

PROCEEDINGS



Military Entomology – Its Global Challenge

2004 DoD Pest Management Workshop

**Naval Air Station, Jacksonville, Florida
February 9 - 13, 2004**

**Sponsored by the
Armed Forces Pest Management Board
Office of the Deputy Under Secretary of Defense
(Installations and Environment)
Washington, D.C.**

Sunday. February 8

Disease Vector Ecology and Control Center

1330 – DoD Pesticide Applicator Certification/Re-certification Examinations – **LTC William Miller**, Chief Medical Zoology Branch, AMEDD Center and School, Fort Sam Houston, Texas and **Mr. David Wolffert**, Training Branch, Disease Vector Ecology and Control Center, Jacksonville, Florida

Board Certified Entomologist Examination (must have pre-registered with the Entomological Society of America) – **LCDR George Schoeler**, Professional Assistant, Disease Vector Ecology and Control Center – Bangor, Silverdale, Washington

Monday, February 9

MORNING SESSION

River Cove Officers' Club, Main Ballroom

0830 -1130 – Plenary Session, Moderator: Lt Col John Stein, Vice Chair, Armed Forces Pest Management Board and Air Force Liaison to the Defense Medical Surveillance System, Walter Reed Army Medical Center, Washington, D.C.

0835 – Announcements - **LTC(P) Richard Johnson**, Research Liaison Officer, Armed Forces Pest Management Board, Silver Spring, Maryland

0840 – Welcome and Keynote Introduction - **CAPT Gary Breeden**, Executive Director, Armed Forces Pest Management Board, Silver Spring, Maryland

0900 – Keynote Speaker: [Worldwide developments of pesticides for vector control](#) – **Dr. Graham White**, Research Scientist and Technical Consultant to the Deployed Warfighter Protection Research Program, University of Florida, Gainesville, Florida

0930 – [Current Issues in Mosquito Control](#) - **Mr. Joseph Conlon** (CDR, USN ret.) Technical Advisor, American Mosquito Control Association, Jacksonville, Florida

1000 – [NBACC, The Forward Edge of the Biodefense](#) - **LTC(P) George Korch**, Deputy Director, National Biodefense Analysis and Countermeasures Center, Fort Detrick, Maryland

1030 – AFPMB Committee Chairs, 2 minute briefs:
Contingency Advisory Committee – **Lt Col John Stein**
Education and Training Committee – **Dr. William Tozer**
Equipment Committee – **LTC Gene Cannon**
Information Transfer Committee – **LTC William Miller**
Medical Entomology Committee – **CDR David Claborn**
Diagnostics Subcommittee – **MAJ Jamie Blow**

Rodent & Tick-borne Disease Subcommittee – **Mr. Karl Neidhardt**
West Nile Virus Subcommittee – **Mr. Ben Pagac**
Natural Resources Committee – **Dr. Al Cofrancesco**
Pesticides Committee – **Mr. Cliff Myers**
Quarantine/Commodity Protection Committee – **LCDR Eric Hoffman**
Real Property Protection Committee – **Mr. Malcolm Boswell**
Repellents Committee – **LTC Mustafa Debboun**
Research Committee – **COL Scott Gordon**

1130 – Lunch

AFTERNOON SESSIONS

River Cove Officers' Club, Main Ballroom

1300 – Symposium: Vector/Pathogen Detection Diagnostics on the Battlefield; Moderator: MAJ Jamie Blow, Chief, Vector Assessment Division, U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, Maryland

1300 - [Joint Biological Agent Identification and Detection System and Entomology](#) - **MAJ Jamie Blow**, Chief, Vector Assessment Division, U.S. Army Medical Research Institute of Infectious Diseases, Fort Detrick, Maryland

1330 - [Air Force and the RAPID in Honduras, Thailand, and Iraq](#) - **Col James Swaby**, Commander, U.S. Air Force Institute of Operational Health, Brooks Air Force Base, San Antonio, Texas

1400 – RAPID Demonstration - **MAJ Blow, Col Swaby**

1500 – Symposium adjourns

BOQ Conference Center

1230 – Concurrent Session: Installation Pest Management; Moderator: Mr. Wayne Fordham, Air Force Civil Engineering Support Activity, Tyndall Air Force Base, Florida

1230 – Pest Control Using High Tech Air Currents – **Mr. William Kolbe**, Market Development Specialist, BASF Corporation, Denville, New Jersey

1300 – [Indoor Insect Light Traps](#) - **Ms. Patricia Hottel**, McCloud Services, Hoffman Estates, Illinois

1330 – Rodent Pest Management - **Mr. Daniel De Poli**, Bell Laboratories, West Melbourne, Florida

1415 – [National Gypsy Moth, Supplemental Environmental Impact Statement](#) – **Mr. Joe Cook**, Supervisory Entomologist, Forest Health Protection, State and Private Forestry, Morgantown, West Virginia

1500 – Session Adjourns

Committee Meetings, Session I

- 1500 - Contingency Advisory Committee – Officers’ Club, St. John’s Room – **Lt Col John Stein**
Diagnostics Subcommittee – Officers’ Club, Main Ballroom – **MAJ Jamie Blow**
Education and Training Committee – BOQ Conference Center, Back Room –
Dr. William Tozer
EPAS Protocol Meeting – Officers’ Club, Manatee Room – **Mr. Richard Wells**

1700 – Committee Session I adjourns

Tuesday, February 10

MORNING SESSIONS

BOQ Conference Center

0800 - Symposium: Sand Fly Control in Operation Iraqi Freedom; Moderator: LTC Russell Coleman, Assistant Chief, Department of Entomology, Walter Reed Army Institute of Research, Silver Spring, Maryland

0800 – Introduction - **LTC Russell Coleman**, Assistant Chief, Department of Entomology, Walter Reed Army Institute of Research, Silver Spring, Maryland

0805 – [520th Theater Army Medical Laboratory in Iraq](#): Overview of the Leishmaniasis Control Program at Tallil Air Base and Vector Diagnostics - **LTC Russell Coleman**, Assistant Chief, Department of Entomology, Walter Reed Army Institute of Research, Silver Spring, Maryland

0845 – [Sand Fly Surveillance at Tallil Air Base and an Assessment of Bednet Usage and Air-Conditioning for the Prevention of Sand Fly Bites](#) – **Maj Douglas Burkett**, Range Operations Environmental Officer, Langley Air Force Base, Virginia

0905 – [Evaluation of the Vector Control Program at Tallil AirBase](#) - **MAJ Jennifer Caci**, Chief, Entomological Sciences Division, U.S. Army Center for Health Promotion and Preventive Medicine, Fort McPherson, Georgia

0925 – [Sand Fly and Leishmaniasis Surveillance, Control, and Diagnostics on an Air Force Compound at Tallil Air Base from August to November 2003](#) – **Capt Keith Blount**, School of Aerospace Medicine, Brooks Air Force Base, San Antonio, Texas

0945 - Break

1000 - [PVNTMED DET Perspective on Sand Fly Surveillance and Control in the V Corps Area of Operations](#) - **MAJ Mark Carder**, Research Entomologist, Walter Reed Army Institute

of Research, Silver Spring, Maryland

1015 - [Sand fly Surveillance and Control in the Marine Expeditionary Force Area of Operations](#)
- **LT Ron Knight**, Doctoral Student, The Johns Hopkins University Bloomberg School
of Public Health, Baltimore, Maryland

1030 - Questions: Panel of Speakers

1100 – [Operation Iraqi Freedom – Entomology Lessons Learned from the Army Medical
Department](#); **LTC David West**, Deputy Director, Proponency Office for Preventive
Medicine – San Antonio, Fort Sam Houston, Texas

1130 – Session adjourns

River Cove Officers' Club, St. John's Room

0800-1200 – The Practice of Integrated Pest Management – Materials and Methods.
Moderator: Dr. Peter Egan, Armed Forces Pest Management Board, Washington, D.C.

0800 – Introduction - **Dr. Peter Egan**, Environmental Biologist, Armed Forces Pest
Management Board, Washington, D.C.

0805 – [The Development and Use of a Thermal Chamber](#) - **Mr. Brian Zeichner**, Master
Consultant in Entomology, U.S. Army Center for Health Promotion and Preventive
Medicine, Aberdeen Proving Ground, Maryland

0820 – [Invasive Plant Management at DoD Installations – a Few Success Stories](#) - **Mr. Steve
Manning**, President, Invasive Plant Control, Inc., Nashville, Tennessee

0850 – [Model Invasive Species Control Project: Yellow Starthistle](#) - **Dr. Herbert Bolton**,
National Program Leader, Cooperative State Research Education and Extension Service,
U.S. Department of Agriculture, Federal Liaison to the U.S. Army Environmental Center,
Aberdeen Proving Ground, Maryland

0920 – Application of IPM to Electric Utility Rights-of-Ways in New York State – **Mr. Kevin
McLoughlin**, System Forester, New York Power Authority (NYPA), Gilboa, New York

0950 - Break

1000 – [Integrated Vegetation Management](#) - **Mr. Richard Johnstone**, System Forester,
Conectiv Power Delivery; President, Integrated Vegetation Management Partners, Inc.,
Newark, Delaware

1030 - [Integrated Management of Fire Ant Populations on Military Installations](#) - **Dr. Roberto
Pereira**, Research Entomologist, Imported Fire Ant and Household Insects Research
Unit, Center for Medical, Agricultural, and Veterinary Entomology, U.S. Department of
Agriculture, Gainesville, Florida

1100 – [IPM Tools Available for Fly Management](#) - **Dr. Jerome Hogsette**, Research Entomologist, Mosquito and Fly Research Unit, Center for Medical, Agricultural, and Veterinary Entomology, U.S. Department of Agriculture, Gainesville, Florida

1130 – [Integrated Control of Termites](#) - **Dr. Faith Oi**, Extension Scientist, Department of Entomology and Nematology, University of Florida, Gainesville, Florida

1200 – Lunch

AFTERNOON SESSION

NAS Flight Line

1230 - 1600 – Aerial Spray, Capt Mark Breidenbaugh, 757th Airlift Squadron, Youngstown Air Reserve Station, Vienna, Ohio

River Cove Officers' Club, Main Ballroom

1300 -1700 – [Vendor Displays](#), LCDR Michael Zyzak and Maj Sharon Spradling, Defense Pest Management Information Analysis Center, Silver Spring, Maryland

Committee Meetings, Session II

1500 – Quarantine/Commodity Protection Committee – BOQ Conference Center, Front Room – **LCDR Eric Hoffman**

Real Property Protection Committee - BOQ Conference Center, Back Room –

Mr. Malcolm Boswell

Repellents Committee – Officers' Club, Manatee Room – **LTC Mustapha Debboun**

West Nile Virus Symposium/SubCommittee Meeting – Officer's Club, St. John's Room

– **Mr. Ben Pagac**

1- [WNV DoD National Surveillance](#)- Pagac

2- [EGGM West Nile Virus Prevention Program](#)- Fay

3- [Great Plain Regional Medical Command WNV System](#)- Bast

4- [Surveillance and Control Procedures for WNV Vectors](#)- Stein

5- [West Nile Virus Overview CY 03](#)- West

1700 – Afternoon Sessions adjourn

Wednesday, February 11

MORNING SESSION

NAS Flight Line

0800-1130 – Unmanned Aerial Vehicle Static Display (due to weather), 1st Lt Jeff Miller, Air Force Robotics Laboratory, Tyndall Air Force Base, Florida

BOQ Conference Center

0800 -1500 – Symposium: GIS for Pest/Vector-borne Disease Management, Where We Are and How Do We Leverage NASA's Earth Science Data and Technology?; Moderator: Mr. Brian Zeichner, Master Consultant in Entomology, U.S. Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Maryland

0800 – [Introduction and Symposium Goals](#) - **Mr. Brian Zeichner**, Master Consultant in Entomology, U.S. Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Maryland

0805 – Georeferencing Data, Pest Population Mapping and Data Delivery - **Mr. Brian Zeichner**, Master Consultant in Entomology, U.S. Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Maryland

0825 – [Employing GIS Technology for Mosquito Larvae Surveillance and Control](#) - **Mr. Kevin Fay**, Pest Management Coordinator, Fort Meade, Maryland

0835 – [Using GIS as an Everyday Tool for Base-level Pest Control](#) - **Ms. Vicki Johnson**, Pest Management Supervisor, Minot Air Force Base, North Dakota

0850 – [Use of GIS for Natural Resources Management](#) - **Ms. Peg Margosian**, Geographer, Avon Park Air Force Range, Florida

0900 – [GIS Applications for Right of Way Management on New York Power Authority High Voltage Transmission Lines](#) – **Mr. John Wingfield**, Manager, Surveying and Mapping, New York Power Authority, Gilboa, New York

0920 – Break

0935 – [A GIS Tool for Deployment Planning of Disease and Environmental Risk](#) - **Mr. Steven Lufkin**, Environmental Division, HQ Air Force Special Operations Command, Hurlburt Field, Florida

1005 – [Mapping of Potential Habitat for Vectors of African Tick Bite Fever in the Masai Mara Region of Kenya](#) - **Ms. Caroline Tungwony**, GIS Technician, U.S. Army Medical Research Unit – Kenya, Nairobi, Kenya

1020 - [Models for Distribution of *Ixodes scapularis* and West Nile Virus Vectors](#) - **Dr. Thomas Kollars**, Molecular Biologist, Entomological Sciences Program, U.S. Army Center for Health Promotion and Preventive Medicine, Aberdeen Proving Ground, Maryland

1035 – [GIS and Predictive Modeling: How to Begin Quantifying the Unknown](#) – **CDR Kenneth Stein**, Officer-in-Charge, Fleet Hospital-Fort Dix, Detachment 5, Fort Dix, New Jersey

1055 – [Remote Sensing Data Currently Available for Vector-borne Disease Modeling](#) – **Ms. Penny Masuoka**, Researcher, Uniformed Services University for the Health Sciences, Bethesda, Maryland and Ms. Katalin Kovacs, NASA Goddard Space Flight

Center, Greenbelt, Maryland

1130 – Lunch

1300 – [NASA Earth Science for Vector-borne Diseases](#) - **Dr. Robert Venezia**, Program Manager for Public Health, Application Division, NASA Headquarters, Washington, D.C.

1330 – NASA Remote Sensing Technologies for Military Pest Management – **Ms. Timi Vann**, Deputy Program Manager for Public Health, Application Division, NASA Headquarters, Washington, D.C. and **Dr. Robert Ryan**, Systems Engineering, Remote Sensing Directorate, Space Operations, Lockheed Martin, NASA John C. Stennis Space Center, Mississippi

1415 – [Malaria Modeling for Thailand and Korea – NASA Techniques and Call for Validation Partners](#) – **Dr. Richard Kiang**, Leader, Earth Science Data Operations Group, NASA Goddard Space Flight Center, Greenbelt, Maryland

1445 - Group discussion (GIS Subcommittee)

1700 – Session Adjourns

AFTERNOON SESSION

River Cove Officers' Club, St. John's Room

1300 – Moderator: Mr. Kevin Fay, Pest Management Coordinator, Fort Meade, Maryland

1300 – [New Pest Control Products](#) – **Mr. Ron Bissonette**, UNIVAR USA, Fort Myers, Florida

1400 – [Resurgence of Bed Bugs](#) – **Dr. Harold Harlan**, Senior Entomologist, Field Services, National Pest Management Association, Inc., Dunn Loring, Virginia

1430 – Discussion of Installation Pest Management Concerns and Challenges

1500 – Session adjourns

Committee Meetings, Session III

1500 – GIS Sub Committee – BOQ Conference Center, Front Room, Mr. Brian Zeichner
Rodent & Tick-borne Disease Sub Committee – BOQ Conference Center, Back Room,
Mr. Karl Neidhardt

- 1- [Tick-borne Diseases](#)- Neidhardt
- 2- [Transforming Disease Vector Management Development](#)- Stein
- 3- [Diversity of Acarina and Prediction of Distribution Using GIS](#)- Kollars
- 4- [Detection of Arthropod-Borne Pathogens Using PCR Techniques](#)- Miller

Natural Resources Committee – Officer's Club, Manatee Room, **Dr. Al**

Cofrancesco

Equipment Committee – Officers Club, St. John’s Room, LTC Gene Cannon

1700 – Committees adjourn

Evening

River Cove Officers’ Club, Main Ballroom

1900 – Banquet, Main Ballroom

Speaker: Dr. Norman G. Gratz, former Director, Vector Biology and Control Unit, World Health Organization, Geneva, Switzerland, now Consultant, Commugny, Switzerland

Presentation: Battling an Insidious Enemy - the Vector-Borne Diseases

Thursday, February 12

MORNING SESSION

River Cove Officers’ Club, Main Ball Room

0900 – 1130 - Army Entomology Session, Moderator: COL Stephen Berté, Entomology Consultant to the Army Surgeon General and Joint Program Manager, Chemical and Biological Medical Systems, Frederick Maryland

0900 - [Writing OER’s](#) - MAJ Aaron Silver, Career Activities Manager, Human Resources Command, Alexandria, Virginia

0930 - [Medical Service Corps Update](#) - COL Robert J. Thompson, Assistant Corps Chief, Office of the Surgeon General, Falls Church, Virginia

1030 - [Consultant Update:](#) COL Stephen Berté, Entomology Consultant to the Army Surgeon General and Joint Program Manager, Chemical and Biological Medical Systems, Frederick Maryland

1130 – Group Photo

BOQ Conference Center

0800-1100 – Air Force Entomology Session – Col James Swaby, Commander, U.S. Air Force Institute of Operational Health, Brooks Air Force Base, San Antonio, Texas and Mr. Wayne Fordham, Air Force Civil Engineering Support Activity, Tyndall Air Force Base, Florida

0800 – [Welcome and Introductions](#) – Col James Swaby and Mr. Wayne Fordham

0815 – [Air Force Civil Engineering Support Activity Update](#) – Mr. Wayne Fordham and SMSgt Jim Lucas

0835 – [U.S. Air Force Academy Manpower](#) – **Mr. Phil Marne**, Command Entomologist, U.S. Air Force Academy, Colorado Springs, Colorado

0845 – [Aerial Spray Update](#) - **Capt Mark Breidenbaugh**, 757th Airlift Squadron, Youngstown Air Reserve Station, Vienna, Ohio

0900 – Break and Photo Time

0915 – Operation Iraqi Freedom [1](#), [2](#) - **Maj Douglas Burkett**, Range Operations Environmental Officer, Langley Air Force Base, Virginia and **Capt Keith Blount**, School of Aerospace Medicine, Brooks Air Force Base, San Antonio, Texas

1015 – [Active Duty Career Field Update](#), [Deployment Schedule](#) - **Col James Swaby**, Commander, U.S. Air Force Institute of Operational Health, Brooks Air Force Base, San Antonio, Texas and Assistant Corps Chief, Biomedical Sciences Corps

1100 Adjourn

0800-1100 – Navy Applied Biology Session – Mr. Harvey Shultz

BOQ Conference Center

1100 – 1500 – Wildlife Management on Airfields, Moderator: Mr. Gene LeBoeuf, Chief USAF Bird/Wildlife Airstrike Hazard (BASH) Team, Kirtland Air Force Base, New Mexico

1100 – [Overview of Bird/Wildlife Airstrike Hazard \(BASH\) Program](#) - **Mr. Gene LeBoeuf**, Chief USAF Bird/Wildlife Airstrike Hazard (BASH) Team, Kirtland Air Force Base, New Mexico

1200 – Lunch

1330 – [Smithsonian Feather Identification and DNA Lab](#) – **Dr. Carla Dove**, Principal Investigator, Smithsonian Institution, Washington, D.C.

1400 – [Overview of USDA’s Aviation Wildlife Hazard Assistance Program](#) – **Dr. Richard Dolbeer**, USDA National Coordinator, Aviation Safety and Assistance Center, Sandusky, Ohio

1430 – [Small Mobile Radar Use to Detect Birds in the Airfield Environment](#) – **Mr. Ron Merritt**, DeTect Inc., Panama City, Florida

AFTERNOON SESSION

River Cove Officers’ Club, Main Ballroom

1300 - 1500 – Symposium: Where the Rubber Meets the Road: Creative Pest Control on the Fly, Moderator: LCDR George Schoeler (for LT Elizabeth Dykstra), Professional Assistant, Disease Vector Ecology and Control Center – Bangor, Silverdale, Washington

1300 – [MREs and Other Means of Pest Control](#) - **LCDR George Schoeler** (for **LT Elizabeth Dykstra**), Professional Assistant, Disease Vector Ecology and Control Center – Bangor, Silverdale, Washington

1315 – Pest Management When All You’ve Got Is a Water Bottle: Controlling Pest with What’s Around! – **LTC William Miller**, Chief, Medical Zoology Branch, Army Medical Department Center and School, Fort Sam Houston, Texas

1335 – How the Price of Copper Changed Malaria Control in Zambia – **Mr. Manuel Lluberas**, Vector Control Systems Manager, H.D. Hudson Manufacturing Company, Jacksonville, Florida

1400 – [Venomous Snakes: The Nature of the Threat to Operational Forces](#) – **Mr. Joseph Conlon** (CDR, USN ret.) Technical Advisor, American Mosquito Control Association, Jacksonville, Florida

1500 – Symposium adjourns

Navy Disease Vector Ecology and Control Center

1300 – 1500 - Equipment Refresher Training; Mr. Kent Smith, Testing and Evaluation Branch , Navy Disease Vector Ecology and Control Center, Jacksonville, Florida

Committee Meetings, Session IV

1500 – Information Transfer Committee – BOQ Conference Center – LTC William Miller

1- [Invasive Species Demo](#)

2- [IPMIS Update](#)- Breshnahan

3- [Nonindigenous Species Database](#)- Fuller

Medical Entomology Committee, Officers’ Club, Main Ballroom, **CDR David M. Claborn**

Pesticides Committee, Officers’ Club, St. John’s Room, **Mr. Clifford Myers**

1700 – Committee Session IV adjourns

Friday, February 13

BOQ Conference Center

0830 – 175th Meeting of the Armed Forces Pest Management Board – Lt Col John Stein, Vice Chair, Armed Forces Pest Management Board and Air Force Liaison to the Defense Medical Surveillance System, Walter Reed Army Medical Center, Washington, D.C.

1200 - Adjourn