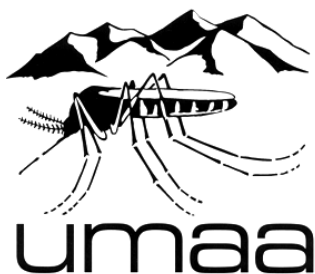


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66<sup>th</sup>  
ANNUAL CONFERENCE  
OF THE  
UTAH MOSQUITO ABATEMENT  
ASSOCIATION



Best Western Plus Ruby's Inn  
1000 S Hwy 63  
Bryce Canyon City, Utah 84764

October 6 - 8, 2013

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**Steven Voss Romney**  
**Nov. 25, 1943 – July 25, 2013**

Whether you know him as Papa, Steve, Uncle Butch or Dr. Romney, you knew he cared for you. He was a unique man, gifted with a brilliant mind, a big heart, a quick wit and an always surprising sense of humor. From the time he could walk he was on the hunt for bugs and butterflies. He always had a butterfly net handy, and gave it away whenever he met a young person with an interest in six-legged creatures.

Steven graduated from East High in 1962. In 1962, Steven began his college career at the University of Utah, finishing a B.S. in biology in 1966. In 1967 he married Ada Lynne Wootton. While Lynne continued working on her teaching degree, Steven worked on a M.A. with a thesis titled 'An Ecological and Biological Study of Four Species of *Aedes* Mosquitoes of Tooele County, Utah' which he completed in 1968. Steven then started work on his Ph.D. working under Dr. Lewis T. Nielsen. His research was done in the Arches and Canyonlands area of southeast Utah. Lynne accompanied Steven on his weekly trips through four years. On their weekly trips, Lynne and Steven slept in a cave and climbed to the five different research sites. In 1971, Steven completed his Ph.D. in medical entomology with work based on his dissertation titled 'The Bionomics of the Rock Pool Mosquito *Aedes atropalpus nielseni* Craig and O'Meara with a Survey of Associate Flora and Fauna.' In the acknowledgement section of his dissertation, Steven wrote, 'To ... Lynne, a trained biologist, go the author's fondest appreciation for her invaluable assistance in field procedures and observations, for the long hours expended in the maintenance of mosquito populations in the laboratory, for her typing of the thesis manuscript, and especially for her constant, cheerful companionship and encouragement on each of 30,400 miles of research trips to southeastern Utah.'

During his doctoral research, Steven found a pool of *Culiseta incidens* larvae infected with a *Coelomomyces* fungal parasite. This led Steven to a post-doctoral research at the University of North Carolina at Chapel Hill under Dr. John N. Couch, to see if this fungus could become a natural control agent for mosquitoes.

In 1975, he returned to Utah to create two mosquito abatement districts one in Duchesne County and one in Uintah County. He served as the Director of the Uintah Mosquito Abatement District for 33 years, improving the quality of life for thousands of people. For both humans and animals, his work decreased the chances of acquiring West Nile virus and other mosquito-borne diseases. He shared knowledge from his work and experience in numerous scientific papers, and his PhD research was featured in National Geographic Magazine. His work with mormon crickets was featured in another National Geographic Magazine article.

Steven was very involved with the Utah Mosquito Abatement Association, serving as its President in 1984 and again in 1996. Steven was best remembered as the comic relief as he gave out the door prizes at the annual meetings. He also presented many quality papers at the annual meeting that were filled with humor only Steven could get away with. His vocabulary was remarkable and was above most people's comprehension, but he always let you know what he

meant in layman's terms. He was recognized for his service to the UMAA, particularly with his obsessive-compulsive personality with regards to liability insurance, many papers and presentations at all the spring workshops he attended and other worth-while projects, receiving both the Glen C. Collect Meritorious Service Award and UMAA's highest honor the Don M. Rees Memorial Award.

Five years into their marriage, their daughter Jennie Lynne was born. Four years after that, Steven Joshua arrived to complete their family. When the children were young the family enjoyed metal detecting, gardening, and hunting for butterflies, fossils, mushrooms, wild flowers, ducks and deer. Many worms were drowned in an effort to catch fish.

In 2008, Steve and Lynne retired to Salt Lake City. They grew a beautiful garden, renewed old acquaintances, made new friends and enjoyed family and their dogs Milli and Max.

With Steven passing a void is left in our Association and in our hearts. We once again wish to recognize our friend by dedicating this meeting to his memory.

## **PROGRAM SUMMARY**

**Sunday, October 6, 2013**

3:00 – 6:30 pm	Registration
3:00 – 7:00 pm	Exhibitor Setup Red Canyon B
6:30 pm	UMAA Board Meeting Manzanita Room (2 <sup>nd</sup> floor)
8:00 pm	President's Reception Red Canyon A & B

## **Monday, October 7, 2013**

7:30 am	Registration
8:30 am	Plenary Session Red Canyon A & B
10:00 am	Break
10:20 am	Door Prize Drawing
10:30 am	General Session Red Canyon A & B
Noon	Lunch – Ruby’s Inn Restaurant
1:30 pm	General Session Red Canyon A & B
1:30 pm	Trustees Session Manzanita Room (2 <sup>nd</sup> floor)
3:00 pm	Break
3:30 pm	General Session Red Canyon A & B
3:30 pm	Trustees Session Manzanita Room (2 <sup>nd</sup> floor)
5:00 pm	Adjourn
7:00 pm	Banquet – Ebenezer Barn & Grill

## **Tuesday, October 8, 2013**

8:30 am	General Session Red Canyon A & B
10:00 am	Break
10:20 am	Door Prize Drawing
10:30 am	General Session Red Canyon A & B
11:30 pm	Adjourn
Noon	UMAA Annual Business Meeting Manzanita Room (2 <sup>nd</sup> floor)

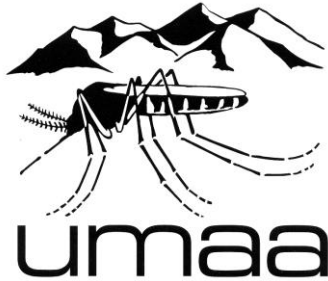
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**WELCOME TO THE**

66<sup>th</sup>

ANNUAL CONFERENCE

OF THE



UTAH MOSQUITO ABATEMENT  
ASSOCIATION

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CONFERENCE HOST

Emery County Weed and Mosquito  
Abatement  
James Nielsen, Manager

MEETING LOCATION

Best Western Plus Ruby's Inn  
1000 S Hwy 63  
Bryce Canyon City, Utah 84764  
October 6 - 8, 2013

**UMAA OFFICERS AND  
BOARD OF DIRECTORS**

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Kirk Robbins

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Randel Sessions

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Tamara Twitchell

Terrie Wierenga

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## UMAA COMMITTEE CHAIRMEN

**Auditing**

Banugopan  
Kesavaraju

**Awards**

Tyson Packer

**Computer/Data  
Processing**

Gary Hatch

**Encephalitis Surveillance**

Gary Hatch

**Environmental Impact**

James Nielsen

**Legislative &  
Resolutions**

Bill Cox

**Local Arrangements**

James Nielsen

**Newsletter**

Randel Sessions

**Nominating**

Tyson Packer

**Operational**

Brian Hougaard

**Pesticides**

Robert Brand

**Policy, Finance & Bylaws**

Banugopan  
Kesavaraju

**Program**

Eldon Rowley

**Publications**

Sammie L. Dickson

**Public Education**

Gary Hatch

**Mosquito Control-  
Fish & Wildlife Mgmt.  
Coordination**

Kirk Robbins

**Workshop**

Lewis T. Nielsen

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## Monday Morning

October 7, 2013

### Plenary Session

### Red Canyon A & B

Moderator: **Mario Boisvert, UMAA President**

- 8:30 Call to Order & Announcements, **Mario Boisvert**, UMAA President and Manager, Southwest Mosquito Abatement & Control District, Washington, UT
- 8:40 Welcome to Ruby's Inn, **Lance Syrett**, Ruby's Inn, Bryce Canyon, UT
- 8:50 Introduction of Keynote Speaker, **Eldon Rowley**, UMAA President-Elect and Manager, West Millard Mosquito Abatement District, Delta, UT
- 8:55 **Keynote Address:** The Rights of Spring: Mosquitoes, Humans, and the Environment, **Gordon Patterson**, Professor of History, Florida Tech, Melbourne, FL
- 9:40 AMCA: Preparing for the Future, **Roxanne Connelly**, AMCA President and Professor, Extension Specialist, Medical Entomologist, Vero Beach, FL
- 10:00 **Break**  
Door Prize Drawing @ 10:20
- 10:30 Can Mosquito Control Still Travel the Road to Effective Public Health? **Gary Goodman**, Assistant Manager, Sacramento-Yolo Mosquito and Vector Control District, Elk Grove and Woodland, CA
- 11:00 Invasion: *Aedes aegypti* in Central California, **Steve Mulligan**, District Manager, Consolidated Mosquito Abatement District, Selma, CA
- 11:15 The Little Things, **Jason Waterson**, Loss Prevention Manager, Utah Local Governments Trust, North Salt Lake, UT
- 11:30 Efficacy of Spheratax SPH in Catch Basin Treatments, **Sammie Dickson, PhD**, Manager, Salt Lake City Mosquito Abatement District, Salt Lake City, UT
- 11:45 **Awards – Keith Hill**, Assistant Director, Weber Mosquito Abatement District, Ogden, UT
- 11:55 **Nominations – Tyson Packer**, Assistant Manager, Box Elder Mosquito Abatement District, Brigham City, UT
- Noon **Lunch**  
**Ruby's Inn Restaurant**

## Monday Afternoon

October 7, 2013

### General Session Red Canyon A & B

Moderator: **Eldon Rowley**, UMAA President-Elect

- 1:30 Dengue, Drones, and Giant Mosquitoes, **Roxanne Connelly**, AMCA President and Professor, Extension Specialist, Medical Entomologist, Vero Beach, FL
- 1:45 Statistics Behind Trap Efficacy Studies and the Effectiveness of Passive Traps, **Katherine Grace Hobbs**, Intern, Salt Lake Mosquito Abatement District, Salt Lake City, UT
- 2:05 Are Biogents Sentinel Traps Efficient Tools for Adult Mosquito Surveillance in Southern India: **Banugopan Kesavaraju PhD**, Salt Lake Mosquito Abatement District, Salt Lake City, UT
- 2:25 The Fight Over Flight: Is Airplane Spraying Keeping Mosquitoes Down? **Nick Delisi**, Intern, Salt Lake Mosquito Abatement District, Salt Lake City, UT
- 2:45 FourStar Briquets and Granules from Conception to Full-Scale Production, **Blaine Oakeson**, Regional Sales Manager, Central Life Sciences, Marriott-Slaterville, UT
- 3:00 **Break**
- 3:30 The Effect of Color on the Selection of a Site to Deposit Eggs by Female Mosquitoes, **Garretson Oester**, President Student Congress, Walnut Hills High School, Cincinnati, OH
- 4:00 Essentria™ AP Essential Oil ULV Application Field Trial in Mesa County, Colorado, **Steve DeFeyter**, New Product Consultant, Grand River Mosquito Control District, Grand Junction, CO
- 4:15 Collaborative Use of On-line GIS Tools to Share GIS Data and Maps, **Ryan Pierson**, Sentinel GIS Sales Coordinator, Electronic Data Solutions, Jerome, ID
- 4:30 OPTI Mist 30 - 30 EC, **Ted Gilwreath**, President, Gil Manufacturing Inc. Montgomery, AL
- 4:45 **Vendor Introductions & Presentations**, Each vendor will have up to 2 minutes to introduce themselves, their company, and products.
- 5:00 **Adjourn**

**Monday Afternoon**  
October 7, 2013  
**Trustee's Session**  
**Manzanita Room (2<sup>nd</sup> floor)**

Moderator: **Tyson Packer**, UMAA Past President

- 1:30 Fair Labor Standards Act, **Jason Waterson**, Loss Prevention Manager, Utah Local Governments Trust, North Salt Lake, UT
- 2:00 Trustee Training
- LeGrand Bitter** – Executive Director, Utah Association of Special Districts
- 3:00 **Break**
- 3:30 Trustee Training
- Sammie Dickson, PhD** – Manager, Salt Lake City MAD
- 5:00 **Adjourn**

**Monday Evening**  
**BANQUET**

**Ebenezer Barn and Grill**  
(Located across Highway 63)

Doors open at 7:00 PM  
Dinner starts at **8:00 PM**

## Tuesday Morning

October 8, 2013

General Session

Red Canyon A & B

Moderator: **Banugopan Kesavaraju**, UMAA Vice President

- 8:30 SSLVMAD: How We Do GIS, **Devin Belnap**, IT Administrator and GIS Analyst, South Salt Lake Valley Mosquito Abatement District, West Jordan, UT
- 8:45 DNA Comparisons of *Culex pipiens* and *Culex erythrothorax*, **Craig Conder**, UVU Lab Manager of Innovabio, Orem, UT
- 9:00 Collection Bottle Rotator Trap Data and *Ochlerotatus nigromaculis*, **Dan Miller**, Lab Technician, and **Robert C. Mower**, Manager, Utah County Mosquito Abatement, Spanish Fork, UT
- 9:15 Overview of Black Fly Winter Control in Twin Falls, **Kirk Tubbs**, Manager, Twin Falls County Pest Abatement District, Twin Falls, ID
- 9:30 Permethrin – The Good, The Bad, and The Ugly, **Eldon Rowley**, Manager, West Millard Mosquito Abatement District, Delta, UT
- 9:45 Field Trials of a Non-Powered Carbon Dioxide Mosquito Trap, **Bob Phillips**, Manager, Moab Mosquito Abatement District, Moab, UT
- 10:00 **Break**  
Door Prize Drawing @ 10:20
- 10:30 More Improvements at the SWMACD, **Mario Boisvert**, PhD, Manager, Southwest Mosquito Abatement and Control District, Washington, UT
- 10:45 The ABCs of GHS, **Terrie Wierenga**, Administrative Manager, Cache Mosquito Abatement District, Hyde Park, UT
- 11:00 A Historical Look at Utah County Mosquito Abatement, **Robert C. Mower**, Manager, Utah County Mosquito Abatement District, Spanish Fork, UT
- 11:15 The Effect of Permethrin Based Pesticides and Their Residues on Honey Bee Mortality, **Ben Sperry**, GIS Specialist, Mosquito Abatement District – Davis, Kaysville, UT
- 11:40 The Expansion History of the Grand River Mosquito Control District, **Carter Synhorst**, Field Supervisor, Grand Junction, CO
- 11:55 **Adjourn**
- Noon **UMAA Annual Business Meeting**,  
Manzanita Room, (2<sup>nd</sup> floor)

## 2013 UMAA SUSTAINING MEMBERS

### **ADAPCO INC.**

Gale Jirik  
1851 CR 671  
Rye, CO 81069  
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(505) 366-7989 Cell  
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Peter Connelly  
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### **CENTRAL LIFE SCIENCES, INC.**

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Blaine Oakeson  
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[boakeson@central.com](mailto:boakeson@central.com)

### **CLARKE**

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### **DYNAMIC AVIATION**

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(540) 828-6070  
[cstitely@dynamicaviation.com](mailto:cstitely@dynamicaviation.com)

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Jerome, ID, 83338

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(208) 358-1142 cell  
[elecdata@elecdata.com](mailto:elecdata@elecdata.com)

**GIL MANUFACTURING, INC**

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Montgomery, AL 36124  
(800) 445-0180  
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[gilmosquito@aol.com](mailto:gilmosquito@aol.com)

**UNIVAR ENVIRONMENTAL SCIENCES**

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650 W. 800 S.  
Salt Lake City, UT 84104-1026  
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**UTAH LOCAL GOVERNMENTS TRUST**

Travis Garton  
55 South Hwy 89  
North Salt Lake, UT 84054-2504  
(801) 936-6400  
(800) 748-4440

**VALENT BIOSCIENCES**

Stephanie Whitman  
1450 North 45<sup>th</sup> Street  
Laramie, WY 82072  
(307) 721-4335  
(307) 399-1732 cell  
[Stephanie.Whitman@valent.com](mailto:Stephanie.Whitman@valent.com)

**VECTOR DISEASE CONTROL, INC. (VDCI)**

Malcom Williams  
1320 Brookwood Dr. Suite H  
Little Rock AR 72202  
(800) 413-4445  
[mwilliams@vdcnet](mailto:mwilliams@vdcnet)

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PRINTING OF PROGRAM

**AMVAC**



DOOR PRIZES

To Be Announced When Prizes Are Given Out

## NOTES





## Past Presidents

1948	Don M. Rees	1981	Dennis Hunter
1949	Don M. Rees	1982	Elmer Kingsford
1950	Don M. Rees	1983	Robert Brand
1951	Don M. Rees	1984	Steven Romney
1952	O. W. Young	1985	James Nielsen
1953	Theodore Schoenfeld	1986	Lewis Marrott
1954	O.C. Finley	1987	Kenneth Minson
1955	Howard Widdison	1988	Sammie Dickson
1956	Delore Nichols	1989	Kay Weight
1957	Jay E. Graham	1990	Lewis Nielsen
1958	Lewis Nielsen	1991	Doug Brown
1959	Lewis Fronk	1992	John Jaussi
1960	Karl Josephson	1993	Keith Wagstaff
1961	Morris Swapp	1994	Evan Lusty
1962	Glen C. Collett	1995	Bruce Bennett
1963	George F. Knowlton	1996	Steven Romney
1964	Henry Beckstead	1997	Gary Hatch
1965	D. Elden Beck	1998	Dennis Kiyoguchi
1966	Lewis Fronk	1999	Gordon Wheeler
1967	Larry Nielsen	2000	Randel Sessions
1968	Kendall Sedgewick	2001	Robert Brand
1969	Karl Josephson	2002	Brian Hougaard
1970	William Wright	2003	Val Bowlden
1971	Reed Roberts	2004	Eldon Rowley
1972	Lee Kay	2005	Kirk Robbins
1973	Wilford Egbert	2006	Ryan Arkoudas
1974	Carl D. Clark	2007	Mike Oldham
1975	Don M. Rees	2008	Sammie Dickson
1976	Earl Jenne	2009	Robert Mower
1977	Larry Nielsen	2010	John Johnson
1978	Evan Lusty	2011	Ryan Lusty
1979	Keith Wagstaff	2012	Tyson Packer
1980	Wanless Southwick		