the awards ceremony. You need not be present to win. The silent auction will open on Wednesday evening during the Welcome Reception and Poster Session and will close during the morning break (9:55 a.m.) on Friday. Items must be purchased and picked up by 1:00 p.m. on Friday, February 3. Raffle and auction proceeds support the Western Section's student programs including travel grants, awards for best papers, and student-mentor activities. We encourage everyone to purchase raffle tickets, which are available at the Registration Desk or from Western Section Executive Board members and volunteers. Raffle and silent auction items will be displayed near the Registration Desk and/or in the Foyer.

**Recycled and Low Environmental Impact Program Materials.** This program has been printed on "Aspen 30" paper and "Fireworx" cardstock, both 30% post-consumer recycled and Forest Stewardship Council-certified paper, purchased through the company, "Give Something Back." For each case of paper used, seven meals were donated to the Sacramento Food Bank. In addition, the programs were printed using Xerox's dry-ink technology which uses non-toxic wax instead of chemically based toner and produces 90% less waste than typical laser printing.

**Refreshment and Lunch Breaks.** Light refreshments will be provided at the early morning, mid-morning and afternoon breaks. Lunch will not be provided. For information on local restaurants and services, inquire at the Registration Desk or at the Woodlake Hotel Concierge.

**Registration Desk.** Registration materials, general information, and Western Section membership applications can be picked up at the Registration Desk.

**Résumé Workshop.** The Western Section is pleased to announce the return of our fantastic résumé workshop! Barbara Peters from the Career Center at Humboldt State University (retired) will be present to offer outstanding guidance on job searching to students and young professionals. The same workshop will occur twice: Thursday from 4:00 p.m. to 6:00 p.m. (Basil's Den), and Friday from 10:00 a.m. to 12:00 p.m. (Executive Suite 117).

**Re-usable Nametag Holders**. The Western Section is now using re-usable nametag holders (aka name badges). At the end of the conference, please drop your nametag holder off at the Registration Desk so it can be re-used next year. Thanks!

**Speaker Practice Room**. Executive Board Suite 116 will be available throughout the meeting for speakers to practice their presentations. You may obtain a key from the Registration Desk.

**Student Presentation and Poster Contest.** Awards will be given to the best student presentations and posters. Poster awards will be announced during the banquet; oral presentation awards will be announced on our website after the meeting.

**Welcome Reception.** A welcome reception will be held on Wednesday, February 1 from 5:30 p.m. to 7:30 p.m. in Edgewater B and F, concurrent with the poster session. Light hors d'oeuvres will be served and a no-host bar will be available. A ticket or name badge symbol is required for this event.

When entering or exiting rooms during sessions, please be careful to open and close the doors quietly. Please do not congregate and converse in the hallway in the immediate area of a door, as your conversation may disturb ongoing sessions.

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### **MEETING SCHEDULES**

### Official Meetings

### Tuesday. January 31

3:00 p.m. to 5:00 p.m. Western Section Executive Board Meeting (Basil's Den)

### Wednesday, February 1

3:00 p.m. to 5:00 p.m. Conservation Affairs Committee (Basil's Den)

7:30 p.m. to 9:00 p.m. Chapter Meetings (see Day and Room Designations for locations;

inside front cover and page 1).

### Thursday, February 2

2:30 p.m. to 3:45 p.m. Oral Presentation Workshop (Basil's Den)

4:00 p.m. to 6:00 p.m. Résumé Workshop (Basil's Den)

5:10 p.m. to 6:00 p.m. Annual Business Meeting and Member's Forum (Edgewater D)

### Friday, February 3

8:15 a.m. to 9:45 a.m. Interview Panel (Basil's Den)

10:00 a.m. to 12:00 p.m. Résumé Workshop (Executive Suite 117)

4:30 p.m. to 5:30 p.m. Western Section Executive Board Meeting (Executive Suite 117)

### **Unofficial Meetings**

### Thursday, February 2

1:30 p.m. to 3:00 p.m. California Bat Working Group (Executive Suite 117)

4:00 p.m. to 6:00 p.m. Humboldt State University Alumni Association (Executive Suite 117)

# THINGS TO DO AND SEE IN SACRAMENTO AND SURROUNDING AREA

January 31, 2012 - February 4, 2012

#### **Get Footloose**

- \* Join hundreds of dancers at <u>Midtown Stomp for East Coast Swing and Lindy Hop</u> dancing every Friday night. Start with beginning swing lessons from 8 to 9 p.m., then join open dancing from 9 p.m. to midnight. Don't miss live music twice a month, featuring bands from around the world. No partner needed!
- \* Put your rhythm to the test on Tuesday nights at <u>The Davis Graduate, where salsa lessons</u> start at 9:30, followed by open dancing.

### Visit a public garden

- \* The <u>UC Davis Arboretum</u> offers 100 acres of gardens and is open 24 hours a day, 365 days a year.
- \* In the southeast corner of <u>Sacramento's Old City Cemetery</u> sits the California Native Plant Society Demonstration Garden, where you can learn about medicinal, cultural and edible aspects of native plants used by local Native Americans. Flowers include the region's largest collection of California lilacs (mountain lilacs) and California sages.

### **Enjoy Fine Wines**

- \* Rail Bridge Cellars Urban Winery, 400 North 16th St., Sacramento. Sacramento's original urban winery providing 6 different varietals primarily with Napa Valley grapes. Custom crush, wine storage, private tastings and event space available.
- \* **Revolution Wines**. 2831 S Street, Sacramento. Sacramento's premiere winery & bistro. Open Tuesday Sunday for wine tasting & artisan small plates. Friday night dinner and wine special \$15-salad, bread, main entrée and glass of wine. Focus on fresh, local ingredients.
- \* <u>Clarksburg Old Sugar Mill Six Wineries: One Location</u>, 35265 Willow Avenue, Clarksburg, CA 95612. The Old Sugar Mill is located in the historic town of Clarksburg, fifteen minutes southwest of the Capitol building in Sacramento. Come and discover for yourself, the wines and wineries of the Old Sugar Mill Open seven days a week.
- \* <u>Wineries in Amador County</u> in just 30 minutes you can enjoy over 30 wineries and historic Gold Rush Towns. http://www.amadorwine.com/
- \* <u>Wineries in El Dorado County</u> More than two dozen award-winning wineries in the Sierra foothills just one hour from Sacramento or South Lake Tahoe. Welcoming tasting rooms open daily. Special events year-round. Check out calendar of events at www.ElDoradoWines.org.

### **Music and Entertainment:**

- \* The Wood Brothers Blues January 31st At Harlow's downtown Sacramento
- \* Wilco February 1st at The Mondavi Center-Jackson Hall, Davis
- \* Kremlin Orchestra February 2<sup>nd</sup> At Three Stages, Folsom Lake College, Folsom
- \* Thursday Night Blues Jam Presented by Sacramento Blues Society at Vega's Nightclub & Sports Bar
- \* Killer blues in Old Sac's Vega's Nightclub & Sports Bar--and enjoy a blues jam open to all jammers. This jam is supported by the Sacramento Blues Society.
- \* Open Night Mic at Old Ironsides Wednesday nights
- \* Pub Quiz night at Fox and Goose Public House go test your wits!

#### **Nature**

- \* <u>Effie Yaw Nature Center</u>, Tarshes Dr and San Lorenzo Way, Carmichael, CA 95609. Wed-Thu 9 am to 1 pm, Fri-Sun 9 am-5 pm. Located where the Sacramento and American rivers meet, this 302-acre park provides many opportunities for relaxation and recreation. Covered shelters invite leisurely picnic lunches, and visitors may boat, bike, fish, ride horses, or participate in archery activities.
- \* <u>Sacramento Zoo</u>, 3930 West Land Park Dr., Sacramento, CA 95822. Open daily 10 am 4 pm. Set on 14-plus acres, Sacramento Zoo is the largest accredited zoological park in the Central Valley. Guests can view over 4,000 exotic animals, including snow leopards, red pandas, and Sumatran tigers. A quarter of the 130 resident species is endangered, and special programs are implemented by the zoo to combat such circumstances, including national breeding programs for two specific species. Adults and children learn while having fun by attending stage presentations, evening events, and weekend animal talks.
- \* <u>Stone Lakes Wildlife Refuge</u>, 1624 Hood-Franklin Road, Elk Grove, CA 95757. Guided tours and special events only, General Office Line: (916) 775-4421
- \* Vic Fazio Yolo Bypass Wildlife Area. Yolo Bypass Wildlife Area is a 16,000-acre reserve that is mostly seasonal and permanent wetlands. It also contains some riparian habitat and upland or grassland habitat. One of the best aspects of this reserve is its proximity to the City of Davis: it is only about three miles east of Mace Blvd. A trip to this area during the fall or winter provides the visitor with a chance to see thousands of over-wintering waterfowl, including many species of ducks and geese. The 16,000-acre Yolo Wildlife Area is one of the largest public/private restoration projects with 3,700-acres of land in the Yolo Bypass floodway restored to wetlands and other associated habitats, with more restoration in the works. The California Department of Fish and Game manages the Yolo Wildlife Area to promote an increase in waterfowl and other bird populations.

**Directions from Sacramento:** From Interstate 80 West take the Mace Boulevard Exit in Davis. Turn left at off-ramp light. Turn left at the next light at the Mace Boulevard and Chiles Road intersection. Once on Chiles Road east of the Mace intersection, Travel approximately 1.5 miles east to the Yolo Bypass Wildlife Area Headquarters office at 45211 County Road 32B (Chiles Road). The Yolo Bypass Wildlife Area is approximately two miles east of the Headquarters office. Drive up onto the levee at the end of Chiles Road (do not go under the freeway). Turn left at the top of the levee and enter the Yolo Wildlife Area.

#### \* Cosumnes River Preserve

Tour the Cosumnes River Walk and Lost Slough Wetlands Walk on your own. It is the only remaining unregulated river on the western slope of the Sierra Nevada. In its lower reaches, it flows through one of the biologically richest regions in California's Central Valley, before merging with the Mokelumne River to flow into the Sacramento-San Joaquin Delta and eventually the Pacific Ocean. The Cosumnes River Preserve was created to safeguard much of this unique landscape. The free-flowing nature of the river allows frequent and regular winter and spring overbank flooding that fosters the growth of native vegetation and the wildlife dependent on those habitats. More than 250 bird species, more than 40 fish species, and some 230 plant species have been identified on the Preserve.

**Directions:** From I-5 (Sacramento Area-North): Take Interstate 5 south to the Twin Cities Road exit (marked with a binoculars sign for wildlife viewing) about midway between Stockton and Sacramento. Take Twin Cities Road exit and go east for exactly one mile, to the first stop sign. Turn right at the first stop sign, onto Franklin Boulevard, for 1.7 miles. The Visitor Center is located on the left side of Franklin Boulevard. Continue down Franklin Boulevard and park in the parking lot just past the Visitor Center.

\* <u>American River Parkway</u>. A picturesque 23-mile stretch of riparian forest and land along the American River that offers visitors wonderful scenic beauty. Bring your bike and check out some of the trail.

### **Capitol Must Sees**

- \* Visit the California State Capitol, Museum and Surrounding Capitol Park. This 19th-century granite building, modeled after the U.S. Capitol, is home to the California Legislature and houses a public museum.
- \* <u>Crocker Art Museum</u>. The Crocker Art Museum was one of the first art museums in the U.S. and is now one of the leading art institutions in California. Established in 1885, the Museum features one of the country's finest collections of Californian art, exceptional holdings of master drawings, a comprehensive collection of international ceramics, as well as European, Asian, African, and Oceanic art.

### SPECIAL ANNOUNCEMENTS

### **CONSERVATION AFFAIRS COMMITTEE MEETING**

The Conservation Affairs Committee will be meeting on Wednesday, February 1 at 3:00 to 4:00 p.m. (Basil's Den). Members are welcome to attend, learn about the committee, and get involved. The committee will be discussing its role in the Section and brainstorming ways to better inform decision makers about wildlife!

Guest Speaker: Terra Rentz, Associate Wildlife Biologist ®, and Assistant Director, Government Affairs & Partnerships, The Wildlife Society will be speaking on Advocacy 101 (while avoiding conflicts of interest).

# PUBLICATION IN THE TRANSACTIONS OF THE WESTERN SECTION —If your work isn't published it's as if it was never done—

Presenters of papers at the Western Section's Annual Conference are strongly encouraged to submit their papers for publication in our annual journal, "Transactions of the Western Section of The Wildlife Society." There are no page charges for papers published by current members of the Western Section! Potential authors should review the guidelines for preparing and submitting manuscripts under the "Transactions" link on the Section web site at http://joomla.wildlife.org/Western/ or contact the Transactions Editor, David Wright (dwright@dfg.ca.gov).

#### CARBON OFFSETS AND REDUCING OUR ECOLOGICAL FOOTPRINT

The Western Section of The Wildlife Society is proud to partner with the Sacramento Valley Conservancy to offset the carbon and ecological footprint of the Sacramento 2012 conference.

Over the past several years, the Western Section has collected donations from conference attendees with the proceeds being used to fund local restoration projects that will offset the carbon footprint of the conference. This year, the registration fee includes a \$5 surcharge for carbon offsets and ecological karma. The Western Section will match the amount collected from attendees, effectively doubling the amount of funding. The donation will be provided to the Sacramento Valley Conservancy, which is working to preserve the beauty, character, and diversity of the Sacramento Valley landscape.

Our contribution will help the Sacramento Valley Conservancy's Deer Creek Hills Oak Woodland Preserve and Working Ranch located in the Blue Oak Woodland Legacy Area of Sacramento County. The 375-acre addition would add a linear mile of Deer Creek, associated riparian habitat, and blue oak woodlands to the existing 4,062-acre Preserve. Our support will also help with stewardship at the Sacramento Prairie Vernal Pool Preserve in Sacramento County, and the Elkhorn Basin Ranch in Yolo County on the Sacramento River right across from the Sacramento International Airport (look down on your landing or take-off and you will see the site!). For more information, see http://www.sacramentovalleyconservancy.org.

To contribute more to the Sacramento Carbon Offset and Ecological Karma Program and these projects, please see Candace Renger at the Registration Desk. Thank you!

### TWS CERTIFICATION PROGRAM

Certification of wildlife biologists is a service provided by The Wildlife Society for wildlife professionals and the public, who may desire a peer evaluation statement. The Wildlife Society is committed to the sound stewardship of wildlife resources under the guidance of well-educated, experienced, and dedicated wildlife biologists. To further this aim, The Wildlife Society has established standards for certifying the credentials of qualified wildlife biologists.

A professional wildlife biologist is a person with the educational background and demonstrated expertise in the art and science of applying the principles of ecology to the conservation and management of wildlife and its habitats. An applicant for professional certification who demonstrates this expertise through education and experience, and is judged to be able to represent the profession as an ethical practitioner, will be designated as a Certified Wildlife Biologist.

An applicant for professional certification who has limited experience but who has completed the rigorous academic standards and is judged to be able to represent the profession as an ethical practitioner will be designated as an Associate Wildlife Biologist (AWB). After sufficient experience is gained, the AWB may apply for the more advanced level of certification.

Please visit the TWS "National" website (www.wildlife.org) for additional details, or contact your TWS-Western Section Professional Development Committee.

### **EXHIBITORS**

### Ascent Environmental, Inc.

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### California Landscape Conservation Cooperative

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### The Wildlife Society

Darryl Walter 5410 Grosvenor Lane Bethesda, MD 20814 (301) 897-9770 dwalter@wildlife.org www.wildlife.org

### TWS WESTERN SECTION BOARD MEMBERS

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**Registration Administration Candace Renger** 

Vendors and Exhibitors Candace Renger

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Sacramento Area Information
Tina Bartlett, California
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Fisher Symposium

J. Scott Yaeger, U.S. Fish and Wildlife Service, Yreka

Katie Moriarty, Oregon State University Rhys Evans, Vandenberg Air Force Base Scientific and Technical Writing Workshop

Jack Barclay, Albion Environmental Rhys Evans,

Vandenberg Air Force Base

Wilderness First Aid and CPR
Bobbie Foster, Foster Calm
Cynthia Perrine, The Western
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### Contributed Papers Session Chairs

Conservation Planning & Environmental Offsets: Tools for Species Recovery? Lucy Harrington, Westervelt Ecological Services

Conservation and Management of Carnivores

Katie Moriarty, Oregon State University

Ecology and Management of Upland Game Birds

Erik Blomberg, University of Nevada, Reno

Ecology and Management of Shorebirds Dr. Mark Colwell, Humboldt State University

Conservation and Management of Songbirds

Steve Henderson, Ascent Environmental, Inc.

Ecology and Management of Waterfowl and Wetlands

Shaun Oldenberger, California Department of Fish and Game

Conservation and Management of Wildlife on Military Lands

Kirsten Christopherson, Beale Air Force Base and Rhys Evans, Vandenberg Air Force Base Challenges of Natural Resource
Management in a Changing Climate
Armand Gonzales, California
Department of Fish and Game

Mitigation Measures: Challenges and Realities During Project Implementation Stephanie Parsons, ESA and Jon Waggoner, AECOM

Large Mammal and Big Game Ecology and Management

James Asmus, U.S. Marine Corps Base Camp Pendleton

Wildlife Diseases and Pathology Leslie Woods, DVM, UC Davis

Renewable Energy and Wildlife Conservation

Steve Henderson, Ascent Environmental, Inc.

Conservation of Amphibians and Reptiles

Michael Van Hattem, California Department of Fish and Game

Posters

Canh Nguyen, California Department of Fish and Game

### **Other Workshops**

Oral Presentation Workshop: How NOT to Give a Scientific Presentation

Jon Hooper, Chico State University

Résumé Workshop

Barbara Peters, Humboldt State University (retired)

Job Interview Panel: I got a job interview, now what? - Getting jobs in a tough job environment

David Wyatt, Sacramento City College

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### RAFFLE AND SILENT AUCTION DONORS

All proceeds/donations from the 2012 Annual Conference Raffle and Silent Auction will support the Western Section's student programs including travel grants, awards for best papers, and student-mentor activities.

### **CONTRIBUTORS**

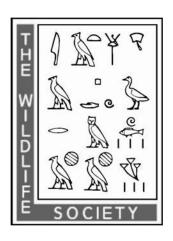
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# **Career Fair Participants**













The Western Section of the Wildlife Society 2012 Annual Conference
PLENARY SCHEDULE AND ABSTRACTS

### **PLENARY SESSION**

### **CONSERVATION IN THE AGE OF LITIGATION**

Thursday, February 2, 2012 8:25-11:50 a.m. Edgewater A and B

Chair: Linda Leeman, TWS Western Section President-Elect

8:25 to 8:30 a.m.	Welcome and announcements
8:30 to 8:50 a.m.	Message from TWS National  Darryl Walter, Director of Membership Marketing and Conferences and Terra Rentz, Assistant Director of Government Affairs
8:50 to 9:00 a.m.	Plenary introduction: Linda Leeman
9:00 to 9:20 a.m.	Roles of Resources Management Planning and Environmental Review in Conservation Curtis E. Alling, AICP, Principal, Ascent Environmental, Inc., Sacramento
9:20 to 9:40 a.m.	Enforcing the Best Available Science Mandate: Ensuring the Data Does the Talking Chris Carr, Morrison & Foerster, San Francisco
9:40 to 10:00 a.m.	Conservation in the Age of Litigation: The Important Role of Citizen Advocacy in Endangered Species Protection Brendan Cummings, Center for Biological Diversity, Joshua Tree, CA
10:00 to 10:20 a.m.	Refreshment Break (Edgewater F)
10:20 to 10:40 a.m.	Effects of Litigation on Conservation Priorities Ken Sanchez, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Field Office
10:40 to 11:00 a.m.	Collaborative Conservation – The Other White Meat: How it Works, When it Works, and When it Doesn't  Dave Ceppos, Managing Senior Mediator, CSU-Sacramento – Center for Collaborative Policy
11:00 to 11:20 a.m.	Science and Litigation: The Good, the Bad, and the Ugly Dr. John A. Wiens, PRBO Conservation Science
11:20 to 11:50 a.m.	Panel discussion

### CONSERVATION IN THE AGE OF LITIGATION

### INTRODUCTION

Litigation, and the use of the judicial system, has increasingly become more common in our society to settle disputes over natural resource management. Early environmental laws protected species from over-harvesting. With growing environmental awareness, key federal and state laws were enacted to protect natural resources, including Endangered Species Act, Clean Water Act, National Environmental Policy Act, National Forest Management Act, and California Environmental Quality Act. These laws and their regulations represent an evolving ethic to protect wildlife for their natural values, as well as aesthetic and moral reasons, to benefit future generations and to sustainably use and manage resources. With implementation of these laws and regulations, use of the courts to enforce the laws or find solutions to conflicts between resource conservation and consumption/development increased. Since the 1980s, deep polarization about resource issues has become the norm in our society as we struggle to implement these laws. Contentious issues have arisen, such as property rights, "regulatory taking," protection of the commons, and environmental activism. More recently, diminishing non-renewable energy resources, climate change, and global needs for water, food, and fiber have further complicated the situation.

Environmental laws, court rulings, and threat of litigation have formed a legal landscape in which we, as wildlife biologists, now practice our profession. How does this legal landscape affect our actions to manage, research, and conserve species and their habitats? What role does advocacy play? How do we consider social, political, financial, or legal frameworks, while using sound science to inform our decisions?

The Plenary presentations and panel discussion will explore the idea of conservation in the age of litigation, drawing on our panelists' backgrounds in applying environmental policy and regulation, judicial rulings, and settlement agreements to wildlife conservation and management.

### ABSTRACTS AND SPEAKER BIOGRAPHIES

ROLES OF RESOURCES MANAGEMENT PLANNING AND ENVIRONMENTAL REVIEW IN CONSERVATION Curtis E. Alling, AICP, Principal, Ascent Environmental, Inc., Sacramento, Curtis.Alling@ascentenvinc.com

Abstract: When consumptive demands or development projects affecting sensitive natural areas compete with the need to conserve species, the threat of litigation can be a reality. Often, however, the competing needs can be resolved through effective planning and environmental review processes. Natural resources management planning can take many forms, such as land management plans for public properties, regional-scale land use and resources plans, and habitat conservation plans. These plans are derived from legal requirements and/or stewardship priorities. When objectively and openly prepared, clear and comprehensive information can be assembled regarding the details about both resource sensitivities of a plan area and the opportunities to serve the needs for use, consumption, or development. The choices for planning solutions can be arrayed for decision makers to consider. The planning process can (and should) be carried out with stakeholder and public involvement. Also, the environmental review process, such as through NEPA or in California, CEQA, can play a valuable role in evaluating conservation issues and recommending mitigating approaches. It is most effective when resources management planning and environmental review are conducted in a coordinated, mutually supportive manner. Although these planning and environmental review processes are also subject to litigation, if they are executed well, they can head off that threat. This presentation will provide a summary of some of the effective resources management planning and environmental review strategies that are useful when contentious resource conservation and use issues arise.

**Speaker biography:** Curtis is a founding principal of the environmental and natural resources consultancy, Ascent Environmental, Inc., based in Sacramento and Lake Tahoe. With 35 years of experience, he is an expert in CEQA and NEPA compliance and a specialist in planning for natural resources management, outdoor recreation, and ecosystem restoration projects. Recently, Curtis has also been heavily involved in climate

change issues, including climate change implications for environmental impact assessment, local government climate action planning, and consideration of climate risks and adaptation in resource management planning efforts.

### ENFORCING THE BEST AVAILABLE SCIENCE MANDATE: ENSURING THE DATA DOES THE TALKING Chris Carr, Morrison & Foerster, San Francisco, CCarr@mofo.com

**Abstract:** Since the 1970s, courts have been called upon to review wildlife agency decisions that present complicated scientific issues. The framework laws for judicial review of such decisions direct the courts to show substantial deference to agency decisions, and only to find those decisions erroneous if they are based on a clear failure of reasoning or fail to follow the requirements of substantive laws. In reviewing agency decisions under the federal Endangered Species Act and its state counterparts, this determination includes examining whether the agency used the "best available science" ("BAS") in making its decision.

The "best available science" mandate is the core provision of the federal Endangered Species Act and parallel state laws such as the California Endangered Species Act requiring wildlife agencies to use science in their decision-making both in listing species and in analyzing the impacts of activities on listed species. The BAS standard governs species data and the analysis of that data. It requires agencies to consider available data on a species, but has been interpreted not to require agencies to collect data that does not already exist. Some have argued for the extension of this limitation on collecting new data to the analysis of the data itself, asserting that agencies cannot be required to use statistical techniques that are standard in the relevant scientific discipline in analyzing the data if those analyses have not already been performed.

This presentation explains why so limiting the BAS mandate is misguided, both scientifically and legally, and why environmental organizations and the regulated community alike should both support holding wildlife agencies to using methods of analysis that are standard in the discipline involved and also increasing funding for wildlife agency science.

**Speaker biography:** Chris Carr is head of the Environment & Energy Practice Group at the international law firm Morrison & Foerster LLP. Based in the firm's San Francisco office, he specializes in litigation and permitting under the federal Endangered Species Act, Clean Water Act, and National Environmental Policy Act, and their California counterparts. He represents private and public entity clients in the water, timber, mining, land development, and renewable energy sectors. Prior to entering private practice, he worked on fisheries conservation issues at the U.S. Department of State (1994), and on endangered species issues at the U.S. Department of the Interior (1995). He received both his law degree and Ph.D. from U.C. Berkeley.

## CONSERVATION IN THE AGE OF LITIGATION: THE IMPORTANT ROLE OF CITIZEN ADVOCACY IN ENDANGERED SPECIES PROTECTION

Brendan Cummings, Center for Biological Diversity, Joshua Tree, CA, bcummings@biologicaldiversity.org

**Abstract:** Species and ecosystems with strong advocates receive more conservation attention, more resources, and generally fair better than those without. Recognizing that federal agencies often lack either the resources or the will to fully enforce and implement the laws they are charged with overseeing, Congress added citizen suit provisions to numerous environmental statutes, including the Clean Air Act, the Clean Water Act and the Endangered Species Act (ESA). Perhaps more so than any other environmental statute, citizen involvement has driven implementation and enforcement of the ESA. Citizen petitions to the U.S. Fish and Wildlife Service to list species, as well as subsequent litigation if the agency either fails to act upon or denies the petitions, have prompted protections for many species. Similarly, while the Fish and Wildlife Service has only rarely prosecuted ESA violations, citizen suits against federal agencies, and less-frequently, against private entities, for failing to comply with the ESA's substantive provisions are numerous. In an ideal world, the Fish and Wildlife Service would fully implement and enforce the ESA for the benefit of all imperiled species on its own volition. But the statute's nearly four-decade history demonstrates that this has never been the case. Citizen advocacy, including litigation, has been an important and necessary component of the ESA since its inception, and will likely remain a driving force in endangered species management in the future.

**Speaker biography:** Brendan Cummings is Senior Counsel and Public Lands Director at the Center for Biological Diversity. He is based in Joshua Tree, California. The Center for Biological Diversity works through science, law and creative media to secure a future for all species, great or small, hovering on the brink of extinction.

### **EFFECTS OF LITIGATION ON CONSERVATION PRIORITIES**

Ken Sanchez, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Field Office, kenneth\_Sanchez@fws.gov

**Abstract:** I will discuss underlying role of the citizen lawsuit provision of the Endangered Species Act in shaping the priorities of the Fish and Wildlife Service. Some historical actions including the listing of the Northern spotted owl and the Fund for Animals lawsuits in the early 1990's were important events that resulted in significant allocation of funding and personnel towards specific conservation actions. Recent prioritization of several hundred listing actions has resulted from the "MDL" settlement. Looking forward; how will the Fish and Wildlife Service continue to utilize the finite funding that Congress allocates to accomplish our job while satisfying the conservation expectations of the public?

**Speaker biography:** Ken has worked the past 23 years for a variety of State and Federal government agencies including California Department of Fish and Game, US Forest Service and currently is with the US Fish and Wildlife Service. Ken currently is a manager in the Sacramento Fish and Wildlife Office and administers Endangered Species Act regulatory responsibilities for urban development, infrastructure, and energy development in the Sacramento and San Joaquin Valley as well as managing the conservation banking and the Endangered Species Listing programs.

### COLLABORATIVE CONSERVATION – THE OTHER WHITE MEAT: HOW IT WORKS, WHEN IT WORKS, AND WHEN IT DOESN'T

Dave Ceppos, Managing Senior Mediator, California State University, Sacramento – Center for Collaborative Policy, dceppos@ccp.csus.edu

**Abstract:** Stakeholders affected by natural resource conflicts and challenges are not inherently litigious. They are self-interested. They seek durable and sustainable conclusions that serve their interests in the most cost and time effective manner. Litigation is an effective tool to achieve these interests however it is not the only option. Multi-party, interest-based problem solving, whether referred to as alternative dispute resolution, collaboration, mediation, or other terms offers a valuable option.

Collaborative approaches to solve conservation conflicts are an art and science. They require stakeholders to have absolute clarity about their best interests and the difference between what is "wanted" and what is "needed". They require all stakeholders to commit to protect and achieve their interests, while simultaneously committing to achieve the interests of all other parties involved. The process requires sequential design and mediation methods, in concert with intuitive skills to accommodate and honor human behavior. That said, collaborative methods are not universally appropriate. Conditions within and about a conflict can dictate that a collaborative approach will result in more damaged outcomes whether in the context of financial resources used, time elapsed, personal relationships affected, and other variables.

This presentation will describe the principles of collaborative, multi-interest problem solving about conservation and natural resource management. Through case studies and best practice examples, it will describe the conditions where collaborative options are appropriate and when they are not. It will provide examples of successful outcomes and examples where despite the best of intentions and conditions, collaborative solutions could not be achieved.

**Speaker biography:** Dave Ceppos is a Managing Senior Mediator with the Center for Collaborative Policy, a program of California State University Sacramento. With 26 years of professional experience, Dave has a comprehensive background developing consensus based, stakeholder-driven, resource management processes. He additionally has considerable management and field experience in watershed planning, ecological assessment, hydrology, hazardous waste management, habitat restoration, and landscape architecture and design.

SCIENCE AND LITIGATION: THE GOOD, THE BAD, AND THE UGLY Dr. John A. Wiens, PRBO Conservation Science, jwiens@prbo.org

**Abstract:** Science and litigation have a complex and often uncomfortable relationship. Some aspects are good, others are bad, and yet others are downright ugly. To explore these relationships, I draw on experiences with the Exxon Valdez oil spill, in which both science and litigation were front and center. The good: the litigants needed information on the short- and long-term consequences of the spill, demanded science that would stand up to rigorous examination, and provided funding to support studies that otherwise would not have been done. As a result, our understanding of the ecosystem was vastly enhanced. The bad: some studies began from the assumption that any changes in the environment could be attributed to the oil spill, leading to inappropriate study designs. In some cases, public perceptions of scientists were colored by their associations with parties in the litigation, influencing the credibility of their findings. The ugly: the litigation often pitted scientists against one another, creating the impression of dueling scientists. The line between objective science and advocacy for a position in the litigation was sometimes blurred, further eroding the credibility of science. Attention to the lessons learned from the Exxon Valdez experience can help to foster the good while eliminating the bad; dealing with the ugly is more challenging, requiring an understanding of human behavior, emotions, and sociology.

**Speaker biography:** John Wiens is an ecologist who, after spending decades in academia on the faculties of Oregon State University, University of New Mexico, and Colorado State University, joined The Nature Conservancy in 2001 as a Lead Scientist in the world office. Since 2008 he has been Chief Scientist for PRBO Conservation Science. He also is a Visiting Professor at the University of Western Australia in Perth.

The Western Section of the Wildlife Society 2012 Annual Conference
<b>CONCURRENT SESSIONS SCHEDULES</b>
AND LIST OF POSTERS

### CONSERVATION PLANNING & ENVIRONMENTAL OFFSETS: TOOLS FOR SPECIES RECOVERY?

Wednesday, February 1, 2012 1:00 p.m. to 4:45 p.m. Edgewater A

Chair: Lucy Harrington, Westervelt Ecological Services

	Chair. Lucy Harrington, Westerveit Leological Services
1:00 to 1:05 p.m.	Session introduction and announcements
1:05 to 1:25 p.m.	Restoration Site Selection: Considerations to Maximize the Sustainability of Restoration and Meet Species Recovery Goals; Greg Sutter and Greg DeYoung
1:25 to 1:45 p.m.	Black Abalone Habitat Surveys and the Restoration of Intertidal Recruitment Habitat on San Clemente Island – A Pilot Study to Aid in the Species Recovery; Christy Bell, Karah N. Ammann, Nathaniel C. Fletcher, Maya K. George, David P. Lohse, C. Melissa Miner, Daniel W. Orr, Peter T. Raimondi, Melissa A. Redfield and Sara E. Worden
1:45 to 2:05 p.m.	Species Guided Restoration for Multi-objective Projects; Trevor Meadows, J.E. Hammond and F.T. Griggs
2:05 to 2:25 p.m.	Meadow Restoration in the Upper Pit River Region: Lessons Learned, Barriers, and Novel, Large-scale Projects; Todd Sloat
2:25 to 2:45 p.m.	Restoring Habitats and Connective Corridors to Support Species Recovery in the Natomas Basin; Kelly Fitzgerald-Holland and Steve Chainey
2:45 to 3:00 p.m.	Refreshment Break (Edgewater F)
3:00 to 3:05 p.m.	Announcements
3:05 to 3:25 p.m.	Los Vaqueros Reservoir Creation (1997) and Expansion (2011): Assessing Past Project Mitigation Requirements to Improve Current/Expansion Mitigation Requirements; Cheryl Davis, Fran Garland and Mary A. Shea
3:25 to 3:45 p.m.	Quantifying Habitat Quality and Standardizing Mitigation in Eastern Alameda County; Troy Rahmig
3:45 to 4:05 p.m.	Pacific Gas and Electric Company's Successful Implementation of a Habitat Conservation Plan (HCP) for Operation and Maintenance Activities Kayla Paschal
4:05 to 4:25 p.m.	Habitat Conservation and Species Recovery in Alameda and Contra Costa Counties; Brad Olson
4:25 to 4:45 p.m.	Land Rich, Cash Poor Public Infrastructure Habitat Mitigation: An Innovative Way for Public Infrastructure Projects to Mitigate for Species Impacts; Greg Lyman and Debbie E. Craven-Green
4:45 p.m.	Session concludes

### **CONSERVATION AND MANAGEMENT OF CARNIVORES**

Wednesday, February 1, 2012 1:00 p.m. to 4:45 p.m. Edgewater B

Chair: Katie Moriarty, Oregon State University

1:00 to 1:05 p.m.	Session introduction and announcements
1:05 to 1:25 p.m.	Effects of Diet Composition on Home Range Size in Fishers in California Keith Slauson and William J. Zielinski
1:25 to 1:45 p.m.	Identification of Occupied Home Ranges Using Travel Distances, Changes in Speed and Final Settlement of Translocated Fishers ( <u>Martes pennanti</u> ) Roger Powell and Aaron N. Facka
1:45 to 2:05 p.m.	Reproductive Ecology and Den Site Selection of Fishers in the Southern Sierra Nevada Rebecca Green, Kathryn L. Purcell, Craig M. Thompson, James D. Garner, Douglas A. Kelt and Heiko U. Wittmer Student Paper
2:05 to 2:25 p.m.	Reproduction, Recruitment and Dispersal of Fishers (Martes pennanti) in a Managed Douglas-Fir Forest in Northwestern California Sean Matthews, J. Mark Higley, Kerry M. Rennie, Rebecca E. Green, Charles A. Goddard, Greta M. Wengert, Mourad W. Gabriel and Todd K. Fuller  Student Paper
2:25 to 2:45 p.m.	Effects of Fuels Treatments and Thinning on Pacific Martens in the Southern Cascades of California: Pre-treatment Results Keith Slauson and William J. Zielinski
2:45 to 3:00 p.m.	Refreshment Break (Edgewater F)
3:00 to 3:05 p.m.	Announcements
3:05 to 3:25 p.m.	Anticoagulant Rodenticide Exposure in Carnivores and Predators: A Review Stella McMillin, Bob Hosea and Brian Finlayson
3:25 to 3:45 p.m.	Home Ranges and Annual Food Habits of Ringtails ( <u>Bassariscus</u> <u>astutus</u> ) in the Sutter Buttes, Sutter County, California (2008-2010)  David Wyatt, Kathleen M. Norton, Michael Starkey, Sarah West and Brian Brown
3:45 to 4:05 p.m.	Evaluating Connectivity Models Using Puma Occurrence Data in the Santa Cruz Mountains Morgan Gray, Adina M. Merenlender and Chris C. Wilmers
4:05 to 4:25 p.m.	Evidence for the Persistence of the Native Cascade Red Fox ( <u>Vulpes vulpes cascadensis</u> ) in Southern Washington: Preliminary Results  Jocelyn Akins, Mark J. Statham, Mason Reid, Keith B. Aubry and Ben N. Sacks  Student Paper
4:25 to 4:45 p.m.	What We Know So Far About the Second Sierra Nevada Red Fox Population Ben Sacks, Mark Statham, Chris Stermer, Jocelyn Akins, Preston Alden, Cate Brown, Adam Rich, Sherri Lisius and Esther Burkett
4:45 p.m.	Session concludes

### **ECOLOGY AND MANAGEMENT OF UPLAND GAME BIRDS**

Wednesday, February 1, 2012 1:00 p.m. to 4:25 p.m. Edgewater C

Chair: Erik Blomberg, University of Nevada, Reno

1:00 to 1:05 p.m.	Session introduction and announcements
1:05 to 1:25 p.m.	Greater Sage-Grouse Nest Survival in Relation to Raven Abundance, Habitat Features and Timing of Nest Initiation Peter Coates, Zachary B. Lockyer, Michael L. Casazza and David J. Delehanty
1:25 to 1:45 p.m.	Temporal Variation in Male Breeding Propensity Influences Lek Count Indices of Population Growth in Greater Sage-Grouse Erik Blomberg, James S. Sedinger, Daniel V. Nonne and Michael T. Atamian Student Paper
1:45 to 2:05 p.m.	The Impact of Radio Collars on Survival and Behavior of Male Greater Sage-Grouse  Daniel Nonne, Jim S. Sedinger and Erik. J. Blomberg  Student Paper
2:05 to 2:25 p.m.	First Credible Repeat Census of Sierra Sooty Grouse ( <u>Dendragapus fuliginosus sierrae</u> ) James Bland
2:25 to 2:45 p.m.	Regional Extirpation of Mount Pinos Sooty Grouse ( <u>Dendragapus fuliginosus howardi</u> ) James Bland
2:45 to 3:00 p.m.	Refreshment Break (Edgewater F)
3:00 to 3:05 p.m.	Announcements
3:05 to 3:25 p.m.	The Impacts of Energy Development Noise Playback on Lek Attendance and Behavior in Greater Sage-Grouse
	Jessica Blickley, Diane J. Blackwood and Gail L. Patricelli  Student Pape
3:25 to 3:45 p.m.	Incorporating the Impacts of Noise Pollution into Greater Sage-Grouse Conservation Planning Gail Patricelli, Jessica L. Blickley and Stacie L. Hooper
3:45 to 4:05 p.m.	Determining the Impact of Noise from Energy Development on Greater Sage-Grouse Using Computer Model Simulations Stacie Hooper, Gail Patricelli and Jessica L. Blickley
4:05 to 4:25 p.m.	NRCS California Collaborative Sage-Grouse Conservation Through Sustainable Ranching Thomas Moore
4:25 p.m.	Session concludes

### **ECOLOGY AND MANAGEMENT OF SHOREBIRDS**

Wednesday, February 1, 2012 1:00 p.m. to 5:05 p.m. Edgewater D & E

Chair: Dr. Mark Colwell, Humboldt State University

1:00 to 1:05 p.m.	Session introduction and announcements	
1:05 to 1:25 p.m.	Long-term Nesting Trends for California Least Terns and Western Snowy Plasmall Beach on the Central Coast of California Carie Wingert, Jennifer M. Turner, Nancy W. Fox Fernandez, Steven J. Hongola and Duane Va	
1:25 to 1:45 p.m.	Semi-colonial Nesting in the Snowy Plover Allie Patrick, Mark A. Colwell and Wendy J. Pearson	Student Paper
1:45 to 2:05 p.m.	Nest-site Selection and Nest Survival in the Western Snowy Plover (Charad Michael Hardy and Mark A. Colwell	<u>rius nivosus</u> )
2:05 to 2:25 p.m.	Nest Success, Mate Fidelity and Dispersal in Snowy Plovers (Charadrius niv Wendy Pearson and Mark A. Colwell	<i>osus)</i> Student Paper
2:25 to 2:45 p.m.	Survival and Reproductive Success of Captive-reared and Oiled Snowy Plov Central California Kristina Neuman, Lynne E. Stenzel and Jenny L. Erbes	ers in
2:45 to 3:00 p.m.	Refreshment Break (Edgewater F)	
3:00 to 3:05 p.m.	Announcements	
3:05 to 3:25 p.m.	Apparent Survival of Snowy Plovers Varies with Reproductive Effort, Year of Sexes  Mark A. Colwell, Wendy J. Pearson, Luke Eberhart-Phillips and Steven J. Dinsmore	and Between
3:25 to 3:45 p.m.	Population Viability of Snowy Plovers in Coastal Northern California Luke Eberhart-Phillips and Mark A. Colwell	Student Paper
3:45 to 4:05 p.m.	Trends in Winter Shorebird Abundance on a Central California Estuary Ove Year Period Lynne Stenzel, Gary W. Page and Matthew E. Reiter	r a Forty
4:05 to 4:25 p.m.	Wintering and Migrating Shorebird Responses to Enhancement Efforts and Unintentional Water Level Manipulations at Pond SF2 Stacy Moskal, L. Arriana Brand, John Y. Takekawa and Scott A. Shaffer	Student Paper
4:25 to 4:45 p.m.	Sharing the Bay: Can Waterbirds and Trail Users Co-Exist? Lynne Trulio, Jana Sokale, Heather White, Caitlin Robinson-Nilsen and Kevin Lafferty	
4:45 to 5:05 p.m.	Behavior of a Nest Predator: Attracting and Deterring Common Ravens and Crows Sara Peterson and Mark A Colwell	d American Student Paper
5:05 p.m.	Session concludes	

## **CONSERVATION AND MANAGEMENT OF SONGBIRDS**

Thursday, February 2, 2012 1:00 p.m. to 4:05 p.m. Edgewater C

Chair: Steve Henderson, Ascent Environmental, Inc.

1:00 to 1:05 p.m.	Session introduction and announcements	
1:05 to 1:25 p.m.	Spatial Ecology of Steller's Jays in Redwood National and State Parks William Goldenberg, T. Luke George and Jeffrey M. Black	Student Paper
1:25 to 1:45 p.m.	A Test of Taste Aversion Conditioning on Steller's Jays to Provide Short-ter Improvement of Nest Survival of Marbled Murrelets in Northern California Pia Gabriel and Richard T. Golightly	
1:45 to 2:05 p.m.	Estimating Post-fledging Survival in Passerines: Insights from Separate And Radio Telemetry and Mark-recapture Data Kristen Dybala	alyses of Student Paper
2:05 to 2:25 p.m.	Comparison of Call-playback and Passive Detection Methods to Monitor A Management Indicator Species in the Sierra Nevada Alissa Fogg and L. Jay Roberts	vian
2:25 to 2:45 p.m.	Resource Subsidies to Riparian Songbirds: Using Compound-specific Stable Ratios to Characterize Diet in Tree Swallows Robert Walsh	Isotope Student Paper
2:45 to 3:00 p.m.	Refreshment Break (Edgewater F)	
3:00 to 3:05 p.m.	Announcements	
3:05 to 3:25 p.m.	Bank Swallow Population and Habitat Status – Declining Trends on the Mil Sacramento River Joseph Silveira, Jennifer E. Isola, Neil M. Carpenter, Michael A. Wolder, Adam W. Henderson Golet	
3:25 to 3:45 p.m.	Birds in <u>Spartina</u> -dominated Versus Native Salt Marsh of Humboldt Bay, Commented National Steven C. Hackett	alifornia
3:45 to 4:05 p.m.	Songbirds as Providers of Ecosystem Services in Vineyards Katherine Howard	Student Paper
4:05 p.m.	Session Concludes	

## **ECOLOGY AND MANAGEMENT OF WATERFOWL AND WETLANDS**

Thursday, February 2, 2012 1:00 p.m. to 4:25 p.m. Edgewater D

Chair: Shaun Oldenberger, California Department of Fish and Game

1:00 to 1:05 p.m.	Session introduction and announcements
1:05 to 1:25 p.m.	Effects of Predation Risk on Incubation Behavior in Waterfowl Monica Stupaczuk, Kevin M. Ringelman and John M. Eadie Student Paper
1:25 to 1:45 p.m.	Harvest of Tule Greater White-fronted Geese at Sacramento National Wildlife Refuge Complex, 2000-2010  Melanie Weaver, Daniel R. Yparraguirre, J. Gregory Mensik and Mike A. Wolder
1:45 to 2:05 p.m.	Monitoring Greater Sandhill Cranes on Modoc National Wildlife Refuge, California: Piecing Together a History of Greater Sandhill Cranes 1980-2010  Dominic Bachman and Cameron T. King
2:05 to 2:25 p.m.	Habitat Use by Long-billed Curlews in California's Central Valley Using Satellite Telemetry Kristin Sesser, Mark A. Colwell, Nils D. Warnock, Gary W. Page, T. Lee Tibbitts
2:25 to 2:45 p.m.	Lake Elevation and Three Indices of Reproductive Success in Aechmophorus       Grebes         Renee Weems, Kristofer M. Robison and Daniel W. Anderson       Student Paper
2:45 to 3:00 p.m.	Refreshment Break (Edgewater F)
3:00 to 3:05 p.m.	Announcements
3:05 to 3:25 p.m.	Factors Influencing the Distribution and Abundance of Shorebirds in Managed Wetlands of the Sacramento Valley, California Matthew Reiter, Catherine Hickey, Mike Wolder, Jennifer Isola, Mike Carpenter and Joe Silveira
3:25 to 3:45 p.m.	Assessment of Wetland Management Practices in the Central Valley of California Michael Brown, John M. Eadie, Rob H. Doster and Mark N. Lubell
3:45 to 4:05 p.m.	Cost-effective Wetland Management: Experimental Evaluation of Moist-soil Management Techniques in the Central Valley Natalie Washburn, John M. Eadie, Brian Olson and Dean Kwasny
4:05 to 4:25 p.m.	Building Regional Shorebird Conservation from the Farm Level Khara Strum, C. Alex Hartman, Monica Iglecia, Rodd Kelsey, Catherine Hickey and Matthew E. Reiter
4:25 p.m.	Session Concludes

### **ECOLOGY AND MANAGEMENT OF WILDLIFE ON MILITARY LANDS**

Thursday, February 2, 2012 1:00 p.m. to 5:05 p.m. Edgewater E

Edgewater E Chairs: Kirsten Christopherson, Beale Air Force Base, and Rhys Evans, Vandenberg Air Force Base		
1:00 to 1:05 p.m.	Session introduction and announcements	
1:05 to 1:25 p.m.	Pioneering Military Environmental Policy: Origins of the U.S. Air Force Conservation Program Jean Mansavage	
1:25 to 1:45 p.m.	Innovative Methods for the Design and Site Assessment of Vernal Pools Niall McCarten, Kirsten Christopherson, Ruben Rosas and Maggie Christman	
1:45 to 2:05 p.m.	Morphological Changes in Two Sister Taxa of Neotoma in Areas of Allopatry and Sympatry Along a Zone of Secondary Contact Michaela Koenig, F.X. Villablanca, M. Matocq, A. Schaffner and S. Steinmaus  Student Paper	er
2:05 to 2:25 p.m.	Exploring Mussel Bed Restoration Strategies on Vandenberg Air Force Base Kristin DeNesnera and Laura M. Anderson Student Pape	er
2:25 to 2:45 p.m.	Innovative Technology for Predator Research and Management Supporting Listed Species Recovery on the Naval Auxiliary Landing Field, San Clemente Island, California Daniel Biteman, Andrew S. Bridges and David K. Garcelon	l
2:45 to 3:00 p.m.	Refreshment Break (Edgewater F)	
3:00 to 3:05 p.m.	Announcements	
3:05 to 3:25 p.m.	Bat Diversity and Management at Marine Corps Base Camp Pendleton Drew Stokes and James Asmus (presenting)	
3:25 to 3:45 p.m.	Population Size of the San Clemente Island Fox William Andelt, Kenneth P. Burnham, Nicholas P. Gould and Kyran E. Kunkel	
3:45 to 4:05 p.m.	Where Have Half the Foxes Gone? Determining the Mechanisms Underlying Population Decline in San Nicolas Island Foxes Brian Hudgens and David K. Garcelon	
4:05 to 4:25 p.m.	Habitat Relationships of Birds Wintering in an Oak Woodland of Coastal-Central California Michael Hardy, William D. Tietje and Justin K. Vreeland	
4:25 to 4:45 p.m.	Managing the Endangerd Hawaiian Goose During Army Training at Pohakuloa Training Area, Hawai'i Island Rogelio Doratt, Lena D. Schnell, Robert Brozka, Bridget A. Frederick, John T. Polhemus and Peter Peshut	

Raymond Hasey

**Session Concludes** 

4:45 to 5:05 p.m.

5:05 p.m.

Integrated Pest Management for Minimizing and Avoiding Impacts to Sensitive

Species from Airfield Bird Aircraft Strike Hazard Management Measures

## CHALLENGES OF NATURAL RESOURCE MANAGEMENT IN A CHANGING CLIMATE

Friday, February 3, 2012 8:00 a.m. to 11:25 a.m. Edgewater A

Chair: Armand Gonzales, California Department of Fish and Game

8:00 to 8:05 a.m.	Session Introduction and Announcements
8:05 to 8:25 a.m.	High Spatial and Temporal Resolution Interpolated Climate Surfaces for California Otto Alvarez
8:25 to 8:45 a.m.	Managing Across the Landscape & Jurisdictional Boundaries  Jody Erikson and Julie Shapiro
8:45 to 9:05 a.m.	Can Pikas Adapt to Rising Temperatures? Comparisons of Behavior Between High and Low Elevation Pikas in the Sierra Nevada Cody Massing Student Paper
9:05 to 9:25 a.m.	Pikas in the Hot Zone: Surveys at the Range Periphery  Joseph Stewart and David H. Wright  Student Paper
9:25 to 9:45 a.m.	Birds and Buffers on Military Lands in California: The Impacts of Climate Change and Land-use Change  Dennis Jongsomjit, Sam Veloz and John Wiens
9:45 to 10:00 a.m.	Refreshment Break (Edgewater F)
10:00 to 10:05 a.m.	Announcements
10:05 to 10:25 a.m.	Habitat Interaction Between Two Species of Chipmunk in the Basin and Range Province of Nevada Christopher Lowrey and Kathleen M. Longshore
10:25 to 10:45 a.m.	A Mammal's Take on the Rapture Hypothesis, Jacob's Ladder, and Other Notions of Doom, Gloom and Uniform Change in Alpine Ecosystems  Rob Klinger, Tom Stephenson and Sarah Stock
10:45 to 11:05 a.m.	Using Environmental Clustering to Examine the Potential Regional Effects of Climate Change on Birds on Military Lands in California Sam Veloz, Dennis Jongsomjit and John Wiens
11:05 to 11:25 a.m.	Planning for Climate Change for Nevada's Key Habitat and Species of Conservation Priority Larry Neel, Louis Provencher, Jennifer Newmark, Jon Sjoberg, Kristen Szabo and Jock Young
11:25 a.m.	Session Concludes

# MITIGATION MEASURES: CHALLENGES AND REALITIES DURING PROJECT IMPLEMENTATION

Friday, February 3, 2012 8:00 a.m. to 11:45 a.m. Edgewater B

Chairs: Stephanie Parsons, ESA and Jon Waggoner, AECOM

8:00 to 8:05 a.m.	Session Introduction and Announcements
8:05 to 8:25 a.m.	The Evolution of Mitigation – A Commitment to Continual Improvement Stephanie Parsons
8:25 to 8:45 a.m.	The Role of the Fish and Wildlife Service in Implementing Mitigation on Flood Control Projects Jennifer Hobbs and Harry Kahler (presenting)
8:45 to 9:05 a.m.	Enforcement and Protection Measures of Fish & Game Code Section 1600-1616 Sandi Jacks
9:05 to 9:25 a.m.	An Owner's Perspective of Mitigation Implementation  Michael Callahan
9:25 to 9:45 a.m.	Protocols for Surveying for Bat Roosts in Trees  Dave Johnston
9:45 to 10:00 a.m.	Refreshment Break (Edgewater F)
10:00 to 10:05 a.m.	Announcements
10:05 to 10:25 a.m.	The Realities of Compliance Enforcement Jon Waggoner
10:25 to 10:45 a.m.	A Contractor's Perspective – Adapting Mitigation Measures to Improve Environmental Protection Chad Brown
10:45 to 11:05 a.m.	California State Lands Comission – Incorporating Effectiveness Criteria into the MMP Christopher Huitt
11:05 to 11:45 a.m.	Discussion
11:45 a.m.	Session Concludes

## LARGE MAMMAL AND BIG GAME ECOLOGY AND MANAGEMENT

Friday, February 3, 2012 8:00 a.m. to 11:45 a.m. Edgewater C

Chair: James Asmus, U.S. Marine Corps Base Camp Pendleton

8:00 to 8:05 a.m.	Session Introduction and Announcements	
8:05 to 8:25 a.m.	The Emergence of Big Game Ecology and Management in Hawai'i Edwin Johnson	
8:25 to 8:45 a.m.	Internet Surveys of Current Deer Management Issues Kent Webb	
8:45 to 9:05 a.m.	Intraspecific Black Bear Spatial Patterns and Interactions at a Small Spatio-tempo Scale Desiree Early	ral
9:05 to 9:25 a.m.	A Review of Mule and Black-tailed Deer Population Dynamics  Tavis Forrester and Heiko W. Wittmer  Student	t Paper
9:25 to 9:45 a.m.	Survival of Pronghorn Fawns on the Carrizo Plain National Monument: Relationsh Between Predation, Habitat Use and Birth Synchrony  Diego Johnson, Kathleen Longshore and Chris Lowrey  Student	•
9:45 to 10:00 a.m.	Refreshment Break (Edgewater F)	
10:00 to 10:05 a.m.	Announcements	
10:05 to 10:25 a.m.	Discontinuous Habitat Occupancy by Sensitive Mammals in the Southern San Joaquin Valley Christine Van Horn Job, Brian L. Cypher, Craig M. Fiehler, Scott E. Phillips, Erin N. Tennant, Tory L. Westall and Alexandra Y. Madrid	
10:25 to 10:45 a.m.	Isolation and Behavior of Island Foxes: Insights from Responses to Approaching Vehicles Nicholas Gould, William F. Andelt and Nathan P. Snow	
10:45 to 11:05 a.m.	Genetic History of the San Joaquin Valley Woodrat ( <u>Neotoma fuscipes riparia</u> ) Marjorie Matocq	
11:05a.m.	Session Concludes	

### RENEWABLE ENERGY AND WILDLIFE CONSERVATION

Friday, February 3, 2012 1:00 p.m. to 3:05 p.m. Edgewater A

Chair: Steve Henderson, Ascent Environmental, Inc.

1:00 to 1:05 p.m.	Session Introduction and Announcements
1:05 to 1:25 p.m.	A Tool for Predicting Bat Activity and Informing Mitigations at Wind Energy Facilities Theodore Weller and James A. Baldwin
1:25 to 1:45 p.m.	Wind, Wings and Wilderness – Decision Support for Minimizing Ecological Impacts of Wind Energy Development in the Southern Sierra and Tehachapis  Jerre Stallcup, Susan Antenen, Wayne D. Spencer, Nancy L. Staus, Allison Anderson and James R. Strittholt
1:45 to 2:05 p.m.	Modelling Effects & Mitigation: Solar Energy Development and the Mojave Desert Tortoise Catherine Darst, Philip Murphy and Nathan Strout
2:05 to 2:25 p.m.	Renewable Energy in the Desert Southwest: Assessing the Impacts on Habitat and Genetic Hotspots Richard Inman, Amy Vandergast, Ken Nussear, Todd Esque, Robert Fisher, Stacie Hathaway, Kelly Barr, Megan Lahti and Dustin Wood
2:25 to 2:45 p.m.	The Whole Enchilada Todd Sloat, Kit Mullen and Jonathan Kusel
2:45 to 3:05 p.m.	Status Survey for Endangered Bakersfield Cactus Brian Cypher, Erin N. Tennant, Christine L. Van Horn Job and Scott E. Phillips
3:05 p.m.	Session Concludes
3:05 to 3:20 p.m.	Refreshment Break (Edgewater F)

#### **DOOR PRIZE**

\$50 REI Gift Certificate will be awarded to one attendee of this session. Name to be drawn before the break.

### WILDLIFE DISEASES AND PATHOLOGY

Friday, February 3, 2012 1:00 p.m. to 4:25 p.m. **Edgewater B** 

Chair: Dr. Leslie Woods, California Animal Health and Food Safety Laboratory System, **School of Veterinary Medicine, UC Davis** 

1:00 to 1:05 p.m.	Session Introduction and Announcements
1:05 to 1:25 p.m.	Emerging Pathogen Discovery Patty Pesavento and Leslie W. Woods
1:25 to 1:45 p.m.	Novel Disease Discovery of the Federally Endangered Amargosa Vole (Microtus californicus scirpensis)  Caitlin Ott-Conn, Deana L. Clifford, Tammy Branston, Leslie Woods and Janet E. Foley Student Paper
1:45 to 2:05 p.m.	Assessing Disease Risk from a Novel Parasite Infection in Pacific Fisher (Martes pennanti)  Deana Clifford, Leslie Woods, Vasyl Tkach, Eric Hoberg, Richard Callas, Richard N. Brown, J. Mark Higley, Ken Haynes and Mourad W. Gabriel
2:05 to 2:25 p.m.	Salmon Poisoning Disease in Trout in the Lassen National Forest Richard Todoroff, Tom Rickman and Richard N. Brown
2:25 to 2:45 p.m.	Prevalence of <u>Trichomonas gallinae</u> in California Band-tailed Pigeons and the Potential Impacts on Population Health: A Preliminary Analysis Krysta Rogers, Yvette A. Girard, Nadira Chouicha and Christine Kreuder Johnson
2:45 to 3:05 p.m.	Antibody Persistence After Canine Distemper Virus Vaccination in the Endangered Catalina Island Fox Julie King, Calvin L. Duncan, T. Winston Vickers and Deana L. Clifford
3:05 to 3:20 p.m.	Refreshment Break (Edgewater F)
3:20 to 3:25 p.m.	Announcements
3:25 to 3:45 p.m.	Marine "Algal" Bloom Toxicity in Wildlife Linda Lowenstine
3:45 to 4:05 p.m.	Fertilizer Research Funded by the California Department of Food and Agriculture to Reduce Environmental Impacts  Dale Woods
4:05 to 4:25 p.m.	Exposure and Poisoning with Anticoagulant Rodenticides in Calfornia Fishers (Martes pennanti) Inhabiting Public Lands  Mourad Gabriel, Leslie W. Woods, Robert Poppenga, Rick Sweitzer, Craig Thompson, Sean M. Matthews, J. Mark Higley, Stefan Keller, Kathryn Purcell, Reginald H. Barrett, Greta M. Wengert, Benjamin N. Sacks and Deana L. Clifford
4:25 p.m.	Session Concludes

### **DOOR PRIZE**

\$50 REI Gift Certificate will be awarded to one attendee of this session. Name to be drawn before the break.

### **CONSERVATION OF AMPHIBIANS AND REPTILES**

Friday, February 3, 2012 1:00 p.m. to 4:25 p.m. Edgewater C

Chair: Michael van Hattem, California Department of Fish and Game

1:00 to 1:05 p.m.	Session Introduction and Announcements
1:05 to 1:25 p.m.	Clinically Significant <u>Batrachochytrium</u> <u>dendrobatidis</u> (Bd) Infection Associated with Bullfrog Mortalities in Northern California Deana Clifford, Allan Pessier, Megan Jones, Sarah Krycia, Jane Vorpagel, Tony Welch, Janet Foley
1:25 to 1:45 p.m.	Landscape Epidemiology of <u>Batrachochytrium</u> <u>dendrobatidis</u> in Central California Gretchen Flohr and Robert L. Hopkins, II
1:45 to 2:05 p.m.	Translocation of California Red-legged Frog (Rana draytonii) Patricia Tatarian, Thomas Newcomb, Bert Mulcahey, Jose Setka and Jessica Purificato (presenting)
2:05 to 2:25 p.m.	A Sustainably Managed Urban California Tiger Salamander ( <u>Ambystoma californiense</u> ) Population Raymond Hasey and H.B. Shaffer
2:25 to 2:45 p.m.	Ecological Role of the Salamander <u>Ensatina eschscholtzii</u> : Direct Impacts on the Arthopod Assemblage and Indirect Influence on the Carbon Cycle in Mixed Hardwood/Conifer Forest in Northwestern California  Michael Best and Hartwell Welsh  Student Paper
2:45 to 3:05 p.m.	Persistence of Larval Tailed Frogs and Torrent Salamanders in Headwater Streams on Redwood Timberlands in North Coastal California Ryan Borque, Lowell V. Diller, Matt R. House and David W. Lamphear
3:05 to 3:20 p.m.	Refreshment Break (Edgewater F)
3:20 to 3:25 p.m.	Announcements
3:25 to 3:45 p.m.	Development of an Amphibian and Reptile Conservation and Management Strategy in California Brian Todd, Betsy Bolster and Aaron Lotz
3:45 to 4:05 p.m.	California's Western Pond Turtle (Emys marmorata): Conservation Issues and Options Betsy Bolster, Don Ashton (presenting), and Hartwell Welsh
4:05 to 4:25 p.m.	California's Amphibian and Reptile Species of Special Concern Robert Thomson, Amber N. Wright (presenting) and H. Bradley Shaffer
4:25 p.m.	Session Concludes

### **DOOR PRIZE**

\$50 REI Gift Certificate will be awarded to one attendee of this session. Name to be drawn before the break.

## POSTER SESSION

February 1, 2012 5:30-7:30 p.m. Edgewater B and F

(Also available for viewing throughout the conference)

Chair: Canh Nguyen, California Department of Fish and Game

Carnivore Distributions in Relation to Roads on the Sierra National Forest, California

Jodi Berg and Rick A. Sweitzer

Reconstructing Time-specific Diet Composition of Greater Sage-Grouse Chicks Using Feather Stable Isotopes

Erik Blomberg, Simon R. Poulson, James S. Sedinger and Daniel V. Nonne

Student Poster

#### Hot and Cold Spots of Snowy Plover Breeding

Justin Brice, Allie Patrick and Mark A. Colwell

Student Poster

Distribution and Estimated Fecundity for Female Black Bears (Ursus americanus) in the Sierra Nevada Mountains, California, Using Images from Automatic Cameras

Joseph Bridges and Rick A. Sweitzer

Physical and Chemical Factors that Affect Diversity of Aquatic Invertebrates in Vernal Pools in Sacramento County, California

Angela Calderaro

#### Rodent Foraging Behavior in Coastal Dunes

Yesenia De Leãn and Matthew D. Johnson

Student Poster

Seasonal Use Patterns of Rest Sites by American Martens in the Lassen National Forest

Matt Delheimer and Katie M. Moriarty

Response of Large Mammalian Predators to Riparian Corridor Restoration in the Sacramento River National Wildlife Refuge

Vasilissa Derugin, Gretchen LeBuhn, Joseph Silveira, Edward F. Connor and Gregory H. Golet

Endangered Species Management at the U.S. Army's Pohakuloa Training Area, Hawai'i Island

Rogelio Doratt, Lena D. Schnell, Robert Brozka, Daniel A. Brown, Marth T. Kawasaki, Bridget A. Frederick and Peter Peshut

Projected Impacts of Climate Change, Urbanization and Water Management Scenarios on Ecology and Habitat of Waterbirds in the Central Valley

Joseph Fleskes, Elliott L. Matchett, Lorraine E. Flint, Alan L. Flint, Mark J. Petrie, Matthew E. Reiter, David R. Purkey, Charles A. Young and John M. Eadie

### The Western Section of the Wildlife Society 2012 Annual Conference

# Camera Trapping of the Coyote (<u>Canis latrans</u>) and Other Mammal Species on the Wind River Ranch, New Mexico

Brenda Fonju, Brian J. Miller and Edward A. Martinez

Student Poster

#### Correlation Between Color, Body Condition, and Diet in the Lesser Goldfinch

Melanie Frincke-Craig, Jessi L. Brown, Chris W. Briggs and Michael W. Callopy

Student Poster

# Population Genetics of the Yellowstone Bison: Implications for Management and Conservation

Florence Gardipee, Rick Wallen, Sally Painter and Gordon Luikart

#### Macroparasites in Greater Yellowstone Bison

Florence Gardipee and Marty Kardos

# Distribution, Diel Activity, and Indices of Abundance for Four Species of Squirrels Living in Sympatry in the Sierra National Forest, California

Taylor Gorman and Rick A. Sweitzer

# The Effects of Bird and Bat Arthropod Predation on Sapling Black Cottonwoods in the Context of Restoration

Sacha Heath and Matthew D. Johnson

Student Poster

# Behavioral Observation of Western Red Bats (<u>Lasiurus blossevillii</u>) from a Maternity Roost in a Valley Oak (<u>Quercus lobata</u>) in the Sutter Buttes, Sutter County, CA

Chandra Jenkins, Daniel P. Neal, Kathleen M. Norton, David T. Wyatt, Elizabeth D. Pierson and William E. Rainey

# A High School Internship Program for the Wildlife and Forestry Departments of the Hoopa Valley Tribe

**Sean Matthews**, Ryan Matilton, Robert Buckman, Brandon Colegrove, Justi Colegrove, Blake Hostler, Hawk Lane and J. Mark Higley

Student Poster

# Foraging and Roosting Behavior for a Male and Female Western Red Bat (Lasiurus blossevillii) in the Vicinity of the Sutter Buttes, Sutter and Butte Counties, CA

**Daniel Neal**, Chandra L. Jenkins, David T. Wyatt, Kathleen M. Norton, William E. Rainey, Elizabeth D. Pierson, Emma Mullins, Sarah West, Carmen Hirkala, Brian Brown and Mandi Raley

#### The Influence of Disturbance on Greater Sage-Grouse Nest Survival

Daniel Nonne, Jim S. Sedinger, Erik J. Blomberg and Mike T. Atamian

Student Poster

# Movement Patterns and Migration Distances in an Upland Population of California Tiger Salamanders (<u>Ambystoma californiense</u>)

**Susan Orloff** 

#### Effects of Nest Temperature Variation on Viability and Sex Determination of Western Pond Turtles

Brendan Phillips, Nicole Christie, Nick Geist, Wendy St. John, Zannie Dallara and Kristine Ward

Student Poster

### The Western Section of the Wildlife Society 2012 Annual Conference

Impacts of Non-motorized Recreation on Meso- and Large Mammals in the San Francisco Bay Ecoregion

Michelle Reilly

California Gull Predator Management and Endangered California Least Tern Reproductive Success on San Francisco Bay, California

David Riensche, Christopher L. Kitting, Tierra C. Groff, Sharon Dulava and Douglas A. Bell

Food Availability for the Yellow-billed Cuckoo Along the Sacramento River

Matthew Rogers, Colleen Hatfield, Donald Miller, Chrissy Howell, Raymond Bogiatto and Joe Silveira

Student Poster

For the Birds: Guzzler Use by Resident and Migratory Avians in the Desert National Wildlife Refuge in Southern Nevada

Sara Schuster, Kathleen Longshore and Lindsay Smythe

Local and Landscape Influences on Sandhill Crane Habitat Suitability in the Sacramento Valley, CA

Laura Shaskey, Joseph G. Silveira, Caroline E. Christian and Derek J. Girman

Student Poster

Nest Site Fidelity and Microhabitat Selection in a Northern California Population of Western Pond Turtles (<u>Emys marmorata</u>)

Wendy St. John, Kristine Ward, Nicole Christie, Nicholas Geist, Zannie Dallara and Brendan Phillips

Ticks from Fishers (<u>Martes pennanti</u>) and Ringtails (<u>Bassariscus astutus</u>) at the Hoopa Valley Indian Reservation

Ellen Ven Rooy, Richard N. Brown and Mourad W. Gabriel

Nest Survival of Tricolored Blackbirds in California's San Joaquin Valley

Kelly Weintraub and T. Luke George

Student Poster

Home Range Size and Foraging Habitat Selection of Northern Spotted Owls and Barred Owls in the California Redwoods Region

Laura Weisel, T. Luke George and Larry L. Irwin

Student Poster

Restoring California Red-legged Frog Habitat on Military Training Lands

Aurianna Woodson and Robert J. Brozka

Invasion of West Nile Virus in Sacramento County and Impacts to Three Resident Bird Populations
Stan Wright and Beatrix E. Treiterer

Try our "Pseudo Quiz Bowl."

Test your knowledge, embarrass your friends, and win prizes!

# **SESSION ABSTRACTS**

To conserve paper and reduce energy consumption, abstracts for concurrent and poster sessions are provided electronically. Abstracts are available to view, download or print via the Western Section webpage (http://www.wildlifeprofessional.org/western/tws\_abstract\_display\_2012.php).

Abstracts will be available for viewing in the back of most session rooms and at the registration desk. A limited number of printed abstracts will be available for purchase.

Smart phone users may scan the following code to gain quick access to the online abstracts:



# **NOTES**



This year marks 75 years since the official founding of The Wildlife Society in 1937. To honor this historic milestone, TWS will offer a host of special events and publications throughout the year, culminating with a celebration at the 19th Annual Conference in Portland, Oregon, to be held October 13-17, 2012. Come join in the celebration!

# **Other Future Meeting Dates**

- Rare Pond Species Survey Techniques, March 31-April 1, 2012, Laguna Learning Center, Santa Rosa, CA, www.lagunafoundation.org
- TWS-WS Bat Ecology and Field Techniques Workshop will be held April 19-22, 2012 at Dye Creek Preserve (near Chico).
- TWS National Meeting, October 13-17, 2012, Portland, OR
- 2013 Annual Meeting of TWS Western Section, Jan 29
   Feb 1, Woodlake Hotel, Sacramento, CA