

Final Program

25th VERTEBRATE PEST CONFERENCE

March 5 - 8, 2012
The Portola Hotel & Spa at Monterey Bay
Monterey, California, USA

*Celebrating the 50th Anniversary of the
Vertebrate Pest Conference, 1962 - 2012*



Conference Chair:
Robert M. Timm

Program Chair:
Roger A. Baldwin

Includes special symposia:

- **Urban Wildlife Management**
- **Wildlife and Food Safety**

Sponsored by:
The Vertebrate Pest Council

COMMERCIAL EXHIBITORS—DeAnza Foyer

(Tuesday March 6, 1:15 PM through Thursday March 8, 12 noon)

Chair: John O'Brien

Nevada Department of Agriculture

Bird Gard/Deer Shield—270 E. Sun Ranch Drive, P.O. Box 1690, Sisters, OR 97759; *Websites:* <http://www.birdGard.com> & <http://www.DeerShieldTech.com>; *E-mail:* info@BirdGard.com & info@DeerShieldTech.com; *Phone:* 1-888-332-2328

Bird Shield—P.O. Box 785 Pullman, WA 99163;
Website: <http://www.birdshield.com>; *E-mail:* sales@birdshield.com;
Phone: 1-509-339-5740

The Gopher Snake—7343 El Camino Real #215, Atascadero, CA 93422;
Website: <http://www.thegophersnake.com>; *E-mail:* thegophersnake@yahoo.com; *Phone:* 1-805-460-0250

Liphatech, Inc.—3600 West Elm Street, Milwaukee, WI 53209;
Website: <http://www.liphatech.com>; *E-mail:* mccalleys@liphatech.com;
Phone: 1-888-331-7900

Messina Wildlife—55 Willow Street Suite 1, Washington, NJ 07882;
Website: <http://www.messinawildlife.com/>; *E-mail:* Info@MessinaWildlife.com; *Phone:* 1-888-411-3337

Motomco Ltd.—3699 Kinsman Blvd, Madison, WI 53704;
Website: <http://www.motomco.com>; *E-mail:* cbagocius@motomco.com;
Phone: 1-800-237-6843

Pestcon Systems Inc.—P.O. Box 28188 Spokane, WA 99228-8188;
Website: <http://www.pestcon.com>; *E-mail:* ghuntpestcon@hotmail.com;
Phone: 509-223-9732

RCO International Inc.—P.O. Box 191, Harrisburg, OR 97446;
Website: <http://www.rodent-baits.com>; *E-mail:* rco@rodent-baits.com;
Phone: 1-800-214-2248

Tomahawk Live Trap Co.—P.O. Box 155, Hazelhurst, WI 54531;
Website: <http://www.livetrapping.com>; *E-mail:* trapem@livetrapping.com;
Phone: 1-715-356-4600

THE VERTEBRATE PEST COUNCIL THANKS THE FOLLOWING EVENT SPONSORS:

Field-trip Lunch:

Liphatech, Inc.

Coffee Break: *Bird Shield (co-sponsor with VPC)*

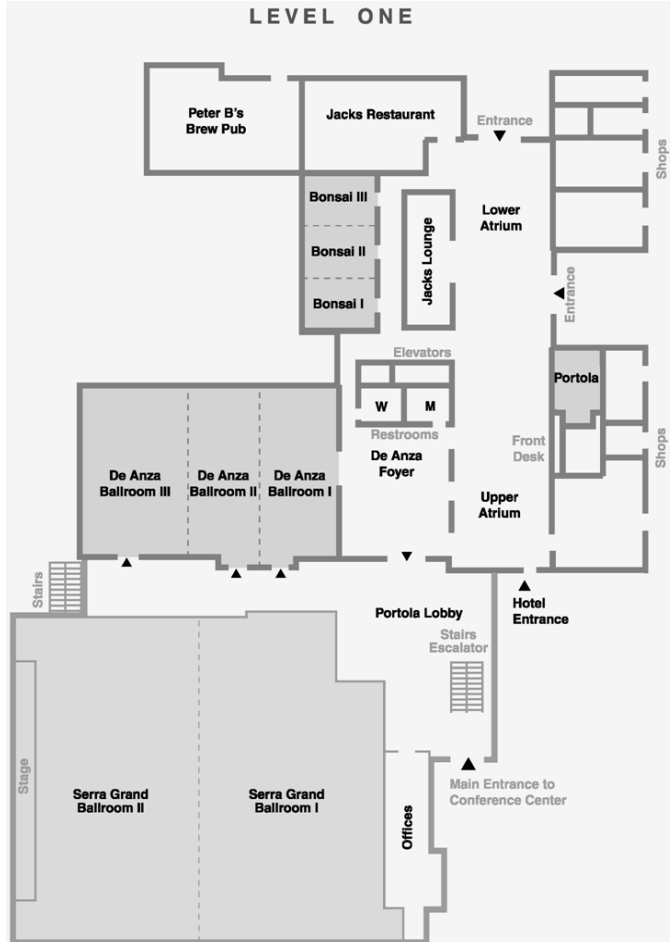
COMMENTS ENCOURAGED

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, Robert Timm, (E-mail: rmtimm@ucdavis.edu).

CONFERENCE PROCEEDINGS

Depending on your registration category, a paper or CD copy of the *Proceedings* of the Twenty-Fifth Vertebrate Pest Conference is included in the registration fee of those who registered for the entire Conference, and it will be mailed to you upon its publication, anticipated 8–10 months following the Conference. Some copies of past *Proceedings* also are available. For ordering current or past *Proceedings* visit our web site: <http://www.vpconference.org>.

CONVENTION AREA FLOOR PLAN



CONFERENCE AT-A-GLANCE

Monday, March 5 (Optional) Field Trip, 8 AM - 5 PM
Buses depart from Portola Hotel & Spa at Monterey Bay at 8:00 AM

Tuesday, March 6

Plenary Session

DeAnza I & II

8:30 AM – 12 Noon

Lunch (*on your own*)

Exhibits / Posters open – *DeAnza Foyer* – 1:15

<i>Conc. Session 1A:</i> Nontoxic Control Methods <i>DeAnza I</i> 1:15 – 5:00 PM	<i>Symposium 1B:</i> Wildlife and Food Safety <i>DeAnza II</i> 1:15 – 5:00 PM
--	---

7:00 PM: 50th Anniversary Banquet (optional)
Montrio Bistro, 414 Calle Principal, Monterey

Wednesday, March 7

<i>Conc. Session 2A:</i> Vertebrate Pest Control Training & Education <i>DeAnza I</i> 8:15 AM – 12:00 PM	<i>Symposium 2B:</i> Urban Wildlife Management <i>DeAnza II</i> 8:15 AM – 12:00 PM
--	--

Lunch (*on your own*)

<i>Conc. Session 3A:</i> Vertebrate Pesticides <i>DeAnza I</i> 1:15 – 5:00 PM	<i>Conc. Session 3B:</i> Introduced / Invasive Pests <i>DeAnza II</i> 1:15 – 5:00 PM
---	--

6:00 PM: Poster Session and Vendors' Forum
Hors d'oeuvres and cash bar – *DeAnza Foyer*

Thursday, March 8

<i>Conc. Session 4A:</i> Wildlife Disease / Rodent Control <i>DeAnza I</i> 8:15 AM – 12:00 PM	<i>Conc. Session 4B:</i> Feral Cats <i>DeAnza II</i> 8:15 AM – 12:00 PM
---	---

Exhibits / Posters conclude

Lunch (*on your own*)

<i>Conc. Session 5A:</i> Bird Management / Closing Remarks <i>DeAnza I</i> 1:15 – 2:35 PM	<i>Conc. Session 5B:</i> Economics / Other Topics / Closing Remarks <i>DeAnza II</i> 1:15 – 4:00 PM
---	---

CONTINUING EDUCATION UNITS ASSIGNED

NOTES

Attendees seeking Continuing Education credit: Sign in and out with the PAPA representative at the event registration desk.

California Department of Pesticide Regulation

Monday, March 5	5.0 O
Tuesday, March 6	TBA
Wednesday, March 7	6.0 O
Thursday, March 8	3.0 O

California Vector Control Technicians

Tuesday, March 6	1.0 D
Wednesday, March 7	3.5 A & 1.5 D
Thursday, March 8	0.5 A & 2.0 D

Note: All credits are approximations and dependent upon your attendance.

BANQUET CELEBRATING THE 50TH ANNIVERSARY OF THE VERTEBRATE PEST CONFERENCE

For those who have pre-purchased banquet tickets celebrating the 50th Anniversary of the Vertebrate Pest Conference, please join us at 7:00 p.m. on Tuesday, March 6, at the Montrieo Bistro (414 Calle Principal, Monterey, CA). The banquet will provide a wonderful opportunity to reminisce about the numerous advancements in vertebrate pest control over the last half-century, while also providing the audience with a video tribute to many of the Vertebrate Pest Council's lifetime members. It should be a memorable experience for all attendees.

Note to Speakers:

There will be a computer provided in the Portola Room to review your Power Point presentation prior to speaking.

Monday, March 5

Field Trip (Optional)

The Portola Hotel & Spa at Monterey Bay

8:00 am **Depart from the Portola Hotel & Spa at Monterey Bay**

Speakers on Bus/Coach:

Richard Smith, Farm Advisor, Monterey County Cooperative Extension
Graham Hunting, Agriculture Inspector Biologist, County of Monterey

2008 Canada Geese Investigation – An Ag Commissioner’s Perspective

Casey McSwiggin, Deputy Agricultural Commissioner, Monterey County

Experimental Methods for Vole Control in Artichokes

Holly Jantz and *Roger Baldwin* PhD, University of California, Kearney Agricultural Research & Extension Center, Parlier, California.

Tour of Artichoke Facilities Sea Mist Farms

Dale Huss, Owner/ Manager, *Francisco Castaneda*, Production Assistant, *Lionell Handel*, Senior Pest Control Advisor

12:00 **Lunch (*Sponsored by Liphatech, Inc.*)**

Provided by Gino’s, Salinas at Sea Mist Farms Conference facility.

Feral Pigs

Shannon Chandler, Wildlife Disease Biologist, USDA APHIS Wildlife Services, Sacramento, California

Food Safety in the Field

Michele Jay Russell DVM, MPVM, PhD Dipl. ACVPM, University of California. Davis, California

Monterey Harbor – Sea Lion and Seal Issues

*Steve Scheiblaue*r, Harbormaster City of Monterey, CA

5:00 pm **Field trip ends. Enjoy a short walk to the Portola Hotel and Spa from the Monterey Harbor.**

Tuesday, March 6

Plenary Session

DeAnza I & II

8:30 am **Welcome**

Eric Lauritzen, Monterey County Agricultural Commissioner

8:45 **Opening Remarks and 50th Anniversary Recognition**

Robert M. Timm, Conference Chair, University of California – ANR

9:15 **Keynote Address: VPC: 50 Years of Progress?**

Terrell P. Salmon, Wildlife Specialist *Emeritus*, University of California Cooperative Extension

10:00 **Break (*co-sponsored by Bird Shield*)**

10:20 **Abating Wild Pig Damage Using Trapping Best Management Practices**

Billy Higginbotham, Texas AgriLife Extension Service, Overton, TX

10:45 **Using Bird Strike Information to Direct Effective Management Actions within Airport Environments**

*Todd J. Pitlik**, USDA/APHIS, Wildlife Services, Long Beach, CA

11:10 **Regulated Commercial Harvest to Manage Overabundant White-Tailed Deer: An Idea to Consider?**

*Scott Hygnstrom**, School of Natural Resources, University of Nebraska, Lincoln, NE

11:35 **The Global Future of Vertebrate Pest Management**

Steven Lapidge, Invasive Animals Cooperative Research Centre, Unley, Australia

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

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

Tuesday, March 6

Concurrent Session 1A: *Nontoxic Control Methods*

DeAnza I

- 1:15 pm **Session Chair: Robert H. Schmidt**
Department of Environment and Society
Utah State University, Logan, UT
- 1:20 **An Assessment of Richardson Ground Squirrel Activity and Potential Barriers to Limit Access to Sensitive Sites at Malmstrom Air Force Base, Montana**
*Gary Witmer**, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 1:45 **Raptor Perches as Vertebrate Pest Control**
Beth Slate, Contra Costa County Department of Agriculture, Concord, CA
- 2:10 **Evaluating Bird Repellents**
Leonard R. Askham, Bird Shield Repellent Corporation, Pullman, WA
- 2:35 **The Effect of Experimental Removal of Single Breeding Pairs of Resident Canada Geese on Small Ponds Historically Harboring a Single Breeding Pair in Southeastern Pennsylvania**
*Ryan P. Lynch**, USDA/APHIS, Wildlife Services, New Britain, PA
- 3:00 **Break**
- 3:20 **Progressing the Possum Pied Piper Project**
*Matt Kavermann**, Lincoln University, Canterbury, New Zealand
- 3:45 **The Use of an Electronic Control Device in Wildlife Management – A Case Series**
*Larry L. Lewis**, Alaska Department of Fish and Game, Soldotna, AK
- 4:10 **Operational Evolution in Pest Eradication through Use of Self-Resetting Traps**
*Stuart Barr**, Goodnature Limited, Wellington, New Zealand
- 4:35 **Wildlife Damage Management at the County Level: Fresno County**
Fred Rinder, Fresno County Department of Agriculture, Fresno, CA

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

If you registered for the 50th Anniversary Banquet, join us tonight at 7:00 pm at the Montrio Bistro, 414 Calle Principal, Monterey.

Tuesday, March 6

Special Symposium 1B: *Wildlife and Food Safety*

DeAnza II

- 1:15 pm **Session Chair: Edward R. Atwill**
Western Institute for Food Safety and Security
University of California, Davis, CA
- 1:20 **Food Safety and Rodent Control in Leafy Green Crops**
*Peter D. Newman**, UC Coop. Extension, San Diego Co., San Diego, CA
- 1:45 **Deer Mouse (*Peromyscus maniculatus*) as a Vector of Foodborne Protozoa Adjacent to Produce Production Fields**
*Xunde Li**, Department of Population Health and Reproduction, University of California, Davis, CA
- 2:10 **Methodological and Epidemiological Concerns When Comparing Microbial Food Safety Risks from Wildlife, Livestock, and Domestic Animals**
*Edward R. Atwill**, Western Institute for Food Safety and Security, University of California, Davis, CA
- 2:35 **Zoonotic Risks from Amphibians and Reptiles**
*Michele Jay-Russell**, Western Center for Food Safety, University of California, Davis, CA
- 3:00 **Break**
- 3:20 ***Trichinella* in California Bear and Feral Pig Populations**
*Jamie Sherman**, School of Veterinary Medicine, University of California, Davis, CA
- 3:45 **Addressing Wildlife Risks in Produce Production in the Central California Coast: A Grower's Perspective**
Bob Martin, Rio Farms, King City, CA
- 4:10 **Discussion on Food Safety Risks Associated with Wildlife**
Panel Group: Edward R. Atwill, Michele Jay-Russell, Xunde Li, Bob Martin, Peter D. Newman, and Jamie Sherman; affiliations listed above
- 4:35 **Discussion on Food Safety Risks Associated with Wildlife—Cont.**
Panel Group: Edward R. Atwill, Michele Jay-Russell, Xunde Li, Bob Martin, Peter D. Newman, and Jamie Sherman; affiliations listed above

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

If you registered for the 50th Anniversary Banquet, join us tonight at 7:00 pm at the Montrio Bistro, 414 Calle Principal, Monterey.

Wednesday, March 7

Concurrent Session 3A: *Vertebrate Pesticides*

DeAnza I

- 1:15 pm **Session Chair: Terrell P. Salmon**
Wildlife Specialist Emeritus
University of California Cooperative Extension, San Diego, CA
- 1:20 **Retrieving Older and Advancing Novel Rodenticides - for Integration with Anticoagulants**
*Charles Eason**, Lincoln University, Canterbury, New Zealand
- 1:45 **NWRC Chemical Effects Database – What’s Old is New Again**
*Jeanette R. O’Hare**, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 2:10 **Innovative Developments for Long-Term Vertebrate Pest Control**
*Helen Blackie**, Department of Ecology, Lincoln University, Canterbury, New Zealand
- 2:35 **Migration of Brodifacoum and Diphacinone from Bait Pellets into Topsoil at Palmyra Atoll National Wildlife Refuge**
*Aurora Alifano**, Island Conservation, Santa Cruz, CA
- 3:00 **Break**
- 3:20 **Protecting Nontarget Wildlife from Effects of Vertebrate Pesticides**
Stella McMillin, California Department of Fish and Game, Rancho Cordova, CA
- 3:45 **Toxicity and Potential Risk of the First Generation Anticoagulant Rodenticide Diphacinone in Raptors**
*Barnett A. Rattner**, USGS Patuxent Wildlife Research Center, Beltsville, MD
- 4:10 **The Importance of Aluminum Phosphide for Burrowing Pest Control in California**
Roger A. Baldwin, Statewide IPM Program, UC Coop. Extension, Parlier, CA
- 4:35 **Evaluation of a Pressurized Exhaust Device to Control Pocket Gophers and Belding’s Ground Squirrels in Alfalfa**
Steve Orloff, UC Coop. Extension, Siskiyou Co., Yreka, CA

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

Join us tonight at 6:00 pm in the De Anza Foyer and Portola Room for poster viewing, vendor’s forum, hors d’oeuvres, and no-host bar.

Wednesday, March 7

Concurrent Session 3B: *Introduced / Invasive Pests*

DeAnza II

- 1:15 pm **Session Chair: Mark E. Tobin**
USDA/APHIS/WS/National Wildlife Research Center
Fort Collins, CO
- 1:20 **Rangitoto and Motutapu – A Potential Model for Future Eradications on Large, Inhabited Islands with a Suite of Invasive Pest Species Present**
*Richard Griffiths**, Island Conservation, Santa Cruz, CA
- 1:45 **Turning Back the Tide of American Mink Invasion at Unprecedented Scales in Partnership with Communities**
*Xavier Lambin**, School of Biological Sciences, University of Aberdeen, Aberdeen, United Kingdom
- 2:10 **Efficacy of the HogHopper™ at Excluding Non-Target Wildlife from HOG-GONE® Baits**
*Tyler A. Campbell**, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Gainesville, FL
- 2:35 **Eastern Fox Squirrels and Western Gray Squirrels in Southern California**
*Alan Muchlinski**, Department of Biological Sciences, California State University, Los Angeles, CA
- 3:00 **Break**
- 3:20 **Changes in Possum Spatial Behaviour Following a Control Operation: Implications for Conservation and Bovine Tuberculosis Management**
*Belinda Whyte**, Centre for Wildlife Management and Conservation, Lincoln University, Lincoln, New Zealand
- 3:45 **Ecological Restoration of Sub-Antarctic Macquarie Island**
Keith Springer, Tasmania Parks and Wildlife Service, Moonah, Australia
- 4:10 **Finding Foxes in Tasmania: Faecal DNA Analysis Reveals Widespread Distribution of an Elusive Introduced Predator**
*Stephen Sarre**, Institute for Applied Ecology and Invasive Animals Cooperative Research Centre, University of Canberra, Canberra, Australia
- 4:35 **Pushing the Envelope in Paradise: A Novel Approach to Rat Eradication at Palmyra Atoll**
*Alexander Wegmann**, Island Conservation, Santa Cruz, CA

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

Join us tonight at 6:00 pm in the De Anza Foyer and Portola Room for poster viewing, vendor’s forum, hors d’oeuvres, and no-host bar.

Thursday, March 8

Concurrent Session 4A: *Wildlife Disease / Rodent Control*

DeAnza I

- 8:15 am **Session Chair: Jeanette R. O'Hare**
USDA/APHIS/WS/National Wildlife Research Center
Fort Collins, CO
- 8:20 **Prevalence of Lymphocytic Choriomeningitis Virus in House Mouse (*Mus musculus*) in New Orleans, Louisiana**
*Ashley Freeman**, Tulane University, New Orleans, LA
- 8:45 **Dynamics of Rodent-Borne Zoonotic Diseases and Their Reservoir Hosts: Invasive *Rattus* in South Africa**
*Rolanda Julius**, Centre of Excellence in Invasion Biology, University of Pretoria, Pretoria, South Africa
- 9:10 **Suburban and Wildlife Skunk Abundances and the Potential for Rabies Spread in Flagstaff, AZ**
*Jesse M. Maestas**, Northern Arizona University, Flagstaff, AZ
- 9:35 **Old World Hantavirus Infection in *Rattus* Species and Risk Management in Urban Neighborhoods of New Orleans, Louisiana**
*Ashley Freeman**, Tulane University, New Orleans, LA
- 10:00 **Break**
- 10:20 **Rats! Foiled Again: A History of NWRC Rodent Methods Development**
*Kathleen A. Fagerstone**, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 10:45 **The Management of Brown Rat (*Rattus norvegicus* Berk.) in Palaearctic**
Rylnikov Valentin, Institute of Pest Management, Moscow, Russia
- 11:10 **The Applicability of Burrow Fumigants for Controlling Belding's Ground Squirrels in Alfalfa**
*Roger A. Baldwin**, Statewide IPM Program, UC Coop. Extension, Parlier, CA
- 11:35 **An Assessment of Seedling Damage by Wild House Mice and Wild Deer Mice**
*Gary Witmer**, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 12:00 **Lunch (on your own)**

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

Thursday, March 8

Concurrent Session 4B: *Feral Cats*

DeAnza II

- 8:15 am **Session Chair: Dirk H. Van Vuren**
Department of Wildlife, Fish and Conservation Biology
University of California, Davis, CA
- 8:20 **Feral Cats in the Tall Forests of Far East Gippsland, Australia**
Tony Buckmaster, Institute for Applied Ecology and Invasive Animals
Cooperative Research Centre, University of Canberra, Canberra, Australia
- 8:45 **Getting Ready for the Next Step: The Eradication of Feral Cats on Large and Highest Priority Mexican Islands**
*José Mariá Barredo**, Grupo de Ecología y Conservación de Islas, A.C., Baja California, Mexico
- 9:10 **The Influence of Perceptions, Attitudes, and Experiences on the Perceived Risks and Benefits of Free-Roaming Cats**
*Dara M. Wald**, University of Florida, Gainesville, FL
- 9:35 **The Effects of Feral Cats on Insular Wildlife: The Club Med Syndrome**
*Steven C. Hess**, USGS Pacific Island Ecosystems Research Center, Hawaii National Park, HI
- 10:00 **Break**
- 10:20 **Social Carrying Capacity for Introduced Terrestrial Vertebrates in the Hawaiian Islands**
*Cheryl Lohr**, University of Hawai'i at Mānoa, Honolulu, HI
- 10:45 ***Toxoplasma gondii* detection in urban Hawai'i**
*Alisa A. Davis**, University of Hawai'i at Mānoa, Honolulu, HI
- 11:10 **Cat Fight! The TNR Wars**
Robert H. Schmidt, Department of Environment and Society, Utah State University, Logan, UT
- 11:35 **Free-Roaming Cats: Menace to Wildlife or Scapegoat for Human Failings? An Animal Welfare and Protection Perspective**
*John Hadidian**, The Humane Society of the United States, Washington, DC
- 12:00 **Lunch (on your own)**

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

Poster Session (Tuesday March 6, 1:15 PM through Thursday March 8, 12 noon)

DeAnza Foyer

Chair: Stella McMillin

California Department of Fish and Game, Rancho Cordova, CA

Efficacy of Milorganite® as a Non-Venomous Snake Repellent

George R. Gallagher*, Department of Animal Science, Berry College, Mount Berry, GA

The Effects of Soil Aeration on the Rodent Population at Kansas City International Airport

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

VPCRAC – A Historical Perspective

Sara Richards*, California Department of Food and Agriculture, Sacramento, CA

Impact of Introduced Small Non-Volant Mammals on Mountain Native Fauna in the Philippines

Anna Pauline O. de Guia*, University of the Philippines Los Baños, Laguna, Philippines

Effects of Vertebrate Herbivory on *Clematis morefieldii*, a Federally Endangered Plant

Kyle Paris*, Auburn University, Auburn, AL

25th VERTEBRATE PEST CONFERENCE

CONFERENCE CHAIR:

Robert M. Timm, University of California - ANR

Ph: (707) 744-1424 Ext. 103; Email: rmtimm@ucdavis.edu

PROGRAM CHAIR:

Roger A. Baldwin, University of California - Statewide IPM Program

Ph: (559) 646-6583; Email: rbaldwin@uckac.edu

REGISTRATION

Amber N. Shrum, University of California - ANR

Ph: (707) 744-1424 Ext. 101; Email: anshrum@ucdavis.edu

LOCAL ARRANGEMENTS:

Victoria Hornbaker, CA Dept. of Food and Agriculture

Ph: (916) 654-0520; Email: vhornbaker@cdfa.ca.gov

PROCEEDINGS EDITOR:

Robert M. Timm, University of California - ANR

Ph: (707) 744-1424 Ext. 103; Email: rmtimm@ucdavis.edu

FIELD TRIP:

Peter D. Newman, University of California – Coop. Extension

Ph: (858) 614-7642; Email: pdnewman@ucdavis.edu

COMMERCIAL DISPLAYS:

John O'Brien, Nevada Department of Agriculture - *Retired*

Ph: (775) 750-9212; Email: objohn1@sbcglobal.net

POSTER AND STUDENT AWARD COORDINATOR:

Stella McMillin, California Department of Fish and Game

Ph: (916) 358-2954; Email: smcmillin@dfg.ca.gov

CONTINUING EDUCATION

Rex O. Baker, California State Polytechnic University - *Emeritus*

Ph: (909) 938-7223; Email: RBakerVertIPM@aol.com

PUBLICITY:

Dirk Van Vuren, Dept. of Wildlife Fish & Conserv. Biol., UC Davis

Ph: (530) 752-4181; Email: dhvanvuren@ucdavis.edu



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