

Using Dogs to Locate Recent, Historic and Prehistoric Human Remains in Challenging Geographies

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Canines Solving Mysteries

Canines are being used to solve geographical mysteries involving lost, missing or murdered persons, and to protect cultural environments. This can present unique challenges.

Recent projects include:

- Tropical island in the South Pacific
- The wilds of Alaska
- The blistering deserts of Southern California
- After massive wildfires



Preparation is Critical

- Research climate
- Research requirements for international travel
- Consider potential hazards
- Prepare safety equipment
- Condition handler and canine
- Train in similar conditions
- Plan for the worst, and hope for the best



A wide-angle photograph of a tropical beach. The foreground is a sandy and pebbly shore that curves from the bottom left towards the center. The water is clear and turquoise, meeting the shore. In the middle ground, a black and white dog is standing in the shallow water. The background features a dense line of palm trees under a bright blue sky with scattered white clouds.

The Search for Amelia Earhart

TIGHAR and National Geographic
June-July 2017

Search for Amelia Earhart



Six months of veterinary preparation for travel to Fiji and the Republic of Kiribati, and quarantine in Fiji



Search for Amelia Earhart



Special arrangements to fly with our dogs in-cabin on Fiji Airways



Search for Amelia Earhart



Shipboard doggie relief area



Can dogs find old burials in a tropical climate?

The answer is yes!

Search for Amelia Earhart



Island Access



Search for Amelia Earhart



Search for Amelia Earhart



Piper alerting at the Seven Site on Nikumaroro where Amelia Earhart may have perished. All four canines alerted in this area. Soil and tree samples were taken.

Piper and Marcy alerted on what is believed to be a previously undiscovered prehistoric burial ground.



Search for Amelia Earhart



Adult coconut crabs are about 1 meter (40 inches) from leg tip to leg tip and weigh about 4.5 kg (10 pounds) and can exert a force of 3,300 newtons (about 742 pound-force) with their pincers.

Potential hazard?



Protecting Prehistoric Burials

Alaska

October 2014



Protecting Prehistoric Burials



Challenges:

- Site access
 - bush plane
 - ATV
- Terrain
- Weather
- Vegetation

Protecting Prehistoric Burials



Access and
Wildlife Protection

Protecting Prehistoric Burials



Protecting Prehistoric Burials



Flagged Canine Alerts



Test pit proof
of in situ
cremations





otillo Valley Desert
Southern California
May & July 2012

Ocotillo Valley Desert



Hundreds of wind turbines were installed in the Ocotillo Valley, a known trade route for thousands of years. An untold number of cremation burials were impacted.

Ocotillo Valley Desert



Working with
Native Monitors

Ocotillo Valley Desert

Hazards





Shade is hard to
find in the desert





California Wildfires

Ongoing

Photo: Camp Fire Nov.2018

California Wildfires



Cremaains Recovery Team

Recovering previously cremated remains after catastrophic wildfires

California Wildfires



The thought of their loved one's remains going to a toxic landfill is completely devastating



Recovery of those remains is life-changing



**“Amazing. In a matter of seconds,
“Piper” closed a wound that no one
else could.”**

California Wildfires

Canine – Archaeologist Teamwork



The dogs find and
the archaeologists recover



California Wildfires



Hazards

California Wildfires



Cremains change color in a wildfire. Texture is granular, with fragments of bone and teeth.

Identification tags contain the number of the crematorium and the specific number assigned to the deceased



At the end of the day ...

Dogs can be critical for:

- Native tribes
- Law enforcement
- Search & Rescue/Recovery
- Archaeologists
- Cultural anthropologists
- Cemetery managers
- Churches
- Park management
- Grieving loved ones

Questions?

