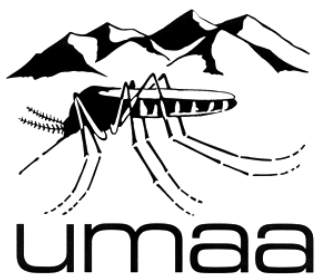


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69<sup>th</sup>  
ANNUAL CONFERENCE  
OF THE  
UTAH MOSQUITO ABATEMENT  
ASSOCIATION



Zermatt Resort & Conference Center  
784 Resort Drive  
Midway, UT 84049

October 2 - 4, 2016

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# PROGRAM SUMMARY

## Sunday, October 2, 2016

- 3:00 pm – 6:30 pm Registration
- 3:00 pm – 7:00 pm Exhibitor Setup  
Bernese Event Center
- 6:30 pm UMAA Board Meeting  
Monte Rosa
- 8:00 pm President's Reception  
Bernese Event Center

## Monday, October 3, 2016

- 7:00 am Registration
- 8:00 am Plenary Session  
Bernese Event Center
- 10:15 am Break
- 10:35 am Door Prize Drawing
- 10:45 am General Session  
Bernese Event Center
- Noon Lunch – Bernese Event Center
- 1:30 pm General Session  
Bernese Event Center
- 3:15 pm Break
- 3:35 pm Door Prize Drawing
- 3:45 pm General Session  
Bernese Event Center
- 5:00 pm Adjourn
- 7:00 pm Banquet – Bernese Event Center

## Tuesday, October 4, 2016

- 8:30 am General Session  
Bernese Event Center
- 8:30 am Trustee Session  
Grindelwald
- 10:00 am Break
- 10:30 am General Session  
Bernese Event Center
- 10:30 am Trustee Session  
Grindelwald
- 12:00 pm Adjourn
- 12:15 pm UMAA Annual Business Meeting

**The 69<sup>th</sup> Annual Conference of the Utah Mosquito  
Abatement Association is dedicated to the  
memories of  
*Glen C Collett and Robert J Brand***



**GLEN CALVIN COLLETT 1926–2016**

Glen Calvin Collett, 89 years old, of Salt Lake City, UT, passed away January 5, 2016, from complications due to his long decline from Alzheimer's disease. He was born on November 3, 1926, in Roosevelt, UT, the eighth child of Charles Capper Collett and Effa Rebecca Seeley Collett, and married Marvis Featherstone on June 7, 1950, being a caring, thoughtful husband for almost 66 years.

Learning from an early age to work hard, he graduated from South High in 1944, and then worked to put himself through college, earning a B.S. degree in Zoology in 1949, followed by an M.S. degree in Entomology from the University of Utah in 1951. For both his undergraduate and graduate work, Dr. Don M. Rees was his major professor. The title of Glen's thesis was "On the Biology of *Aedes niphadopsis*." During his college years, Glen worked as a seasonal employee at the Salt Lake City Mosquito Abatement District (SLCMAD). Upon receiving his M.S. he was hired as the district entomologist at the Tulare Mosquito Abatement District. He worked there just one year before he went into the US Army and off to Korea. Upon returning he was hired as the field supervisor of the SLCMAD in 1954. He took over as the district's manager in 1955 and remained in that position until December of 1987.

During his professional years, Glen authored or coauthored 47 scientific publications, including "An Identification Guide to the Mosquitos of Utah" and "Natural Overwintering Hosts of the Virus of Western Equine Encephalitis."

During Glen's university and employment years, he belonged to The Society of the Sigma Xi scientific research association, the Phi Sigma Biological Society, the Military Preventative Medicine Association, the California Mosquito and Vector Control Association (CMVCA), the Utah Mosquito Abatement Association (UMAA), the Society for Vector Ecology (SOVE), and the American Mosquito Control Association (AMCA).

After his retirement, Glen was the executive director of the UMAA for 18 years. He continued to serve on the SLCMAD's supervisory board for many years. He also

served on the board of the Magna Mosquito Abatement District. During his many years of work in mosquito control, he was well known throughout the USA, speaking at conferences held in many states.

For his service and professional recognition, Glen received a number of honors and awards. These included serving as president of the UMAA (1962), director of the AMCA West Central Region (1963), and 32nd president of AMCA (1972). He was the first recipient of the Dr. Don M. Rees Award from the UMAA (1987), an honorary life member of the CMVCA (now the Mosquito and Vector Control Association of California)—the only out-of-state member ever to receive this award (1988), recipient of AMCA Medal of Honor (1989), president of the SOVE (1990), and honorary member of AMCA (1998). The UMAA Meritorious Service Award was renamed the Glen C. Collett Meritorious Service Award (2007).

Glen served in the Korean War as a preventative medicine technician and was awarded the Korean Service Medal, the United Nations Service Medal, and the National Defense Service Medal. The stories of his time in Korea were shared many times and will always be remembered, as will his kindness to the people of Korea that he served.

A former bishop in the Church of Jesus Christ of Latter-day Saints, Glen was active for many years in the young men's program as a leader, teacher, and father. He served faithfully in many positions in his high priests' groups. Garrulous, friendly, and caring, he always enjoyed his home teaching assignments and even when assignments would change, he would continue to care for and be concerned about those he had served as a home teacher.

Whatever his outside concerns were, however, his main focus was his home and family. A loving husband and father, he attended every baseball game, basketball game, and tennis match his children took part in. He enjoyed taking his family hiking, camping, and on vacations, and doing yard work with them. He taught his children his philosophies of hard work and commitment, stressing his basic precepts that any job worth doing is worth doing well and that if you are not five minutes early, you are late. He was always supportive of his wife in all her endeavors and they worked unitedly together in running their home. After his retirement, they became world travelers, visiting Russia, Egypt, Italy, Peru, China, and many other countries. However, no matter how fascinating the journey, he always looked forward to returning to garden in his own backyard.

Glen is survived by his wife, Marvis; his children Robin Collett of Salt Lake City, Steven (Stacy) Collett of Tualatin, OR, Gordon (Siv) Collett of Billings, MT, and Jill (Mark) Filicetti of Boise, ID; 13 grandchildren; and his sister Veve Andersen of Murray, UT.



Robert J Brand 1949-2016

Robert J Brand passed away May 12, 2016 surrounded by his family. He was born in Murray, UT on January 23, 1949 to Elden Dale and Wilberta "Bertie" Gosman Brand. Bob loved growing up in Midvale, UT where there were fields to roam and trees to climb.

Bob studied music theory and composition at BYU and drafting at SLCC. He married his sweetheart Sharon Ann Tillman in the spring of 1975 in the Salt Lake Temple, and together they raised 5 children. In 1977 they moved to Grantsville, UT where he started the Tooele Valley Mosquito Control program. In 2000 he co-authored an identification guide for "The Mosquitoes of Utah", still in use throughout Utah and other states today. At his retirement in 2014, he received the Don M. Reese award for his exceptional work.

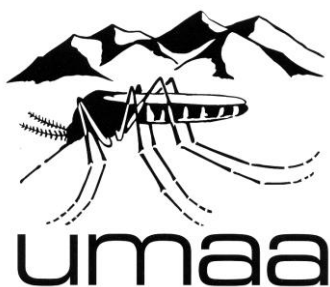
Bob was a member of The Church of Jesus Christ of Latter Day Saints and was always willing to serve. He held many callings and loved being the ward organist. He loved the Book of Mormon above any other book. He was a missionary at the LDS Employment Resource Center at the time of his passing.

Bob loved life. He had many friends that he held dear. He had an influence on many. But nothing brought him greater joy than his faith in Christ, and his family. He loved his wife and children beyond words. He loved being a grandpa, and the time he was able to spend with his grandchildren.

Bob was preceded in death by his loving parents, his little brother Larry (Cathy), and his sweet wife Sharon. He is survived by his five children, Adrian (Michele) of Grantsville, Neal (Heidi) of Syracuse, Rebecca Greenburg (Ben) of Tooele, Russell and Rachel of Grantsville, 12 grandchildren, his sisters Cheryl Nielsen (Gale) of West Jordan, and Joan Enniss (Merrill) of Bluffdale.

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WELCOME TO THE  
**69<sup>th</sup>**  
ANNUAL CONFERENCE  
OF THE



UTAH MOSQUITO ABATEMENT  
ASSOCIATION

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CONFERENCE HOST

South Salt Lake Valley  
Mosquito Abatement District  
Brian Hougaard, Manager

MEETING LOCATION

Zermatt Resort & Conference Center  
784 Resort Drive  
Midway, UT 84049  
October 4-6, 2015

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Scott Bradshaw

**Awards**  
Bryan Stephens

**Computer/Data  
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Gary Hatch

**Encephalitis Surveillance**  
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Sammie L. Dickson

**Public Education**  
Gary Hatch

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

**Workshop**  
Sammie L. Dickson

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# Monday Morning

October 3, 2016

## Plenary Session

Bernese Event Center

Moderator: **Bill Cox, UMAA President**

- 8:00 Call to order & announcements, **Bill Cox**, UMAA President and Manager, Rich County Mosquito Abatement
- 8:05 Welcome to the 68<sup>th</sup> Annual Meeting in Midway, Utah, **Ryan Starks**, Ex. Director, Heber Valley Chamber of Commerce, Economic Development and Tourism
- 8:10 Introduction of keynote speaker, **Richard Rigby**, UMAA President-Elect, and Manager, Cache Mosquito Abatement District
- 8:15 **Keynote Address:** "Can mosquitoes help us with our work? Autocidal methods against *Aedes* mosquitoes" **Stephen L Dobson, PhD**, Professor Medical and Veterinary Entomology, University of Kentucky, Lexington, KY
- 9:15 AMCA update, **Ary Faraji PhD**, West Central Regional Director, American Mosquito Control Association, Salt Lake City, Utah
- 9:30 Leadership and the AMCA: **Stanton E Cope, PhD**, President, American Mosquito Control Association
- 10:15 **Break**  
Door prize drawing @ 10:35
- 10:45 California's online vector surveillance website: CalSurv gateway: A database for mosquito surveillance and control information, **Greg White**, PhD, Assistant Director Salt Lake City Mosquito Abatement District
- 11:00 Zika surveillance and epidemiology, **Dallin Peterson**, Vectorborne/Zoonotic Disease Epidemiologist, Utah Department of Health
- 11:15 MapVision Enterprise a few key features in the challenges of disease and heightened surveillance and the CalSurv Synchronization, **Bill Reynolds**, Leading Edge Associates
- 11:30 Bayer research update and the latest on DeltaGard, **Gordon Morrison**, Bayer Environmental Science, Research Triangle Park, NC
- 11:45 Boots on the ground: *Aedes* control in Los Angeles County, **Mark Daniel**, Director of Operations, Greater Los Angeles County Vector Control District
- 12:00 **Lunch**  
Bernese Event Center



## Monday Afternoon

October 3, 2016

### General Session

Bernese Event Center

Moderator: **Richard Rigby**, UMAA President-Elect

- 1:30 Pollinators and pesticides, what's the latest, **Gordon Morrison**, Bayer Environmental Science, Research Triangle Park, NC
- 1:45 Potential attractiveness and impact of Terminix Allclear ATSB concentrate to honey bees during nectar dearth, **Kirk Tubbs**, Manager Twin Falls County Pest Abatement District, Twin Falls, ID
- 2:00 Promoting honey bee health in Utah, **Joey Caputo**, Apiary Inspector, Utah Department of Agriculture and Food
- 2:15 The effect of three pyrethroids on a non-target insect, the alfalfa leafcutting bee (*Megachile rotundata*), **Alyssa M Piccolomini M.S.** and Robert KD Peterson, PhD., Entomology Department of Land Resources and Environmental Science, Montana State University
- 2:40 Estimating methoprene resistance in laboratory and field populations of *Culex pipiens*, **Scott A. Bernhardt, PhD**, Ryan L. Keweshan, Zachariah Gompert, Utah State University
- 2:55 PrecisionVision remote piloted aircraft update and our progress with the FAA, **Bill Reynolds**, Leading Edge Associates
- 3:10 Nominations: **Ryan Lusty**, Manager, Magna MAD
- 3:15 **Break**  
Door prize drawing @ 3:35
- 3:45 What lies beneath: a practical approach to mosquito suppression in underground storm drains, **Mark Daniel**, Director of Operations, Greater Los Angeles County Vector Control District, Los Angeles, CA
- 4:00 Update on infectious diseases in Utah animals, **Barry Pittman, DVM MPH DACVPM**, Utah State Veterinarian
- 4:15 Reduced susceptibility of *Culex* larvae in catch basins, **Greg White, PhD**, Assistant Manager/Entomologist Salt Lake City Mosquito Abatement District
- 4:30** Flying high for mosquitoes, **Jared Garcia**, Jolly Rotor LLC
- 4:45 Mosquitoes, missionaries, Moab, myths, & more! **Steve DeFeyter**, Manager, Delta County Mosquito Control Program
- 5:00 **Adjourn**

**Monday Evening  
AWARDS BANQUET**

**7:00 PM**

**Bernese Event Center**

**Tuesday Morning**  
October 4, 2016  
**General Session**  
**Bernese Event Center**

Moderator: **Scott Bradshaw**, UMAA Vice President

- 8:30 Continued aerial adulticide trials in Salt Lake City, **Nadja Mayerle**, Seasonal Laboratory Director, Salt Lake City MAD
- 8:45 Intra-agency cooperation to manage an outbreak of flea-borne typhus in Los Angeles County, California, **Kenn Fujioka**, Manager, San Gabriel Valley Mosquito & Vector Control District, Kimberly Nelson, Angela Brisco, Gilbert Holguin, and J Wakoli Wekesa
- 9:00 Setting up a qPCR lab: saving time and money, **Dan Miller**, Manager, Utah County Mosquito Abatement, Spanish Fork, Utah
- 9:15 Mosquito identification – southwest style, **Sean Amodt**, Manager, Southwest Mosquito Abatement & Control District
- 9:30 “Stick that in your bucket & trap it.” – Slight modifications to CDC light trap, **Kesler Hansen**, Southwest Mosquito Abatement & Control District
- 9:45 Year two of an examination of mosquito activity using a collection bottle rotator trap, **Ryan Arkoudas**, Manager, Weber Mosquito Abatement District
- 10:00 **Break**  
Door prize drawing @ 10:20
- 10:30 Fighting vector-borne disease – putting the pieces together with geospatial solutions **Linda Dean Glover**, Frontier Precision, Inc. (formally Elecdata)
- 10:45 New updates on FourStar, Altosid, & Zenivex for 2017, **Blaine Oakeson**, Regional Sales Manager, Central Life Sciences
- 11:00 Natular G-30 field trials, **Jacob Hartle**, Field Biologist, Clarke
- 11:15 Field trials with Natular in a ditch habitat, **Jason Hardman**, Field Supervisor, Salt Lake City MAD
- 11:30 In2Care Mosquito Control, **TJ Shelby**, Industry Specialist, Univar Environmental Sciences
- 11:45 ULV mapping with I-Pads: continuation of the project, **Dan Miller**, Manager, Utah County Mosquito Abatement, Spanish Fork, Utah
- 12:00 **Adjourn**

**Tuesday Morning**  
October 4, 2016  
**Trustee's Session**  
**Conference Center – Grindelwald**

Moderator: **Bryan Stephens**, UMAA Past President

8:30 Trustee training—Part 1: Governance (roundtable discussion)

**LeGrand Bitter**, Executive Director, Utah Association of Special Districts

**Ryan Roberts**, Supervisor, Local Government Division, State Auditor's Office

10:00 **Break**

10:30 Trustee training—Part 2: Financial (roundtable discussion)

**LeGrand Bitter**, Executive Director, Utah Association of Special Districts

**Ryan Roberts**, Supervisor, Local Government Division, State Auditor's Office

12:00 **Adjourn**

12:15 **UMAA Annual Business Meeting**,  
Monte Rosa

## **2016 UMAA SUSTAINING MEMBERS**

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Marriott-Slaterville, UT, 84404  
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[boakeson@central.com](mailto:boakeson@central.com)

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[linda@frontierprecision.com](mailto:linda@frontierprecision.com)

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[mark.nelson@nuivarusa.com](mailto:mark.nelson@nuivarusa.com)

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(800) 413-4445  
[mwilliams@vdc.net](mailto:mwilliams@vdc.net)

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**PRINTING OF PROGRAM & AWARDS**

AMVAC

**DOOR PRIZES**

To Be Announced When Prizes Are Given Out

## NOTES



## Past Presidents

1948	Don M. Rees	1982	Elmer Kingsford
1949	Don M. Rees	1983	Robert Brand
1950	Don M. Rees	1984	Steven Romney
1951	Don M. Rees	1985	James Nielsen
1952	O. W. Young	1986	Lewis Marrott
1953	Theodore Schoenfeld	1987	Kenneth Minson
1954	O.C. Finley	1988	Sammie Dickson
1955	Howard Widdison	1989	Kay Weight
1956	Delore Nichols	1990	Lewis Nielsen
1957	Jay E. Graham	1991	Doug Brown
1958	Lewis Nielsen	1992	John Jausi
1959	Lewis Fronk	1993	Keith Wagstaff
1960	Karl Josephson	1994	Evan Lusty
1961	Morris Swapp	1995	Bruce Bennett
1962	Glen C. Collett	1996	Steven Romney
1963	George F. Knowlton	1997	Gary Hatch
1964	Henry Beckstead	1998	Dennis Kiyoguchi
1965	D. Elden Beck	1999	Gordon Wheeler
1966	Lewis Fronk	2000	Randel Sessions
1967	Larry Nielsen	2001	Robert Brand
1968	Kendall Sedgewick	2002	Brian Hougaard
1969	Karl Josephson	2003	Val Bowlden
1970	William Wright	2004	Eldon Rowley
1971	Reed Roberts	2005	Kirk Robbins
1972	Lee Kay	2006	Ryan Arkoudas
1973	Wilford Egbert	2007	Mike Oldham
1974	Carl D. Clark	2008	Sammie Dickson
1975	Don M. Rees	2009	Robert Mower
1976	Earl Jenne	2010	John Johnson
1977	Larry Nielsen	2011	Ryan Lusty
1978	Evan Lusty	2012	Tyson Packer
1979	Keith Wagstaff	2013	Mario Boisvert
1980	Wanless Southwick	2014	Eldon Rowley
1981	Dennis Hunter	2015	Bryan Stephens