

### Wildlife Field Forensics

(406) 244-0007

38689 Highway 200 East, Box 6; Greenough, MT 59823

# Wildlife Field Investigation Seminar – 15-17 April 2008

Sponsored by the Association of Midwest Fish and Game Law Enforcement Officers

Contact: Carleen Gonder (406) 244-0007; carleen\_montana@yahoo.com

Three day seminar at Lubrecht Experimental Forest, University of Montana. 24 hours of POST credit available for participants

Lubrecht, a university forestry field station approximately 30 miles east of Missoula, MT, is a full conference facility with overnight accommodations and staffed kitchen.

#### **Participants**

Montana Fish, Wildlife and Parks wardens, Wyoming Game and Fish wardens, Idaho Fish and Game conservation officers, other state and provincial wildlife officers, US Fish and Wildlife Service Refuge Officers and Special Agents, National Park Service law enforcement rangers

#### **Topics and presenters**

#### Field necropsy protocols, and recognition and handling of hazardous materials

Richard Stroud, DVM, wildlife medical examiner; US Fish and Wildlife Service National Fish and Wildlife Forensics Lab

#### Firearms evidence field analysis

Tony Latham, Regional Investigator, Idaho Fish and Game

Backcountry wildlife investigation techniques: When batteries go dead and cell phones don't work Tim Eicher, Special Agent, US Fish and Wildlife Service

### Time of Death and decomposition, plus basic forensic entomology

Carleen Gonder, Interdisciplinary graduate student in Criminology and Forensic Anthropology for wildlife forensics at the University of Montana, Missoula, MT

#### The basics of field forensics, materials and practicum

Karen Rudolph, PhD, Forensic Specialist, Idaho Fish and Game

#### Utah protocols for carnivore attacks

Jodi Becker, Training Sgt., Utah Division of Wildlife

#### Montana case histories: Field investigations of large scale operations

JD Douglas, regional Investigator, Montana Fish, Wildlife and Parks

#### Footwear and tire track collection

Deborah H. Lougee, CLPE, (Certified Latent Print Examiner) Forensic Scientist, Montana DOJ, Missoula, MT

#### Wildlife Service Dogs: their versatility and use in evidence recovery

Kirk Olchowy, Fish and Wildlife Officer, Alberta Fish and Wildlife Enforcement Field Service

#### Forensic botany: Basics of plant biology for forensic applications

Kevin Murray, PhD, University of Montana biologist

#### Idaho wolf poisoning case

Richard Stroud, DVM, US Fish and Wildlife Service and Tony Latham, Idaho Fish and Game (Tentative: Scott Bragonier, Special Agent, US Forest Service; previously with US FWS)

### Field necropsy protocols for poaching investigations

Richard K. Stroud, DVM, US FWS National Fish and Wildlife Forensics Lab, Ashland, OR Dr. Stroud received an undergraduate degree in fisheries biology and graduated from Washington State University as a Doctor of Veterinary Medicine. He completed further graduate work in Veterinary Science Pathology at Oregon State University. Since 1990 Dr. Stroud has been the Veterinary Medical Examiner with US Fish and Wildlife Service, Division of Law Enforcement National Fish and Wildlife Forensics Lab where he conducts pathological evaluations and evidence gathering of law enforcement submissions to the lab, conducts field investigations with FWS special agents and serves as expert court witness in highly complex wildlife cases. He has numerous publications to his credit and has led and participated in several seminars and conferences internationally.

#### Firearms evidence field analysis

#### Tony Latham, Idaho Fish and Game Regional Investigator, Salmon, ID

The firearms course instructs field techniques to conduct detailed examinations of spent bullets, cartridge cases and suspected firearms. It includes both lecture and practical exercises. This indepth course has been given to: North American Wildlife Enforcement Officers Assoc. conference, Idaho Fish and Game in-service and new officer training, Montana Fish, Wildlife and Parks in-service, Ontario Ministry of Natural Resources in-service, and National Tribal Game Warden training. Tony has a degree from the University of Idaho and was a uniformed Conservation Officer with Idaho Fish and Game for 15 years. His experience includes backcountry patrols via boat and horseback. In 2003 he was selected as Idaho Fish and Game's first Regional Investigator. He has been the recipient of multiple officer of the year awards.

# Backcountry wildlife investigation techniques Tim Eicher, US FWS Special Agent, Cody, WY

This presentation will detail recovery of ballistic evidence, field necropsies and crime scene reconstruction with a focus on backcountry techniques. With a degree in Forestry, a Master's in Wildlife Biology and experience as a guide and outfitter in the Gila Wilderness, Tim Eicher began his wildlife law enforcement career as a Conservation Officer with the New Mexico Dept of Game and Fish in 1978. He joined US FWS as a Special Agent in 1988. In addition to conducting criminal investigations, he instructs interview and interrogation, crime scene techniques, handling of evidence, and wildlife field forensic techniques throughout the US, and in Canada, Ukraine, Botswana and Tanzania.

Time of Death and decomposition; includes basic forensic entomology (recognition of relevant insects and collection protocols; MSU data base contact – Gregory Johnson, PhD) Carleen Gonder, Interdisciplinary graduate student in Criminology and Forensic Anthropology for wildlife forensics at the University of Montana, Missoula, MT Several carcasses are in advanced and dry stages of decomposition in a secure site at Lubrecht Forest and include: mountain lions, black bears, wolves and a whitetail deer. The purpose of this project is to develop time of death markers to be used in field investigations by wildlife officers. Carleen was a law enforcement officer with US Fish and Wildlife Service, Wyoming Game and Fish and National Park Service, and has received numerous awards for investigations.

#### The basics of field forensics, materials and practicum

### Karen Rudolph, Ph.D., Idaho Fish and Game Forensic Specialist

Karen's presentation will focus on field techniques for evidence collection and determination, and will include a practical with a "mock" crime scene. Karen has an undergraduate degree in molecular, cellular and developmental biology from the University of Colorado, and a doctorate in molecular biology from Dartmouth College. She has been with Idaho Fish and Game since 1995, initially participating in bighorn sheep disease research and in 1997 assumed duties of Idaho's wildlife forensics program.

# Utah protocols for carnivore attacks

# Jodi Becker, Utah Division of Wildlife Training Sergeant

Jodi's presentation will focus on basic scene investigations of predator attacks. This field based training is designed as a working outline for field personnel. After receiving a Bachelor of Science degree in Michigan, Jodi joined the National Park Service and worked in law enforcement at Crater Lake National Park and Apostle Islands National Lakeshore. Jodi began her work with Utah Division of Wildlife in 1992 and is currently the statewide training coordinator. Additionally, she instructs K-9 drug and wildlife detection at the Utah State Police Academy.

# Montana case histories: Field investigations of large scale operations J.D. Douglas, MT Fish, Wildlife and Parks, R-2 Regional Investigator

This presentation will detail a large scale investigation in Seeley Lake, MT which included covert operations, video/photo analysis and numerous hours of typical warden investigative duties. There will also be a presentation of a smaller case involving the taking of a trophy mule deer and the photo evidence used in that prosecution. J.D. has a degree in wildlife biology from the University of Montana and began his law enforcement career as a Sheriff's Deputy in 1997. J.D. joined FWP in 2001 and has been a FWP warden for 6 years. He is currently the Region 2 Regional Investigator. He is a training officer, and recipient of multiple wildlife officer awards including the Shikar Safari Officer of the Year in 2005.

#### Footwear and tire track collection

# Deborah H. Lougee, CLPE, (Certified Latent Print Examiner) Forensic Scientist, Montana DOJ, Missoula, MT

Bring your Camera Equipment! Debbie has 28 years experience in the collection and comparison of latent prints, footwear impressions and tire tracks. Specific to outdoor crime scenes, the non-destructive preservation method for footwear and tire track evidence is photography. Techniques for proper capture and lighting will be discussed with hands-on practice. Various casting methods using dental stone will be demonstrated and include more hands-on practical exercises. Explanation on how the comparison process is conducted and the types of conclusions the lab would report to you will be given. The various resources available for database searches to identify a particular vehicle, tire or shoe are provided to assist you in your investigation for suspects.

# Wildlife Service Dogs: Their versatility and use in evidence recovery

Kirk Olchowy, Alberta Fish and Wildlife Officer, and Jodi Becker, Utah Training Sgt. Kirk will present details of Alberta's Wildlife Service Dog program using Wind River Bear Institute (WRBI) Karelian Bear Dogs (KBDs), and will highlight their versatility and agency image enhancement. Use of Wildlife Service Dogs provides a canine adjunct to tracking and

carcass detection, can push back carnivores and provides safety during chance encounters or conflict situations, and provides potential for evidence recovery at poaching investigations (spent casings and other material). Jodi Becker will also give a presentation of Utah Division of Wildlife's K-9 program. Kirk Began service with the Alberta Government as a Provincial Park ranger in 1974 and was hired as an Alberta Fish & Wildlife Officer in 1976. He has been certified as a Bear Response Team Leader since 1989, and became involved with KBDs in 1998. He was selected by Alberta Fish & Wildlife and WRBI in 2000 as one of two officers to receive a KBD from WRBI. These were the first service dogs of any description taken on by the Alberta Fish & Wildlife Division of the Department of Sustainable Resource Development. He subsequently coordinated the acquisition and training of both dogs and handlers, as well as drafting a Standard and Procedure Document for the Fish & Wildlife Division for the Alberta KBD Program. He continues to act as both a handler and a coordinator for the KBD Program.

# Forensic botany: Basics of plant biology for forensic application Kevin Murray, PhD, University of Montana, Missoula biologist

Focus of this presentation will be on time dependent plant phenology (plant development stage at the time plant was crushed under a carcass, foot tracks at a poaching scene, etc). It will include information on the transfer of seeds, pollen, moss, and lichens that are region specific (plant parts found on a suspect, the carcass, the suspect's vehicle, etc). Dr. Murray is currently a Lecturer in Biology. Primary activities center on teaching Introductory Biology/Botany courses as well as more advanced courses in Plant Evolution and Phylogenetics, Geology/Biology and Diversity of Life. Prior to coming to the University of Montana in 1995, Dr. Murray held a similar position at the University of Nevada, Las Vegas. Dr. Murray's research interests have centered on plant physiological ecology, community structure, conservation biology and exotic plant invasiveness. These studies have involved work with lichens, bryophytes (mosses), perennial herbaceous, woody invasive and timberline coniferous species at sites ranging from Arctic Alaska, the Sierra Nevada, central Montana and desert systems of the Great Basin region. Dr. Murray holds degrees in Biology (B.S.), Ecology & Systematics (M.A.) from San Francisco State University and a PhD in Ecology, Evolution and Conservation Biology from the University of Nevada, Reno.

#### Idaho wolf poisoning case

# Richard Stroud, DVM, US FWS and Tony Latham, ID Fish and Game (Tentative, Scott Bragonier, USFS; previously with US FWS)

Coordination between US Fish and Wildlife Service and Idaho Fish and Game resulted in successful conviction of an individual attempting to poison wolves in Idaho. Scott and Tony will present details of the field investigation, and Dr. Stroud will highlight the work conducted by the federal wildlife forensics lab for this case.

# Recognition of hazardous materials and safe handling techniques *Richard K. Stroud, DVM, US FWS*

Dr. Stroud will discuss recognition of hazardous materials that may be present in and around carcasses, and safe handling techniques for evidence recovery.