



*Anubis - the Egyptian god who oversaw embalming and mummification, as well as escorting the deceased through the procedures for entering the underworld.*

# ICF

## NEWSLETTER

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## ***Institute for Canine Forensics***

ICF is a non-profit organization in Northern California for the advancement of research and education of Forensic Evidence and Human Remains Detection Dog teams.

### **ICF has three new associates - Welcome!**

- ✓ Pat Lamson with "Tucker" - Pat began her work in Search and Rescue in 2000 training for disaster response. Crossing over, she and her K-9 partner Tucker have spent the last four years specializing in Human Remains Detection, at which time they also began their work in Historical Remains Detection. In addition to her other responsibilities, she is currently serving as President and HRD Coordinator of Third Coast Canine Search and Rescue of Michigan.
- ✓ Donna Randolph with "Zuma" and "Duke" - Donna has been involved in Search and Rescue activities from 2001 with her first dog Duke. She trained and certified him in Human Remains Detection with both LETS and NASAR. She is currently working a puppy, a Border Collie named Zuma. They specialize in Human Remains Detection. Donna enjoys teaching Human Remains Detection seminars at the Indiana Department of Homeland Security Search and Rescue Training Center to various Search and Rescue groups.
- ✓ Christy Bergeon of Huston, Texas, and her quadruped partner
- ✓ Two new puppies joined the group – Welcome to Shirley's "Remie" and Bevy's "Taos" !



### **Advisory Board**

LORNA C. PIERCE, Ph.D.  
Anthropology  
San Jose State University

RUSS SKOWRONEK, Ph.D.  
Archaeology  
University of Santa Clara

MICHAEL M. ZANONI, Ph.D.  
Forensic Consultant

PAT GRANT, DVM  
Veterinary consultant

### **Mission Statement**

To promote and elevate professionalism in the use of specially trained canines for forensic evidence and human remains detection.

Additionally, our ongoing research and educational programs are designed to develop advanced techniques regarding the use of canines as a forensic tool, and to better assist investigative and cultural resource management agencies.

We promote the teamwork approach and emphasize cooperation between other experts and agencies in the field. We maintain a Web site and Email list for networking internationally and for the exchange of new ideas and discoveries.

Our intention is the continuance of research projects providing needed information on the canine olfactory capabilities in relation to forensic evidence investigations.



## The Evolution of the Historical Human Remains Detection Dog Or How Did We Get Here?

Since before recorded history, dogs have played an important role in man's daily life. They have served as companions, guardians for family and livestock, and hunting companions and much more. Because of the dogs' outstanding scent ability, dogs were used during both world wars to locate injured soldiers on the battlefield. In World War II, these dogs were called "casualty dogs," and worked with the Medical Corps. The casualty dog was the start of the modern day Search and Rescue dog, a dog taught to locate people who are injured or lost. The Search and Rescue dog has now been trained in a variety of specialties.

California has had volunteer search and rescue dog groups for almost 30 years. A few of the search disciplines dogs have been trained in are listed below with a brief description.

**Area Search Dog:** This dog is trained to cover or grid large geographic areas by sampling the air currents for traces of live human scent.

**Cross-Trained:** A search dog trained in two disciplines, usually live human and cadaver.

**Cadaver Dog:** A term used in a search and rescue context to indicate a canine primarily trained as an area search dog (live human scent) that has also received cross training in the location of deceased humans.

**Human Remains Detection Dog:** (HRD) This detection canine specializes in crime scenes, old cases, small scent sources, and residual scent.

**Historical Human Remains Detection Dog:** This dog is the most recent in the evolution of human remains detection dogs. The training is similar to HRD, but emphasis is placed on old bones, historical graves, teeth, and buried bodies.

**Disaster Search Dog:** A dog trained to locate and alert on live humans in natural or manmade disasters.

**Trailing:** A dog with the specific ability and training to track and locate a specific human on the basis of that individual's scent.

Dogs are very capable of learning many scent sources and can be trained for multiple disciplines at the same time. However, experience shows us that dogs trained for different types of scents have different ways of working. Dogs trained primarily to search for live human scent hold their heads high to catch the scent carried in the wind. A dog imprinted on old graves, old bone, and teeth works with its nose close to the ground. For most historical graves, the scent is only on the surface of the ground; it tends not to be carried high in the winds like fresh human scent.

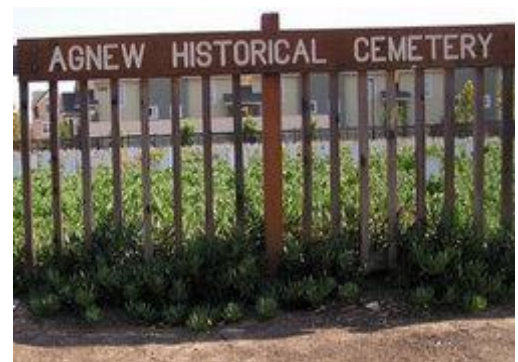
### The Birth of the Historical Human Remains Detection Dog

The Agnew's Insane Asylum in Santa Clara County, California was founded in 1889. In 1906, over 100 patients were killed in the San Francisco earthquake. The bodies of these patients were buried on the asylum grounds. The wooden grave markers can still be seen there today.

In 1993 search dogs were called to assist in locating a missing patient from the now called Agnew's Developmental Center. The gentleman was located by the dogs, naked and sunburned, swimming in a creek. The patient was returned safely to Agnew's. The staff at Agnew's was very grateful for the return of their patient and ask if there was anything they could do to return the favor. We requested that we be allowed to use the abandoned buildings and property for dog training and were promptly granted permission.

At the time, our dogs were cross-trained in finding both living and deceased humans. One day in 1995, we decided to see if one of the dogs would alert on the 1906 graves. To our surprise, the dog alerted on several of the graves. This was the start of the specialized training we know today as historical HRD.

There are now hundreds of Search and Rescue dogs throughout the country, many cross-trained to find live or deceased humans. Less common are dogs trained for only human remains detection, only about 10 in California. The historical human remains detection dog, the newest in the evolution of specialized dogs number less than 12 in the world.



ICF members presented their papers at the National Annual Conference **Society for Historical Archaeology "Life on the Edge"** in Sacramento, California, USA

January 11 - 15, 2006

The complete paper presentations are available on the ICF website [www.k9forensic.org](http://www.k9forensic.org) in "Historical Grave Detection" section.

### "Above ground noninvasive technique to locate human remains and historical graves: The nose knows"

By Adela Morris



The historical human remains detection dog is the one of newest tools available to archaeologists. Dogs that have been trained for historical work can detect the scent of human remains and historical graves on the surface of the ground, causing no destruction to the site. By combining techniques such as oral and written history, remote sensing, and traditional archaeology, archaeologists have multiple resources that can help them resolve the mysteries of lost history. The search for the Donner party

camp at Alder creek used collaborative lines of research, including historical human remains detection dogs, to help locate one of the camps and exclude sites historically believed to be locations where George Donner and his family spent the winter of 1846 -1847.

### "Canine Training: Historical versus Cadaver"

By Bev Peabody

Canine training as an adjunct to fields such as archaeology and anthropology has advanced significantly over the past few years. Canines trained to locate human remains can be subdivided



into three broad disciplines: cadaver dogs, human remain detection dogs, and historical human remains detection dogs. Although there are significant overlaps in the skills necessary for certification in these three disciplines, there are also distinct differences.

Cadaver dogs are usually called upon to locate recently deceased individuals in missing person and law enforcement cases. Human remains detection dogs are more likely to be employed to locate human remains related evidence at a crime scene.

Historical human remains dogs are specially trained

to locate very old human remains, and are most likely to be employed by archaeologists to locate old burials.

### "A Noninvasive Method of Searching for Buried Human Remains"

By Eva Cecil



This presentation will focus on the fact that locating unmarked, buried human skeletal remains is possible for a canine trained to detect them. According to legend, Canadian fur trapper and mountain man Lawrence Rence, whose name was shortened by Native Americans to LoLo (also Lo lo or Lou Lou). He was killed by a grizzly bear and buried by Nez Perce Indians near the LoLo Trail, in the Bitterroot Mountains, Montana, in the early 1850s. The headstone marking his grave was destroyed and lost in the 1930s due to logging.

With the cooperation of Dr. Kelly Dixon of the University of Montana, Lewis & Clark Trail Heritage Foundation's Traveler's Rest Chapter, and using the Institute for Canine Forensic dogs'

noses, we were able to map a possible burial site of LoLo.

## Notable Investigations

Our team members participated in hundreds of investigations including:

- Amber Schwartz Garcia
- Bayley House Family Plot, 1896, Pilot Hill, California
- Boca Cemetery 1866, Truckee, California
- Donner Camp at Alder Creek, California
- Ground Zero at World Trade Center, New York City
- Henry Olson Search, Half Moon Bay, California
- LoLo's Grave, Lewis & Clark Trail, Montana
- Loma Prieta Earthquake
- Mexico City Earthquake
- Napoleon War 1815, Mass Graves, Czech Republic
- Oakland Firestorm
- Oklahoma City Bombing
- Polly Klaas
- Space Shuttle Columbia Disaster
- Stone Mounds, El Dorado Hills, California
- Washoe Cemetery, Camp Richardson, South Lake Tahoe
- Xiana Fairchild

## Research

### What is Residual Scent?

**Residual scent** occurs when no physical object is located or present. Scent clings to nearby objects that the canine can smell. **Forensic Evidence definition of residual scent:** the gaseous signature produced by the volatile decomposition binds to the surrounding surfaces.

### Residual Scent Study

How long can residual scent remain? Currently we are conducting research on residual scent in an unused building. We are exploring the question we are often asked, "How long can residual scent last?" Our study has been in progress for over two years.

### Environmental Influence on Human Bones

We are conducting research on scent from human bones exposed to hostile environments (variations in soil chemistry, long term exposure and weathering, gnawing and scent marking by wild animals).

## "Is there a human signature in ancient bones that a trained canine can recognize?"

*Eva Cecil - Institute for Canine Forensics*

*Heidi Hill - University of Montana, Missoula*



In summer 2004, on an excavation site in Prague, Czech Republic, a trained human remains detection canine was presented with a rare opportunity: to imprint the scent of ancient human bones. This paper will raise the following questions: Is there a human signature in ancient bones that a trained canine can recognize? In the near future, should trained canines assist archaeologists and anthropologists locate unmarked buried human skeletal remains?

## The Bayley Project – Canine Remote Sensing Detection

*By Shirley Hammond*



The Bayley House, Historic State Park is located on Highway 49, Pilot Hill, CA

The Institute for Canine Forensics was contacted by the Friends of the Bayley House, a non-profit organization formed to restore and preserve the Bayley House. Their request was to have our canines locate the family burial plot on the property.

Alcander John Bayley, an attorney, built the once grand Bayley Mansion in 1862. He believed the rumors that the Central Pacific Railroad would follow the established freight hauler route, Highway 49, which went through Pilot Hill.

The railroad did not follow the Highway 49 route, but was routed through Auburn and Dutch Flat.

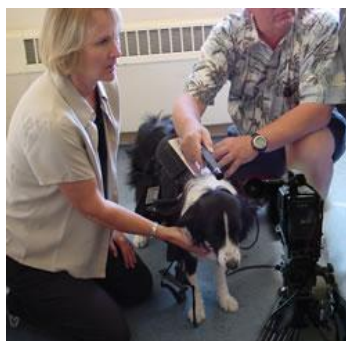
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## ICF Video Production

Institute for Canine Forensics creates and produces documentaries in close cooperation with [www.LFCStudio.com](http://www.LFCStudio.com)

Historical Human Remains Detection dog is taught to discriminate between human and non-human items, alerting on the faint residual scent of human tissue or bone, as well as dried blood. HRD dogs do not disturb the crime scene by digging or retrieving evidence and can search homes or vehicles without causing damage to property. The dogs usually work slowly and methodically. Their most common alerts are passive, sitting or lying down when human remains are found.

Some of our multimedia compilations were used as a resource for programs of the educational TV channel Animal Planet.



The ICF DVD documents HRD dogs' activities. We offer this DVD as a token of appreciation for your tax-deductible donation to the Institute for Canine Forensics (ICF) - a charitable 501(c)(3) nonprofit organization.

## Latest Developments

**WASHOE CEMETERY** - The US Forest Service requested ICF teams to search the Washoe Cemetery located in South Lake Tahoe, California in order to identify possible unmarked graves in the cemetery and the adjoining campground prior to the campground's refurbishment.

**BUENA VISTA** - The Pacific Legacy, Inc. called the ICF for help to search Me-Wuk Cemetery and two adjoining "dance house" areas, located in Buena Vista, California, prior to planned new building construction.

## Picture of the Month



## Thank You

The Institute for Canine Forensics would like to send a word of appreciation to all friends who believe in us and our mission. We thank you for caring.

Our mission is to provide the finest specialized search dog teams and to develop state-of-the-art-training techniques. Your donation will help us to continue to provide highly trained forensic evidence and human remains detection dog teams to better serve the State of California.

The ICF Board of Directors:  
Adela Morris  
Shirley Hammond  
Bev Peabody  
Eva Cecil  
Warren Kirsch