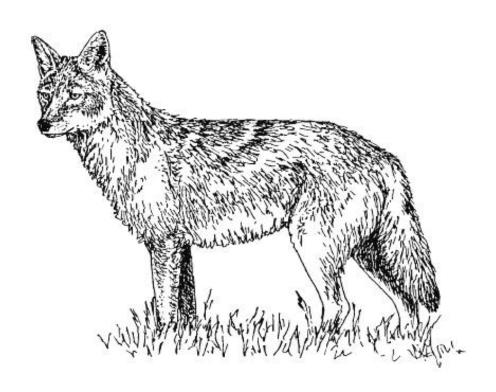
Final Program

27th VERTEBRATE PEST CONFERENCE

March 7-10, 2016
Fairmont Newport Beach
Newport Beach, California, USA



Conference Chair:

Roger A. Baldwin

Program Chairs: Stella McMillin Marc Kenyon Dirk Van Vuren

Includes special symposia:

- Urban Coyotes
- Bird Management
- Wild Pig Management

Organized by:

The Vertebrate Pest Council

A NOTE FROM FAIRMONT HOTEL

Parking

Upon arrival please obtain your parking permit from the doorman *PRIOR to parking*. Special Conference Rate: \$10 overnight and daily; applicable for Valet or Self-Parking. Parking charges on guest room receipts will be denoted as "Parking" and will not reference "Valet" in order to assist with expense claiming.

Food

Limited food options are available at the Fairmont Newport Beach. The Hotel is offering "grab and go" breakfast and lunch *a la carte* selection from their AVO and bar for purchase. Preorders are NOT available.

*** *** ***

COMMENTS ENCOURAGED

We have worked over the years to keep this educational Conference the best of its kind. We welcome your comments (good and bad) concerning it. We are always looking for potential Conference speakers and would appreciate your suggestions for possible speakers or program topics. Contact the chairperson, Roger Baldwin, (E-mail: rabaldwin@ucdavis.edu).

CONFERENCE PROCEEDINGS

Depending on your registration category, a paper or digital copy of the *Proceedings* of the 27th Vertebrate Pest Conference is included in the registration fee of those who registered for the full Conference, and it will be mailed to you upon its publication, anticipated 8-10 months following the Conference. For ordering current or past *Proceedings* visit our web site: http://www.vpconference.org.

ATTENTION TO PRESENTERS

Check in with your session chairperson at the beginning of your session and introduce yourself. Please be careful with your time and respectful of the session chairperson and your fellow speakers. Speakers will have 25 minutes to be introduced, present their talks, and field questions. Session chairpersons will keep speakers on time to ensure people attending concurrent sessions can hear papers presented at their published times.

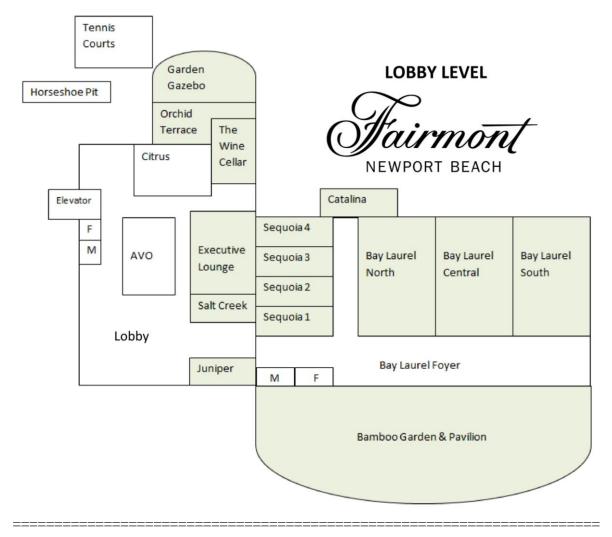
Practice Room:

A computer will be available in the Juniper Board Room beginning Monday evening March 7 for speakers to review their PowerPoint presentations. The Juniper room is located adjacent to the Bay Laurel Foyer. Please review your file, preferably the day before your presentation, to ensure the file is compatible with our software and hardware. We recommend the use of standard fonts such as Arial or Times New Roman to reduce the chance of format problems.

Loading Presentations:

A VPC representative or volunteer will be available in the Juniper Board Room Monday, Tuesday and Wednesday evening between 5:00 and 7:00 PM to load your presentation in preparation for your session. Please bring your presentation loaded on portable storage device (e.g. thumb-drive) to facilitate this process. We will transfer your presentation to our computer and return your storage device to you. In addition, we will be accepting manuscripts for inclusion into the conference Proceedings, so please bring those as well.

CONVENTION AREA FLOOR PLAN



The Vertebrate Pest Conference thanks these sponsors for support of our mission

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National Wildlife Control Operators Association (NWCOA)

Conference At-A-Glance

Monday, March 7: Optional Field Trip, 7:30 AM - 4:00 PM

Tuesday, March 8:

Opening Plenary Session

Bay Laurel Central/South

9:00 AM - 12:00 noon

Lunch (on your own)
Posters and Commercial Exhibits open – 1:15

| Symposium | Symposium | Concurrent Session |
|-----------------|---------------------|--------------------------|
| Bird Management | Wild Pig Management | Vertebrate Pesticides |
| Sequoia 1-4 | Bay Laurel North | Bay Laurel Central/South |
| 1:20 - 5:00 PM | 1:20 - 5:00 PM | 1:20 - 5:00 PM |

No-Host Welcoming Social – *Bay Laurel Foyer* 5:30 - 7:00 PM

Wednesday, March 9:

| Concurrent Session Vertebrate Management Tools | Symposium Urban Coyotes |
|--|----------------------------|
| Bay Laurel North | Bay Laurel Central/South |
| 8:10 AM - 11:50 PM | 8:10 AM - 11:50 PM |

Lunch (on your own)

| Concurrent Session | Symposium | |
|---|--------------------------|--|
| Vertebrate Management Tools and Disease | Urban Coyotes | |
| Bay Laurel North | Bay Laurel Central/South | |
| 1:20 - 5:00 PM | 1:20 - 4:35 PM | |

Hors d'oeuvres, Poster Session, and Vendors' Forum

Bay Laurel Foyer

6:00 - 7:30 PM

Thursday, March 10:

| Symposium Bird Management | Concurrent Session Non-lethal Vertebrate Control |
|---------------------------|--|
| Bay Laurel North | Bay Laurel Central/South |
| 8:10 AM - 11:50 PM | 8:10 AM - 11:50 PM |

Lunch (on your own)
Posters and Commercial Exhibits conclude

| Symposium Wild Pig Management | Concurrent Session Field Rodents / Closing Remarks |
|-------------------------------|--|
| Bay Laurel North | Bay Laurel Central/South |
| 1:20 - 4:10 PM | 1:20 - 4:20 PM |

CONTINUING EDUCATION UNITS ASSIGNED

Attendees seeking Continuing Education credit must sign in and out at the event registration desk. All credits are approximations and are dependent upon your attendance.

California Department of Pesticide Regulation*:

Field Trip - March 7, 2016: 0.50 L 6.50 O

Day 1 - March 8, 2016: Plenary AND Wild Pig Management OR Bird Management 0.00 L 4.00 O

Day 1 - March 8, 2016: Plenary AND Vertebrate Pest Management 1.00 L 4.00 O

Day 2 - March 9, 2016: Vertebrate Management Tools 0.50 L 4.00 O

Day 2 - March 9, 2016: Urban Coyotes 0.00 L 2.50 O

Day 3 - March 10, 2016: 0.00 L 4.50 O

*Note that Day 1 is Tuesday, March 8 for DPR.

California Department of Public Health**:

Day 1 (Field Trip), Date: March 7, 2016 Program Approval Number: 17-00115

CEU Approved: (CDPH units) 1.0 Category D.

Day 2, Date: March 8, 2016

Program Approval Number: 17-00079

CEU Approved: (CDPH units) 1.0 Category D.

Day 3, Date: March 9, 2016

Program Approval Number: 17-00080

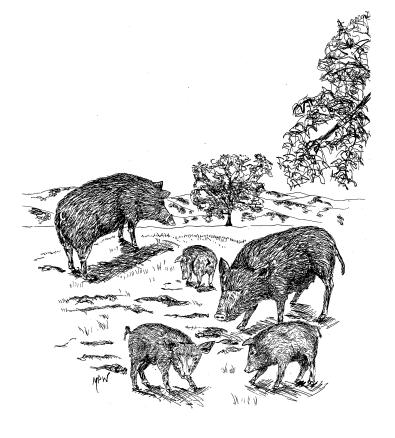
CEU Approved: (CDPH units) 4.0 Category D.

Day 4, Date: March 10, 2016

Program Approval Number: 17-00081 CEU Approved: (CDPH units) 1.25

Category D.

**Note that Day 1 is Monday, March 7 for CDPH



CONFERENCE FIELD TRIP (Optional)

Monday, March 7

7:30 AM Buses depart from the Fairmont Hotel, Newport Beach

Managing seagulls on baby beaches

8:10 - 8:40 Poche Beach, San Clemente

Kevin Estrada- Orange County Parks

Join Orange County Park Ranger Kevin Estrada at Poche Beach in Southern Orange County to discuss measures taken to manage seagulls and improve water. These birds are thought to contaminate the water at the outlet with fecal material. This reduces the water quality which can contribute to closure of the beach. It becomes unsafe for swimming when bacteria counts are high.

Vector-borne disease in Orange County

9:30 - 10:30 Orange County Mosquito and Vector Control District, Garden Grove

Laura Krueger- Orange County Mosquito and Vector Control District
Vector ecologist Laura Krueger and the staff of OCMVCD will be discussing the many projects that the District is conducting in Orange County. The District provides services for all of Orange County to control many vectors of disease. Laura and staff explain the regular surveillance for vectors and vector-borne diseases that can make the citizens of, or visitors to, Orange County ill, or can be a nuisance.

Wildlife fences and mountain lions

11:00 - 11:30 South Coast Research and Extension Center, Irvine

Dr. Winston Vickers- University of California, Davis

According to the 2010 Census, Los Angeles, Orange and San Diego Counties are among the top 6 most populated counties in the United States. Join wildlife veterinarian Winston Vickers at UCANR South Coast Research and Extension Center for a presentation and discussion on the challenges that some of our larger vertebrate species have to face in order to be successful in an area with an extremely large and busy road network.

11:30 - 12:30 Lunch at the UC South Coast Research and Extension Center, Irvine

Falconry as a tool for bird management

12:30 - 2:00 South Coast Research and Extension Center

Adam Chavez-Adam's Falconry Service

Join falconer Adam Chavez at the South Coast Research and Extension Center to discuss the ways he uses birds to manage seagulls at landfills and other species in different situations.

Rodent management on flood control channels

2:30 - 3:00 Santa Ana River, Vista Park, Costa Mesa

Cort DiStanislao- OC Environmental Resources, Orange County Public Works Vegetation and Pest Control Specialist, Cort DiStanisloa will discuss the intricacies of controlling burrowing rodents on the Santa Ana River and similar flood control channels. The Army Core of Engineers has a zero tolerance for burrowing rodents on these structures and Cort will discuss how OC Public Works manages these pests.

3:30 - 4:00 Arrive back at the Fairmont Hotel, Newport Beach

Tuesday, March 8

PLENARY SESSION

Laurel Bay Central/South

Session Chair: Roger A. Baldwin

VPC Conference Chair; Dept. of Wildlife, Fish and Conservation Biology, University of California, Davis, CA

9:00 Conference Welcome and Overview

Roger A. Baldwin, Vertebrate Pest Conference Chair

9:20 Keynote Address:

A Brief History of Human/Wildlife Conflicts and Potent Lessons – Ignored *Valerius Geist*, Professor Emeritus of Environmental Science, University of Calgary, Calgary, Alberta, Canada

- 10:05 **Break**
- 10:20 Save Me from the Lion's Mouth: Efforts to Promote Human-Wildlife Coexistence in Southern Africa

Scott Hygnstrom, University of Wisconsin, Stevens Point, WI

10:45 Technology Advances for Vertebrate Pest Eradication

Charles Eason*, Cawthron Institute, Nelson, New Zealand

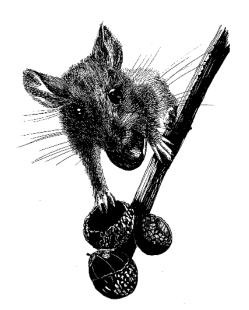
11:10 A Tour de Force by Hawai'i's Invasive Mammals: Establishment, Takeover, and Ecosystem Restoration through Eradication

Steven Hess, US Geological Survey Pacific Island Ecosystems Research Center, HI

11:35 Management of Wild Swine

Michael J. Bodenchuk, USDA APHIS Wildlife Services, San Antonio, TX

12:00 **Lunch Break** (on your own)



^{*}Multiple authored paper, see abstract for a complete list of authors.

Tuesday, March 8 (PM)

SPECIAL SYMPOSIUM: BIRD MANAGEMENT

Sequoia 1-4

| 1:20 | Session | Welcome |
|------|----------|----------|
| 1.20 | 26881011 | w elcome |

Mike Taber, Session Chair, Wildlife Control Technology, Inc., Fresno, CA

1:25 Bird Damage to Fruit Crops: A North American Overview

*Karen Steensma**, Department of Biological and Environmental Studies, Trinity Western University, Langley, BC

1:50 Use of Falconry as Deterrent of Nuisance Birds in Leafy Greens Fields in Northern California

Nora Navarro-Gonzalez*, Western Center for Food Safety, University of California, Davis, CA

2:15 Pathogen Risks Related to the Movement of Birds Frequenting Livestock and Fresh Produce Growing Areas

Paula Rivadeneira*, University of Arizona, Yuma, AZ

2:40 Prey Consumption by a Large Aggregation of Barn Owls in an Agricultural Setting

Mark Browning*, Barn Owl/Rodent Project, Pittsburgh, PA

3:05 **Break**

3:20 Insect Pest Control and Bird Damage as a Function of Distance from Riparian Habitat in a California Vineyard

Sara Kross, Department of Wildlife, Fish and Conservation Biology, University of California, Davis, CA

3:45 Female Blackbirds' Response to Stress during Breeding: Possible Implications for Future Management

Jessica Mahoney*, Biological Sciences Department, North Dakota State University, Fargo, ND

4:10 The USDA APHIS WS Unified Model for Estimating DRC-1339 Bait Application Take Estimates: Past, Present, Future

Randal S. Stahl*, USDA Wildlife Services, Nat. Wildlife Res. Center, Fort Collins, CO

4:35 Gopherbusters? A Review of the Candidacy of Barn Owls as the Ultimate Natural Pest Control Option

Sara Kross*, Department of Wildlife, Fish and Conservation Biology, University of California, Davis, CA

5:00 **Session Close**

5:30 - 7:00 PM No-Host Welcoming Social – Bay Laurel Foyer

^{*}Multiple authored paper, see abstract for a complete list of authors.

Tuesday, March 8 (PM)

SPECIAL SYMPOSIUM: WILD PIG MANAGEMENT

Bay Laurel North

| 1:20 | Session Welcome Dennis Orthmeyer, Session Chair, USDA/APHIS/Wildlife Services, Sacramento, CA |
|------|---|
| 1:25 | The Value of Reducing Uncertainty about Feral Swine Population Chris Slootmaker*, USDA Wildlife Services, National Wildlife Res. Center, Fort Collins, CO |
| 1:50 | A Survey of Feral Swine Damage in California Aaron Anderson*, USDA Wildlife Services, National Wildlife Res. Center, Fort Collins, CO |
| 2:15 | Estimating Feral Pig Abundance and Damage at Tejon Ranch, California Ben Teton*, Tejon Ranch Conservancy, Frazier Park, CA |
| 2:40 | Landowner Opinions Regarding Wild Pigs in Georgia, USA Michael T. Mengak, Warnell School of Forestry & Natural Resources, University of Georgia, Athens, GA |
| 3:05 | Break |
| 3:20 | Development of a National Wild Pig Task Force as a Focal Point for National Leadership Mark D. Smith, School of Forestry and Wildlife Sciences, Auburn University, Auburn, AL |
| 3:45 | A Comprehensive Nine Year Case History of Texas A&M AgriLife Extension's Educational Impacts on Wild Pig Damage Abatement in Texas Billy Higginbotham*, Texas A&M University, College Station, TX |
| 4:10 | Evaluating Feral Pig Management Strategies at Tejon Ranch, California Michael D. White*, Tejon Ranch Conservancy, Frazier Park, CA |
| 4:35 | Challenges and Lessons Learned from Feral Swine Elimination Efforts in New York |

5:00 Session Close

5:30 - 7:00 PM No-Host Welcoming Social – Bay Laurel Foyer

Mark Jackling*, USDA-APHIS, Wildlife Services, Castleton, NY

^{*}Multiple authored paper, see abstract for a complete list of authors.

Tuesday, March 8 (PM)

SESSION: VERTEBRATE PESTICIDES

Bay Laurel Central/South

1:20 **Session Welcome**

Jeanette O'Hare, Session Chair, USDA Wildlife Services, Nat. Wildlife Res. Center, Fort Collins, CO

1:25 The Ground View of Navigating FIFRA and the ESA: one Pesticide Registrant's Perspective

*Jeanette R. O'Hare**, USDA Wildlife Services, Nat. Wildlife Res. Center, Fort Collins, CO

1:50 A Decision Tool for Determining Federal Regulatory Authority over Products for Vertebrate Wildlife

Jeanette O'Hare*, USDA Wildlife Services, Nat. Wildlife Res. Center, Fort Collins, CO

2:15 Are Cholecalciferol plus Anticoagulant Rodenticides a Viable Option for Field Rodents?

Roger A. Baldwin*, Department of Wildlife, Fish, and Conservation Biology, University of California, Davis, CA

2:40 EradiRat: an Eco-friendly, Natural, Palatable, and Effective Rodent Fertility Control Bait

Karen Chase*, SenesTech, Inc., Flagstaff, AZ

- 3:05 **Break**
- 3:20 Free-Ranging Wild-caught Norway Rats have Reduced Fecundity after Consuming Liquid Oral Fertility Bait

Brandy Pyzyna*, SenesTech, Inc., Flagstaff, AZ

3:45 Anticoagulant Poisoning of Non-target Species: Have Things Changed after Implementation?

Philippe J. Berny*, USC1233-INRA-Vetagro Sup., Marcy l'étoile, France

4:10 Usefully Persistent? Anticoagulants as Quantitative Markers of Bait Uptake in Brushtail Possums

Penny Fisher*, Landcare Research, Lincoln, New Zealand

4:35 **New Rodenticide on the Block: Bromethalin Intoxication in Wildlife in California** *Stella McMillin**, California Department of Fish and Wildlife, Rancho Cordova, CA

5:00 Session Close

5:30 - 7:00 PM No-Host Welcoming Social – Bay Laurel Foyer

^{*}Multiple authored paper, see abstract for a complete list of authors.

Wednesday, March 9 (AM)

SESSION: VERTEBRATE MANAGEMENT TOOLS

Bay Laurel North

| 8:10 | Session Welcon Greg Hacker, S | me ession Chair, California Department of Public Health, Elk Grove, CA | |
|-------|---|--|--|
| 8:15 | Mountain Lions in Southern California: Interactions with People and the Consequences for this Large Carnivore Winston Vickers*, Wildlife Health Center, University of California, Davis, CA | | |
| 8:40 | The Current Status of Feral Goat Eradications on the Island of Oahu, HI Christopher Miller*, Hawaii Division of Forestry and Wildlife, Pearl City, HI | | |
| 9:05 | Managing Pocket Gophers Under the Healthy Schools Act Ashley Freeman, Department of Pesticide Regulation, Sacramento, CA | | |
| 9:30 | | Industry that Underpins a National-scale Pest Control Programme on*, Landcare Research, Lincoln, New Zealand | |
| 9:55 | Break | Refreshments sponsored by Liphatech Inc. | |
| 10:10 | Surveillance D | ndscape-scale Vertebrate Pest Management using Control and ata *, Landcare Research, Lincoln, New Zealand | |
| 10:35 | _ | ale Wireless Technology for Vertebrate Pest Control Encounter Solutions Ltd., Auckland, New Zealand | |
| 11:00 | for the Web | Resource Design: Providing Accessible Ground Squirrel Extension *, University of California Cooperative Extension, Orange County, | |
| 11:25 | Australasia | ort Systems for Improving Invasive Rabbit Management in on*, Landcare Research, Lincoln, New Zealand | |
| | | | |

11:50 Lunch Break (on your own)

^{*}Multiple authored paper, see abstract for a complete list of authors.

Wednesday, March 9 (AM)

SPECIAL SYMPOSIUM: URBAN COYOTES

Laurel Bay Central/South

| 8:10 | Session | Welcome |
|------|----------|-----------|
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Niamh Quinn, Session Chair, University of California Cooperative Extension, Irvine, CA

8:15 Update on a Database of Coyotes Attacks on Humans, 1970-2015

*Robert Timm**, Division of Agriculture & Natural Resources, University of California, Hopland, CA

- 8:40 **Dealing with the Issues of the Urban Coyote One County's Experience** *Jim Hartman*, Los Angeles County Dept. of Agriculture, Arcadia, CA
- 9:05 An Examination of Citizen-Provided Coyote Reports: Temporal and Spatial Patterns and Their Implication for Management of Human-Coyote Conflicts Niamh Quinn*, University of California Cooperative Extension, Irvine, CA
- 9:30 Coyotes in the City: Results from a Pilot Study of GPS-Collared Coyotes in Downtown Los Angeles

Justin Brown*, National Park Service, Thousand Oaks, CA

- 9:55 **Break** Refreshments sponsored by **Liphatech Inc.**
- 10:10 How Human Predation Can Shape Coyote Temperament, and Implications for Management in Urban Environments

Stewart Breck*, USDA National Wildlife Research Center, Fort Collins, CO

10:35 Food Habits of Coyotes (*Canis latrans*) Along an Urban-Rural Gradient in Alabama

Jim Armstrong*, Auburn University, AL

11:00 On the Use of Animal Behavior as a Means of Managing Human Animal Interactions

Valerius Geist, University of Calgary (emeritus), Port Alberni, British Columbia, Canada

- 11:25 Q & A / Discussion with Morning Speakers
- 11:50 **Lunch Break** (on your own)

^{*}Multiple authored paper, see abstract for a complete list of authors.

Wednesday, March 9 (PM)

SESSION: VERTEBRATE MANAGEMENT TOOLS and DISEASE

Bay Laurel North

| 1:20 | Session W Ashley Fre Sacrament | eman, Session Chair, California Department of Pesticide Regulation, |
|------|--------------------------------------|--|
| 1:25 | | on of 3 Kill Traps to Manage Pocket Gophers in Alfalfa y*, Utah State University Extension, Cedar City, UT |
| 1:50 | New Zeala | ing Traps provide Sustained Landscape Scale Control of Rat Plagues in and ters*, Department of Conservation, Wellington, New Zealand |
| 2:15 | Traps: An | ng Sympatric Pest Mammal Populations with Self-resetting, Toxin-Free Opportunity of Dam*, Goodnature Ltd, Wellington, New Zealand |
| 2:40 | Los Angel | ontrol has a Role in Mitigating High Incidents of Flea-borne Typhus in es County Wekesa*, San Gabriel Valley Mosquito and Vector Control District, West |
| 3:05 | Break | Refreshments sponsored by EcoClear Products |
| 3:20 | the Twain | ounty Vector Control and the County's Feral Cat TNR Program: Ne'er shall Meet? mmings*, Orange County Mosquito and Vector Control District, Garden |
| 3:45 | Opossums County, C | tion of Zoonotic and Vector-borne Infectious Agents Associated with (Didelphis virginiana) in Residential Neighborhoods of Orange (A eger*, Orange County Mosquito and Vector Control District, Garden |

- 4:10 Aversive or Attractive: The Effects of Skunk Oil and Pelt Coloration on Carnivore Behavior
 - Holly Schiefelbein, Department of Biological Sciences, CSU Long Beach, CA
- 4:35 **The Development of Semiochemical Lures for Invasive Rats** *Michael Jackson**, Victoria University of Wellington, New Zealand
- 5:00 Session Close

Grove, CA

6:00 - 7:30 PM Hors d'oeuvres, Poster Session, and Vendors' Forum – Bay Laurel Foyer

Wednesday, March 9 (PM)

SPECIAL SYMPOSIUM: URBAN COYOTES

Bay Laurel Central/South

| 1:20 | Session Welcome Rex Baker, Session Chair, California State Polytechnic University, Pomona, CA |
|------|---|
| 1:25 | A National Coyote Database to Aid in Selective Management of Problem Animals Rob Erickson, On Target A.D.C., Cortland, IL |
| 1:50 | Urban Coyotes in Arizona: a Ten Year Review David L. Bergman*, USDA Wildlife Services, Phoenix, AZ |
| 2:15 | A Balanced Approach to the Adaptive Management of Urban Coyotes: Integrating Geospecific Behavior Density with Human Dimensions for Establishing Targeted Management Implementation Threshold Levels Randy Farrar, USDA Wildlife Services, Advance, MO |
| 2:40 | Using Coyote Hazing at the Community Level to Change Coyote Behavior and Reduce Human-Coyote Conflict in Urban Environments Mary Ann Bonnell*, Jefferson County Open Space District, CO |
| 3:05 | Break Refreshments sponsored by EcoClear Products |
| 3:20 | Successful Management in Problem Coyotes in the Chicago Area <i>Rob Erickson</i> , On Target A.D.C., Cortland, IL |
| 3:45 | The Problematic Trend of Pseudo-Science Dictating Urban Coyote Management Policy Sean Brady, Michel & Associates, P.C., Long Beach, CA |
| 4:10 | Q & A / Discussion with Afternoon Speakers |
| 4:35 | Symposium Adjourns |

6:00 - 7:30 PM Hors d'oeuvres, Poster Session, and Vendors' Forum – Bay Laurel Foyer

^{*}Multiple authored paper, see abstract for a complete list of authors.

Thursday, March 10 (AM)

SPECIAL SYMPOSIUM: BIRD MANAGEMENT

Bay Laurel North

| 8:10 | Session | Welcome |
|------|----------|-------------|
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Michelle Dennis, Session Chair, California Department of Food and Agriculture, Sacramento, CA

8:15 Predator Management Techniques for the Protection of Federally Listed Beach Nesting Species

Jake Manley*, Institute for Wildlife Studies, San Diego, CA

8:40 **Depredation of the California Ridgway's Rail: Causes and Distribution** *Cory Overton**, US Geological Survey, Dixon, CA.

9:05 Non-lethal Management of American Kestrels: A Case Study at the Los Angeles International Airport

Todd J. Pitlik*, USDA Wildlife Services, Los Angeles, CA

9:30 Managing Raptor-Aircraft Collisions on a Grand Scale: Summary of a Wildlife Services Raptor Relocation Program

Laurence M. Schafer*, USDA Wildlife Services, Olympia, WA

9:55 **Break**

10:10 **Population Dynamics of the Feral Pigeon in the Heart of Butte America** *Cody Richardson**, Montana Tech of the University of Montana, Butte, MT

10:35 The Efficacy of OvoControl (0.5% nicarbazin) in the Management of Feral Pigeons

Erick Wolf*, Innolytics, LLC, San Clemente, CA

11:00 West Nile Virus Activity in a Winter Roost of American Crows (*Corvus brachyrhynchos*)

Mitchell G. Hinton*, University of California, Davis, CA

11:25 Improving Bullfrog Capture Methods to Benefit Hawaii's Endangered Endemic Waterbirds

Jared Grant Underwood*, US Fish and Wildlife Service, Honolulu, HI

11:50 Lunch Break (on your own)

^{*}Multiple authored paper, see abstract for a complete list of authors.

Thursday, March 10 (AM)

SESSION: NON-LETHAL VERTEBRATE CONTROL

Bay Laurel Central/South

| 8:10 | Session Welcome Robert Schmidt, Session Chair, Utah State University, Logan, UT | | |
|-------|--|--|--|
| 8:15 | Influence of Visual Input on Behavior of White-tailed Deer (Odocoileus virginianus) to an Auditory Alert Recording George R. Gallagher*, Dept. of Animal Science, Berry College, Mount Berry, GA | | |
| 8:40 | The Need for Humane Wildlife Control Standards Sara Dubois*, University of British Columbia and BC SPCA, Canada | | |
| 9:05 | Making a Killing without Killing Rebecca Dmytryk, Humane Wildlife Control, Moss Landing, CA | | |
| 9:30 | Acceptable Management Practices for Bat Control Activities in Structures Justin Stevenson*, White-nose Syndrome Conservation and Recovery Working Group, Las Lunas, NM | | |
| 9:55 | Break | | |
| 10:10 | Protecting Small Livestock and Predators Alike: Early Successes Christy Wyckoff*, Santa Lucia Conservancy, Carmel, CA | | |
| 10:35 | The Marin County Livestock Protection Program: 15 Years in Review Stephanie Larson*, UC Cooperative Extension, Santa Rosa, CA | | |
| 11:00 | Hazing and Deterrents – "Preventive Medicine" Deployed for Protection of Wildlife in or near Oil Spills Winston Vickers, Oiled Wildlife Care Network, Wildlife Health Center, University of California, Davis, CA | | |
| 11:25 | What if Everything You Thought You Knew About "Feral" Cats was Wrong? Peter J. Wolf, Best Friends Animal Society, Kanab, UT | | |

^{11:50} Lunch Break (on your own)

^{*}Multiple authored paper, see abstract for a complete list of authors.

Thursday, March 10 (PM)

SPECIAL SYMPOSIUM: WILD PIG MANAGEMENT

Bay Laurel North

1:20 Session Welcome

Dirk Van Vuren, Session Chair, Department of Wildlife, Fish and Conservation Biology, University of California, Davis, CA

1:25 An Overview on Feral Hog Management in Brazil after Two Years of Control Regulation

*Marcelo Osório Wallau**, Universidade Federal do Rio Grande do Sul, Porto Alegro, Brazil

1:50 Bait Preference for Delivering Pesticide to Feral Swine

*Nathan P. Snow**, Texas A&M University-Kingsville, TX and USDA Nat. Wildlife Res. Center, Fort Collins, CO

2:15 Development of a Self-contained Carbon Dioxide Euthanasia Trailer for Large Scale Euthanasia of Feral Pigs

John C. Kinsey*, Texas Parks and Wildlife Department, Hunt, TX

2:40 Thinking Outside of the Box Trap

Joshua A. Gaskamp*. The Samuel Roberts Noble Foundation, Ardmore, OK

- 3:05 **Break**
- 3:20 An Overview of San Diego County's Ongoing Feral Pig Eradication Project Ryan McCreary*, USDA-Wildlife Services, El Cajon, CA

3:45 Land Management and Land Cover Influence the Emergence of Pseudorabies in Feral Swine in Florida

Samantha Wisely*, Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL

*** *** ***

- 4:10 Closing Remarks will be in: Bay Laurel Central/South
- 4:20 Conference Adjourns

^{*}Multiple authored paper, see abstract for a complete list of authors.

Thursday, March 10 (PM)

SESSION: FIELD RODENTS

Bay Laurel Central/South

| 1:20 | Session | Welcome |
|------|---------|-------------|
| 1.40 | Dession | VV CICUIIIC |

Gary Witmer, Session Chair, USDA Wildlife Services, National Wildlife Research Center, Fort Collins, CO

1:25 Managing Voles in Idaho Crops and Landscapes

Danielle Gunn*, University of Idaho, Fort Hall, ID

1:50 Evaluation of Forage Preferences and their Corresponding Nutritional Content of Northern Pocket Gophers

Gary Witmer, USDA Wildlife Services, Nat. Wildlife Res. Center, Fort Collins, CO

2:15 Impact of Field Border Plantings on Rodents and Food Safety Concerns

Laurel Sellers*, University of California Cooperative Extension, Woodland, CA

2:40 Herbal Repellents against Agricultural Rodent Pest Species

Sabine Hansen*, Julius Kühn-Institut (JKI) Institute for Plant Protection in Horticulture and Forests, Muenster, Germany

3:05 **Break**

3:20 The Use of Forced Gas Rodent Burrow Fumigation Systems and the Potential for Risk to Humans

John D. Eisemann,* USDA Wildlife Services, National Wildlife Research Center, Fort Collins, CO

3:45 Evaluation of Potential Repellents for Pocket Gophers (*Thomomys bottae*)

*Gary Witmer**, USDA Wildlife Services, National Wildlife Research Center, Fort Collins, CO

4:10 Closing Remarks

John D. Eisemann, Chair-Elect, Vertebrate Pest Council

4:20 Conference Adjourns

^{*}Multiple authored paper, see abstract for a complete list of authors.

POSTER SESSION

Wednesday, March 9 (6:00 - 7:30 PM)

Bay Laurel Foyer

Session Chairs:

Kathleen Fagerstone

USDA National Wildlife Research Center, Fort Collins, CO

Ashley Freeman

California Department of Pesticide Regulation, Sacramento, CA

A Review of Cat Home Ranges: Movements of Feral and Free-Roaming Cats to Inform Colony Exclusion Zone

Adam Griesemer, US Fish and Wildlife Service, Kapaa, HI

"Achilles Heel" Approach to Vertebrate Pest Control

Brian Hopkins*, Landcare Research, Canterbury, New Zealand

Genetic Pest Management Technologies to Control Invasive Rodents

Dona Kanavy*, Texas A&M University Department of Molecular and Cell Medicine, College Station, TX

Potential Increases in High Elevation Coyote Susceptibility to Neck Snaring Efforts during Breeding

Pat Jackson*, Nevada Department of Wildlife, Reno, NV

The Role of Feral Swine in the Emergence of Neglected Pathogens of Cattle in Florida *Mary M. Merrill**, Department of Environmental and Global Health, University of Florida, Gainesville, FL.

Could Spectral Characteristics of Decayed Wood Signal Woodpeckers?

Sean T. O'Daniels*, Missouri Cooperative Research Unit, Department of Fisheries and Wildlife Sciences, University of Missouri, Columbia, MO

Exploring Novel Tools for Island Conservation through the Mating of Wild and Laboratory Mouse Strain

Megan Serr*, North Carolina State University, Raleigh, NC

Observations of Feral Hog Ecology in South and Southeast Brazil

Marcelo Osorio Wallau*, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil

Behavioral Responses of Red-winged Blackbirds to Simulated Unmanned Aerial System Scare Tactics

Lucas Wandrie, Dept. of Biological Sciences, North Dakota State University, Fargo, ND

^{*}Multiple authored paper, see abstract for a complete list of authors.

27th VERTEBRATE PEST CONFERENCE

CONFERENCE CHAIR:

Roger A. Baldwin, University of California, Davis (530) 752-4551; Email: rabaldwin@ucdavis.edu

PROGRAM CHAIRS:

Stella McMillin, California Department of Fish and Wildlife (916) 358-2954; Email: stella.mcmillin@wildlife.ca.gov

Marc Kenyon, California Department of Fish and Wildlife (916) 358-1356; Email: marc.kenyon@wildlife.ca.gov

Dirk Van Vuren, University of California, Davis (530) 752-4181; Email: dhvanvuren@ucdavis.edu

REGISTRATION:

Judy Letterman, Professional Association of Pesticide Applicators (831) 442-3536; Email: judy@papaseminars.com

Stephanie Souza, Professional Association of Pesticide Applicators (831) 442-3536; Email: stephanie@papaseminars.com

LOCAL ARRANGEMENTS:

Charlie Crabb, Vertebrate Pest Council Business Manager (805) 704-4514; Email: charles.crabb@me.com

PROCEEDINGS EDITOR:

Robert M. Timm, University of California - ANR (707) 744-1424 Ext. 103; Email: rmtimm@ucanr.edu

FIELD TRIP:

Niamh Quinn, University of California – ANR (949) 653-1813; Email: nmquinn@ucanr.edu

COMMERCIAL DISPLAYS:

Ashley Freeman, California Department of Pesticide Regulation (916) 445-4239; Email: ashley.freeman@cdpr.ca.gov

POSTER AND STUDENT AWARD COORDINATOR: Kathleen Fagerstone, USDA APHIS NWRC (*retired*) (303) 880-5066; Email: kathy.fagerstone@gmail.com

CONTINUING EDUCATION:

Edmund Duarte, Alameda County Agricultural Commissioner's Office (926)245-0853; Email: ed.duarte@acgov.org

David Kratville, California Department of Food and Agriculture (916) 262-1102; Email: david.kratville@cdfa.ca.gov

Michelle Dennis, California Department of Food and Agriculture (916) 262-1102; Email: michelle.dennis@cdfa.ca.gov

PUBLICITY:

Mike Taber, Wildlife Control Technology, Inc. (559) 490-2262; Email: miket@wildlife-control.com

Notes

COMMERCIAL EXHIBITS

Bay Laurel Foyer

(Tuesday 1:15 PM - Thursday 12:00 noon)

Chair: Ashley Freeman

California Department of Pesticide Regulation

Avitrol Corporation

7644 E. 46th Street, Tulsa, OK 74145; Website: http://www.avitrol.com

Phone: 800-633-5069

Bird Barrier & OvoControl by Innolytics

20925 Chico Street, Carson, CA 90746

Websites: http://www.birdbarrier.com; http://ovocontrol.com

Email: franklinkerry@mac.com; Phone: 800-503-5444

CAPCA – California Association of Pest Control Advisors

2300 River Plaza Dr. #120, Sacramento, CA 95833; Website: http://capca.com

Email: ariana@capca.com; Phone: 916-928-1625

DPR - California Dept. of Pesticide Regulation

1001 I Street, Sacramento, CA 95812; Website: http://www.cdpr.ca.gov

Email: Ashley.Freeman@cdpr.ca.gov; Phone: 916-445-4239

Inert Gas Injection LLC

P.O. Box 193, Acampo, CA 95220; Website: https://eliminatorbyigi.com

Email: corp@eliminatorbyigi.com; Phone: 855-901-2300

Liphatech Inc.

3600 W. Elm Street, Milwaukee, WI 53209; Website: http://www.liphatech.com

Email: horns@liphatech.com; Phone: 414-351-1476

Motomco Ltd.

3699 Kinsman Blvd, Madison, WI 53704; Website: http://www.motomco.com

Email: slockrem@motomco.com; Phone: 800-237-6843

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E-mail: trapem@livetrap.com; Phone: 715-356-4600

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E-mail: rcoinc@earthlink.net; Phone: 541-520-3073

W-W Livestock Systems / Boar Buster

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Email: boarbuster@pldi.net; Phone: 800-999-1214