

Commercial Exhibitors

Crystal Ballroom II

Advanced Telemetry Systems

Avitrol Corporation

Bird Barrier America, Inc.

Critter Control

J. T. Eaton & Co., Inc.

Martin Engineering

Motomco Ltd.

Pestcon Systems

Rodenator

Scimetrix Ltd.

Senoret Chemical Co.

Tomahawk Live Trap Co.

Varmit Getter

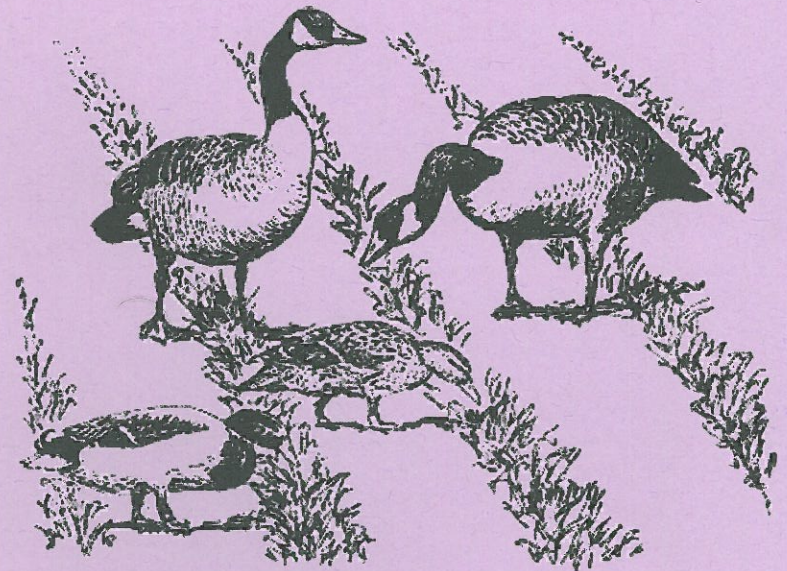
Waters Corporation

23rd VERTEBRATE PEST CONFERENCE

March 17 - 20, 2008

**Westin Hotel at Emerald Plaza,
San Diego, California, USA**

Final Program



Sponsored by:

The Vertebrate Pest Council

Conference Chair:

Minoo B. Madon

Conference At-A-Glance

Monday, March 17 – Field Trip, 8 AM – 5 PM

Tuesday, March 18

Plenary Session <i>Emerald Ballroom</i> 9:00 – 11:45 AM

Lunch (on your own)

1A: Wildlife Contraceptives <i>Emerald Ballroom</i> 1:15 – 4:35 PM	1B: <i>Symposium:</i> Marine Mammals / Predators <i>Crystal Ballroom I</i> 1:15 – 4:35 PM
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6:30 PM: No-host welcoming social
Emerald Ballroom Foyer & Crystal Ballroom II

Wednesday, March 19

2A: Birds <i>Crystal Ballroom I</i> 8:15 – 11:35 AM	2B: Rodents <i>Emerald Ballroom</i> 8:15 – 11:35 AM
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Lunch (on your own)

3A: Birds / Mammals & Reptiles <i>Crystal Ballroom I</i> 1:00 – 4:55 PM	3B: Rodents <i>Emerald Ballroom</i> 1:00 – 4:55 PM
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6:30 PM: Hors d'oeuvres and Vendors' Forum
Emerald Ballroom Foyer & Crystal Ballroom II

Thursday, March 20

4A: Management Strategies <i>Crystal Ballroom I</i> 8:15 AM – 12:00 noon	4B: <i>Symposium:</i> Wildlife and Food Safety <i>Emerald Ballroom</i> 8:15 AM – 12:00 noon
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Lunch (on your own)

Public Health / Closing Remarks <i>Emerald Ballroom</i> 1:15 – 2:45 PM

Continuing Education Units Assigned

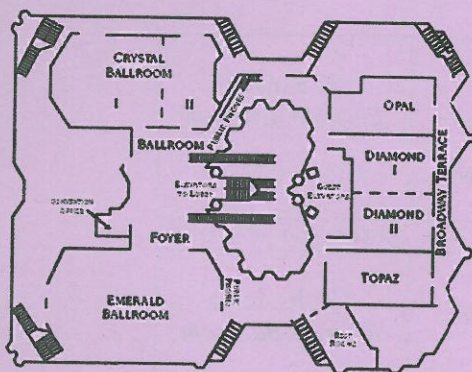
California Dept. of Pesticide Regulation

Tues. March 18	1.50 Laws, 4.00 Other
Weds. March 19	6.00 Other
Thurs. March 20	8.00 Other

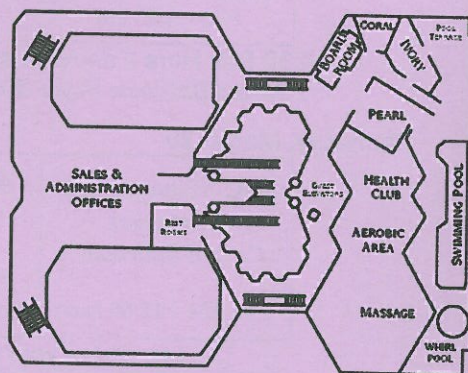
California Vector Control Technicians

Tues. March 18	0.5 A, 4.0 D
Weds. March 19	5.75 D
Thurs. March 20	4.0 D

*For all attendees seeking Continuing Education credits-
Be sure to sign in and sign out of each session with the PAPA representative,
Charlotte Carson, to receive credit for your participation..*



SECOND FLOOR



THIRD FLOOR

Note to Speakers:

You may review your PowerPoint presentation on the computer provided in the Ivory Room (third floor)

Tuesday, March 18

Plenary Session

Emerald Ballroom

9:00 am Welcome

Bob Atkins, Agricultural Commissioner, San Diego County, CA

9:05 Opening Remarks

Minoo Madon, Conference Chair, Greater Los Angeles County Vector Control District, Santa Fe Springs, CA

9:20 Keynote Address: Progress in Sensory Biology: Implications for Vertebrate Pest Control

Dr. Gary Beauchamp, Director and President, Monell Chemical Senses Center, Philadelphia, PA

10:05 The Implications of Wildlife in *E. coli* Outbreaks in Fresh Vegetables

Rob Atwill, School of Veterinary Medicine, University of California, Davis, CA

10:30 Coyotebytes.Org – A Website to Inform Urban Coyote Management

Robert M. Timm, Hopland Research & Extension Center, University of California, Hopland, CA

10:55 Evaluating the Benefits of Vertebrate Pest Control in Conservation Settings

David Choquenot, Landcare Research, Auckland, New Zealand

11:20 Anatomy of the Cape Cod Oral Rabies Vaccination Program: What Happened, and Where to Now?

Timothy P. Algeo, USDA/APHIS, Wildlife Services, National Rabies Management Program, Concord, NH

11:45 Lunch (on your own)

Tuesday, March 18

Concurrent Session 1A: Wildlife Contraceptives

Emerald Ballroom

- 1:15 pm **Session Chair: Dave Cowan**
Central Science Laboratory, Sand Hutton, York, UK
- 1:20 **Wildlife Contraception, Individuals, and Populations: How Much Fertility Control is Enough?**
Dave Cowan, Central Science Laboratory, Sand Hutton, York, UK
- 1:45 **Population Modeling of Wildlife Contraception as a Management Tool**
Christi Yoder, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 2:10 **Long-Term Efficacy and Reproductive Behavior Associated with Gonacon™ Use in White-Tailed Deer (*Odocoileus virginianus*)**
Gary Killian, Deer Research Center, The Pennsylvania State University, University Park, PA
- 2:35 **Field Test of GonaCon™ Immunocontraceptive Vaccine in Free-Ranging Female Fallow Deer**
James P. Gionfriddo, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 3:00 Break
- 3:20 ***M. avium* Bacterium: Is it an Essential Ingredient for a Single-Injection GnRH Immunocontraceptive Vaccine?**
Kelly R. Perry, USDA/APHIS Wildlife Services, National Wildlife Research Center, Olympia, WA
- 3:45 **Immune Mechanisms and Characterization of Injection-Site Reactions Involved in the Multi-Year Contraceptive Effect of the GonaCon™ Vaccine**
Lowell Miller, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 4:10 **Oral Vaccination and Immunocontraception of Feral Swine Using *Brucella suis* Utilizing Recombinant LHRH Gene Insert**
Jeffrey M. Kemp, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO

Tuesday, March 18

Concurrent Session 1B: Special Symposium: Marine Mammals

Crystal Ballroom I

- 1:15 pm **Session Chair: Leigh Taylor Johnson**
Marine Advisor, UC Coop. Extension, San Diego Co, CA
- 1:20 **Marine Mammals and Fishery Sustainability**
Mark Helvey, NOAA/National Marine Fisheries Service, Long Beach, CA
- 1:45 **Sea Lion Impacts on the California Commercial-Passenger Fishing Industry**
Robert Fletcher, Sportfishing Association of California, San Diego, CA
- 2:10 **Non-Lethal Deterrence of California Sea Lions and Pacific Harbor Seals (Pinnipeds and Interactions with Humans)**
Monica DeAngelis, NOAA/National Marine Fisheries Service, Long Beach, CA (presented by *Barbara Curry*, Hanan and Associates, Inc., Rancho Santa Fe, CA)

2:35 Break

Concurrent Session 1B: Predators

- Session Chair: Dennis Orthmeyer**
USDA/APHIS Wildlife Services, Sacramento, CA
- 3:20 **Relative Risks of Predation on Livestock Posed by Individual Wolves, Black Bears, Mountain Lions, and Coyotes in Idaho**
Mark Collinge, USDA/APHIS, Wildlife Services, Boise, ID
- 3:45 **A Distribution of Trap Monitors to the Wildlife Services Operational Program**
Patrick A. Darrow, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Logan, UT
- 4:10 **Live Trapping and Monitoring Mountain Lion Movements within a Feral Horse Population in Storey County, Nevada, 2005-2007**
Meeghan Gray, University of Nevada, Reno, NV

Wednesday, March 19
Concurrent Session 2A: Birds
Crystal Ballroom I

- 8:15 am **Session Chair: Mark Tobin**
 USDA/APHIS WS, National Wildlife Research Center
- 8:20 **Seasonal Occurrence of Blackbird Species (*Icteridae*) in Wild Rice (*Zizania*): A Response to Rice Stage or Breeding Phenology?**
Thomas A. Scott, Department of Environmental Science, Policy, and Management, University of California-Berkeley, Riverside, CA
- 8:45 **Avian Use of Rice-Baited Trays Attached to Cages with Live Decoy Blackbirds**
Jamison Winter, Dept. of Biological Sciences, North Dakota St. Univ., Fargo, ND (presented by *George M. Linz*, USDA NWRC, Bismarck, ND)
- 9:10 **Computer Simulations of Baiting Efficacy for Raven Management Using DRC-1339 Egg Baits**
Randal S. Stahl, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 9:35 **Pest Bird Control in California Strawberry Production with Falconry**
Oleg Daugovich, University of California Coop. Extension, Ventura, CA
- 10:00 Break
- 10:20 **Methodology to Quantify the Economic Impact of the Double-Crested Cormorant (*Phalacrocorax auritus*) to the Oneida Lake Region, NY**
Stephanie A. Shwiff, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins CO
- 10:45 **Effects of Roost Shooting on Double-Crested Cormorant Use of Catfish Ponds: Preliminary Results**
Jimmy Taylor, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Olympia, WA
- 11:10 **Israel-Ukraine Cooperation for the Management of a Shared Overabundant Population of Great Cormorants (*Phalacrocorax carbo sinensis*)**
Simon C. Nemtsov, Science and Conservation Division, Israel Nature and Parks Authority, Jerusalem, Israel
- 11:35 Lunch (on your own)

Wednesday, March 19
Concurrent Session 2B: Rodents
Emerald Ballroom

- 8:15 am **Session Chair: Brian Finlayson**
 CA Dept of Fish & Game, Rancho Cordova, CA
- 8:20 **Rodenticide Misconceptions**
Richard M. Poché, Genesis Laboratories, Inc., Wellington, CO
- 8:45 **Concerns Regarding Proposed Restrictions in the Use of Second-Generation Anticoagulant Rodenticides for Commensal Rodent Control**
Dale E. Kaukeinen, Kaukeinen Consulting Services, Wilmington, DE
- 9:10 **Field Efficacy of In-Burrow Applications of Kaput® Bait Block Containing 250 mg/kg Warfarin for the Control of Black-Tailed Prairie Dogs (*Cynomys ludovicianus*) in Colorado**
J. Joshua Bruening and *Jeff N. Borchert*, Genesis Laboratories, Inc., Wellington, CO
- 9:35 **Comparative Efficacy of Several Rodenticides in the Black-Tailed Prairie Dog**
Thomas Schmit, Liphatech, Inc., Milwaukee, WI
- 10:00 Break
- 10:20 **Field Efficacy of a Diphacinone Grain Bait Using an In-Burrow Baiting Method to Control the Black-Tailed Prairie Dog**
J. Joshua Bruening, Genesis Laboratories, Inc., Wellington, CO
- 10:45 **Anticoagulant Rodenticide Exposure in an Urban Population of the San Joaquin Kit Fox**
Stella C. Borucki, California Department of Fish and Game, Pesticide Investigations Unit, Rancho Cordova, CA
- 11:10 **Smarter Pest Control: Tools and Strategies**
Charles Eason, Connovation Research, Auckland, New Zealand
- 11:35 Lunch (on your own)

Wednesday, March 19

Concurrent Session 3A: Birds

Crystal Ballroom I

- 1:00 pm **Session Chair: Paul Gorenzel**
Wildlife, Fish & Conservation Biology, UC Davis
- 1:05 **Effigies for Dispersing Urban Crow Roosts**
Michael L. Avery, USDA Wildlife Services NWRC, Gainesville, FL
- 1:30 **Does Non-Lethal Management to Reduce Urban Crow Conflicts Work? Case Histories from Five Cities in New York (2002-2007)**
Richard B. Chipman, USDA/APHIS, Wildlife Services, Castleton, NY
- 1:55 **Successful Use of Alarm and Alert Calls to Reduce Emerging Crop Damage by Resident Canada Geese near Horicon Marsh, Wisconsin**
Philip C. Whitford, Capital University, Columbus, OH
- 2:20 **Evaluation of an Integrated Non-Lethal Canada Goose Management Program in New York (2004-2006)**
Stacy E. Preusser, USDA/APHIS, Wildlife Services, Castleton, NY

2:45 Break

Concurrent Session 3A: Mammals/Reptiles

- 3:05 **Use of an Electrified Mat to Control White-Tailed Deer (*Odocoileus virginianus*) Access**
Thomas W. Seamans, USDA/APHIS, Wildlife Services, Sandusky, OH
- 3:30 **Tetracycline as a Biological Marker for Mark-Recapture Analysis of Feral Pigs**
Matthew M. Reidy, Caesar Kleberg Wildlife Research Institute, Department of Animal and Wildlife Sciences, Texas A&M University-Kingsville, Kingsville, TX
- 3:55 **Controlling Mouflon Sheep at the Kahuku Unit of Hawai'i Volcanoes National Park**
Robert M. Stephens, Hawai'i Cooperative Studies Unit, PACRC, University of Hawai'i, Hilo, HI
- 4:20 **Transcontinental Introductions of Watersnakes (*Nerodia*) into California**
Peter S. Balfour, ECORP Consulting, Inc., Rocklin, CA

Wednesday, March 19

Concurrent Session 3B: Rodents

Emerald Ballroom

- 1:00 pm **Session Chair: Jon Shelgren**
CA Dept of Pesticide Regulation (*retired*)
- 1:05 **The Ability of Geo-Textile Barriers to Exclude Rodents**
Gary Witmer, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 1:30 **An Analysis of the Efficacy and Comparative Costs of Using Flow Devices to Resolve Conflicts with North American Beavers along Roadways in the Coastal Plain of Virginia**
Stephanie L. Boyles, Department of Biology, Chemistry and Environmental Science, Christopher Newport University, Portsmouth, VA
- 1:55 **If You Build It, They Will Come: Management Planning for a Suburban Beaver Population in Arizona**
Jimmy Taylor, USDA Wildlife Services NWRC, Olympia, WA
- 2:20 **Efficacy of Concussion Blast Equipment for the Elimination of Ground Hogs in the Burrow System**
Richard A. Shadel, S & S Wildlife Control Services Inc, Harrisburg, PA
- 2:45 Break
- 3:05 **Improving Nutria Trapping Success**
Patrick Burke, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 3:30 **Live Trapping California Ground Squirrels – Is for the Birds**
Lefty A. Ayers, Heritage Wildlife Management, Frazier Park, CA
- 3:55 **An Evaluation of the Effectiveness of Potential Norway Rat Attractants**
Gary Witmer, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 4:20 **Prairie Dog Contraception**
Christi A. Yoder, USDA APHIS National Wildlife Research Center, Fort Collins, CO

Thursday, March 20

Concurrent Session 4A: Management Strategies and Techniques

Crystal Ballroom I

- 8:15 am **Session Chair: Mike Taber**
Wildlife Control Technology, Inc., Fresno, CA
- 8:20 **What is a Humane Wildlife Control Service?**
John Griffin, The Humane Society of the United States, Washington, DC
- 8:45 **Ethics of Wildlife Control in Humanized Landscapes: A Response**
Stephen Vantassel, University of Nebraska-Lincoln, Lincoln, NE
- 9:10 **Developing Standard Operating Procedures for Wildlife Damage Management Activities in Urban and Suburban Areas in Southern Nevada**
Jack W. Sengl, USDA/APHIS, Wildlife Services, Las Vegas, NV
- 9:35 **Using an Environmental Management System to Improve Vertebrate Pest Programs**
Bruce A. Colvin, Colvin Consulting, Inc., Melrose, MA
- 10:00 Break
- 10:20 **The IPM Paradigm: Economics, Uncertainty, and Vertebrates**
Ray Sterner, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 10:45 **Economic Methodology to Quantify the Impacts of Rodent and Bird Damage to Vulnerable Crop/Commodity-Producing Counties**
Stephanie A. Shwiff, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 11:10 **The Changing Landscape of Animal Damage Management Needs: Directions for the Future**
Larry Clark, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO
- 11:35 **Wildlife Forensics: Non-Invasive DNA Methods for Monitoring Vertebrate Pests in New Zealand**
Dianne M. Gleeson, Ecological Genetics Laboratory, Landcare Research, Auckland, New Zealand

12:00 Lunch (on your own)

Thursday, March 20

Concurrent Session 4B: Special Symposium - Wildlife and Food Safety

Emerald Ballroom

- 8:15 am **Session Chair: Bob Beach**
Disease Program, National Wildlife Research Ctr., Fort Collins, CO
- 8:20 **Resolving Conflicting Priorities Concerning Food Safety Issues in Leafy Green Vegetables**
Mary Bianchi, UC Cooperative Extension, San Luis Obispo, CA
- 8:45 **Rodents, Rodent Control, and Food Safety**
Terrell P. Salmon, UC Cooperative Extension, San Diego, CA
- 9:10 **A Grower's Perspective of the Interface between Wildlife and Food Safety**
Hank Giclas, Western Growers Association, Irvine, CA
- 9:35 **Food Safety Risks and Mitigation Strategies for Feral Swine (*Sus scrofa*) near Agricultural Fields**
Michele Jay-Russell, California Department of Public Health, Food and Drug Laboratory Branch, Richmond, CA, and *Jerry Wiscomb*, USDA APHIS WS, Billings, MT
- 10:00 Break
- 10:20 **Managing Gulls to Reduce Fecal Coliform Bacteria in a Municipal Drinking Water Source**
Benjamin Nugent, USDA/APHIS, Wildlife Services, Lewiston, ME
- 10:45 **Role of the European Starlings in the Transmission of *E. coli* O157 on Dairy Farms**
Jeffrey LeJeune, The Ohio State University, Columbus, OH
- 11:10 **Barriers, Corridors, and Raccoon Variant Rabies in Northeastern Ohio: Research in Progress**
Are R. Berentsen, USDA APHIS WS National Wildlife Research Center, Ft. Collins, CO
- 11:35 **Open Discussion**
- 12:00 Lunch (on your own)

Thursday, March 20

Concluding Session: Public Health

Emerald Ballroom

1:15pm

Session Chair: Tyler Campbell
USDA/APHIS WS, NWRC, Kingsville, TX

1:20

Synergistic Agreement: How the California Department of Public Health and U.S. Forest Service Region 5 Challenge Cost-Share Agreement Saves Lives and Money

Joseph Burns, California Department of Public Health, Vector-borne Disease Section, Ontario, CA

1:45

Potential Food Item Distractions during Raccoon ORV Baiting Campaigns on Cape Cod, Massachusetts: Would You Like Fries with That ORV Bait?

Brian M. Bjorklund, USDA/APHIS, Wildlife Services, West Boylston, MA

2:10

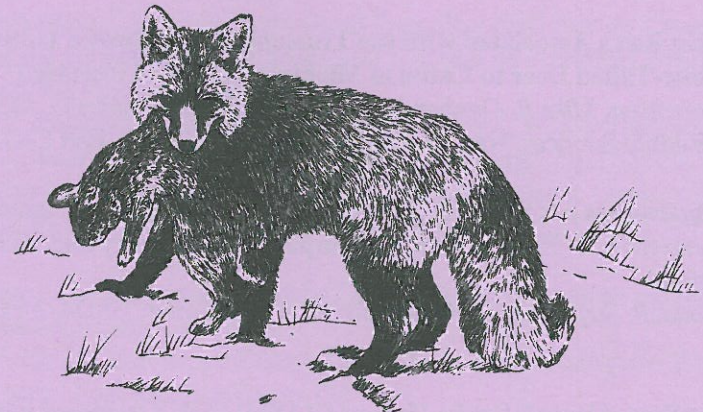
Synopsis of the Shoshone River Skunk Rabies Epizootic in Northwestern Wyoming

Craig A. Ramey, USDA/APHIS, Wildlife Services, National Wildlife Research Center, Fort Collins, CO

2:35

Closing Remarks

Terrell P. Salmon, UC Cooperative Extension, San Diego, CA and Business Manager, Vertebrate Pest Council



Poster Session

Tuesday afternoon, March 18 through

Thursday noon, March 20

Crystal Ballroom II

Posters

Dingo Control or Conservation? Attitudes towards Urban Dingoes (*Canis lupus dingo*) as an Aid to Dingo Management

Sarah A. Atkinson, University of Aberdeen, Scotland

Evaluating Risks Associated with the Transmission of Bovine Tuberculosis from White-Tailed Deer to Cattle in Michigan: Current Research

Are R. Berentsen, Mike R. Dunbar, Regina Ebersole, and Robert G. McLean, USDA/Wildlife Services, National Wildlife Research Center, Fort Collins, CO

Cost Effectiveness of Ovocontrol G® for Managing Nuisance Canada Goose (*Branta canadensis*) Populations: A Comparison of Theory and Field Applications

Joe N. Caudell, Stephanie A. Shwiff, and Michael T. Slater, USDA/APHIS Wildlife Services

Assessing Bird-Aircraft Strike Hazard (BASH) Risk Associated with Breeding and Migrating Osprey

Brian S. Dorr, Brian E. Washburn, and Thomas J. Olexa, USDA/APHIS Wildlife Services, NWRC, Mississippi State, MS, Sandusky OH, and Langley AFB, VA

Pathogenic Diseases and Movements of Wintering European Starlings Using Feedlots in Central Kansas

Shannon M. Gaukler¹, H. Jeffrey Homan², Neil W. Dyer¹, George M. Linz², and William J. Bleier¹, ¹North Dakota State University, Fargo, ND; ²USDA Wildlife Services, NWRC, Bismarck, ND

Pest Impacts On The King Ranch White-Tailed Deer Program

David Graves, Rancho Tio Moya Lease, Norias Division of the King Ranch, Kingsville, TX

Benzoate Adjuvant to Increase the Utility of Methylxanthine Pesticides: Identification of a Potential Rodenticide Formulation for Organic Food Production

John J. Johnston, USDA/Wildlife Services, National Wildlife Research Center, Fort Collins, CO

Posters, continued

Breeding Red-Winged Blackbird Response to Conspecific Models Placed in Pre-Copulatory Position: Implications for Reproductive Control

Laurel L. Moulton¹, George M. Linz², and William J. Bleier¹, ¹North Dakota State University, Fargo, ND; ²USDA Wildlife Services, NWRC, Bismarck, ND

Evaluation of Stop-level vs. Route-level Breeding Bird Survey Counts for Modeling the Influence of Land Use and Climate on Breeding Blackbird Abundance in North Dakota

Michelle L. Petersen¹, George M. Linz², Greg Forcey³, Wayne Thogmartin⁴, William J. Bleier¹, ¹North Dakota State University, Fargo, ND, ²USDA NWRC Great Plains Field Station, Bismarck, ND, ³Pandion Systems, Gainesville, FL, ⁴USGS Upper Midwest Environmental Sciences Center, La Crosse, WI

The Ecology and Surveillance of the Deer Mouse *Peromyscus maniculatus* in San Diego County, California

Ronald D. Ramos, San Diego County Department of Environmental Health, Vector Control Program, San Diego, CA

The Use of a Remote Cellular-Driven Digital Camera System for the Evaluation of OvoControl P (Nicarbazin) Pigeon Bait Acceptance in San Diego

Erick G. Wolf, Innolytics, LLC, Rancho Santa Fe, CA, and *Justin L. Roach*, ERS Group, Inc.

23rd VERTEBRATE PEST CONFERENCE

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Minoo B. Madon, Greater L.A. County Vector Control District

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