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

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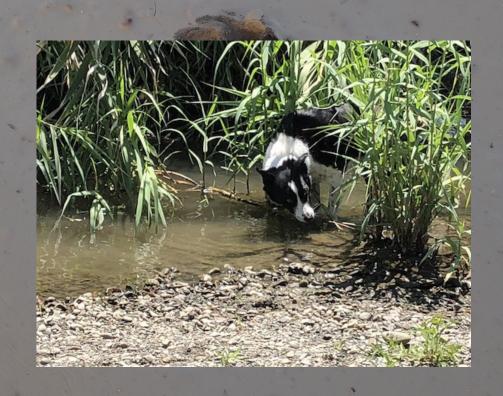


# **Canines Solving Mysteries**

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:

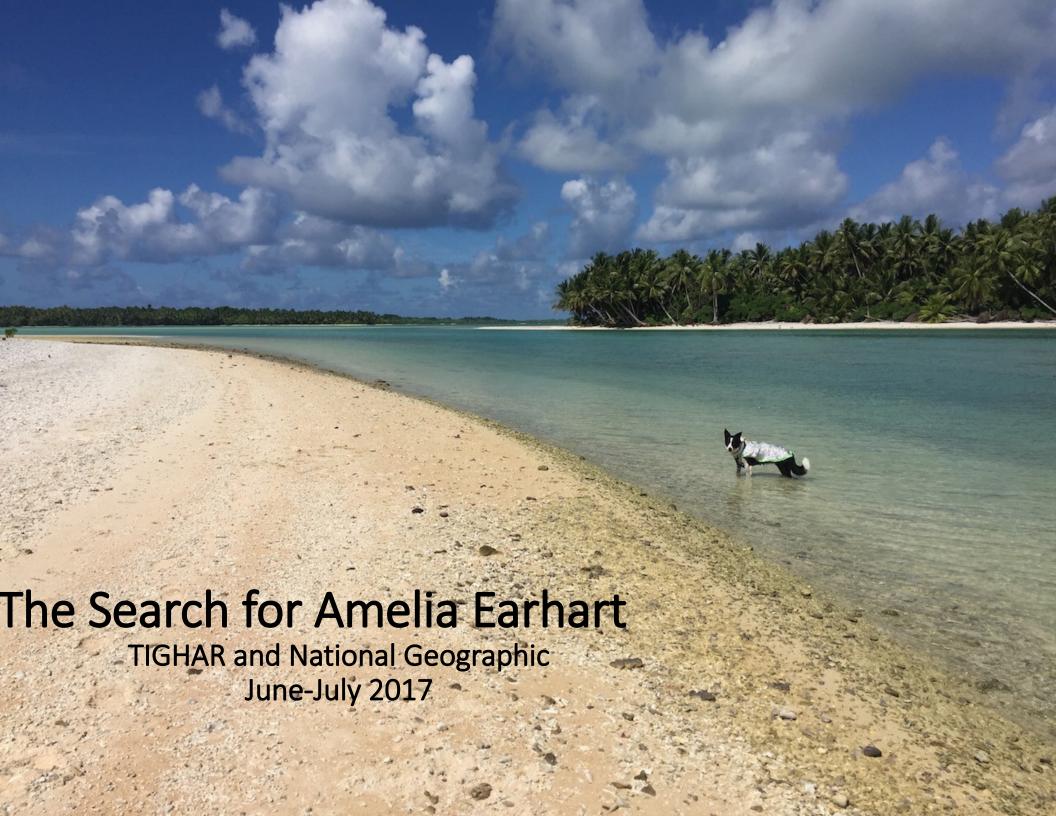
- Tropical island in the South Pacific
- · The wilds of Alaska
- The blistering deserts of Southern California
- After massive wildfires



## **Preparation is Critical**

- Résearch 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









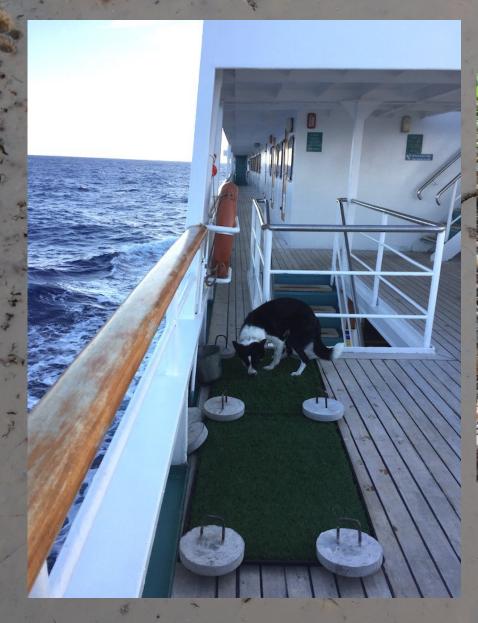
Six months of veterinary preparation for travel to Fiji and the Republic of Kiribati, and quarantine in Fiji





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





Shipboard doggie relief area



Can dogs find old burials in a tropical climate?

The answer is yes!



**Island Access** 











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.

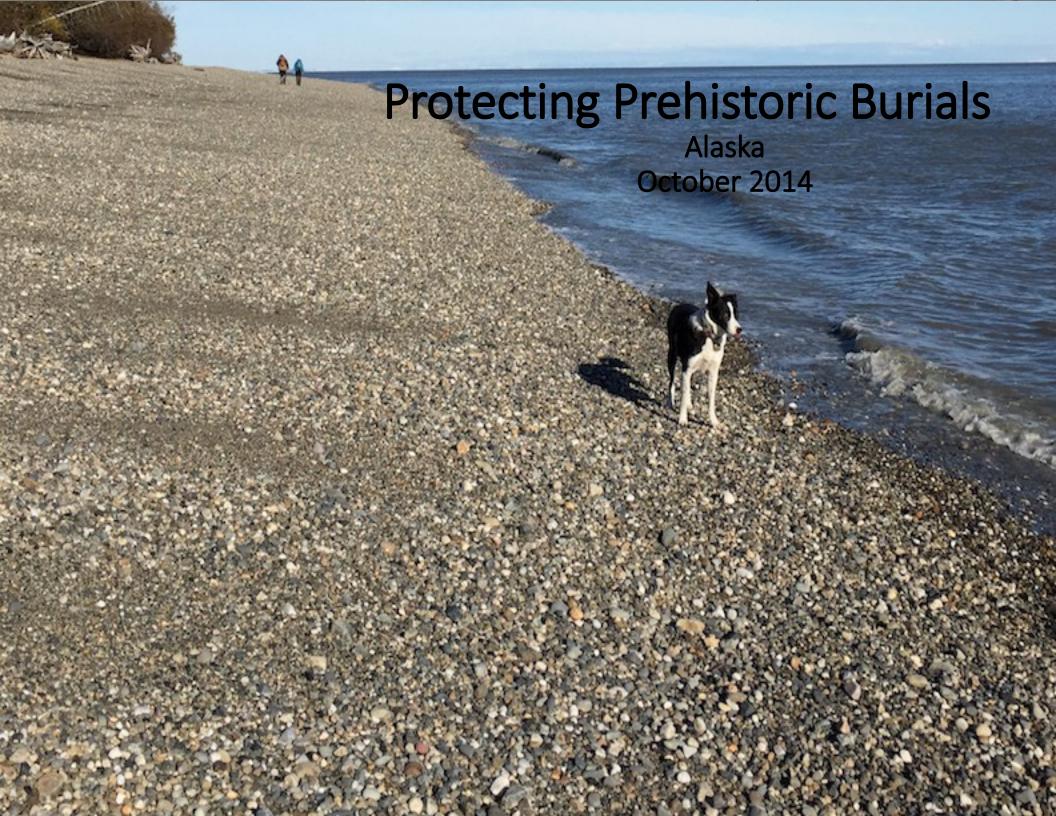




Adult coconut crabs are about 1 meter (40 inches) from leg tip to leg tip and weigh about 4.5 kg (10 pounds) and can exert a force of 3,300 newtons (about 742 poundforce) with their pincers.

#### Potential hazard?





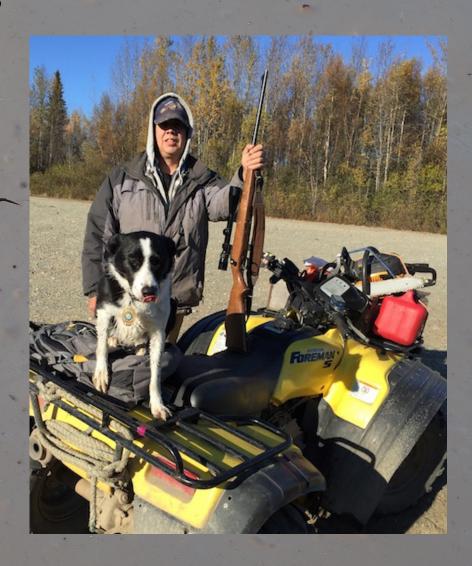


#### **Challenges:**

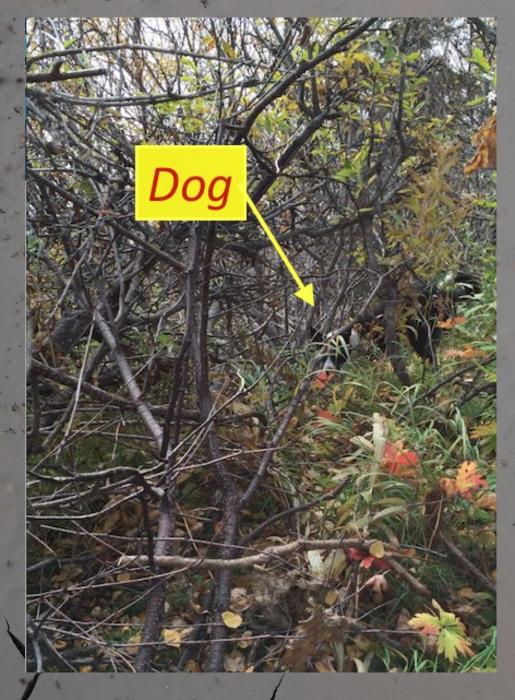
- Site access
  - bush plane
  - ATV
- Terrain
- Weather
- Vegetation





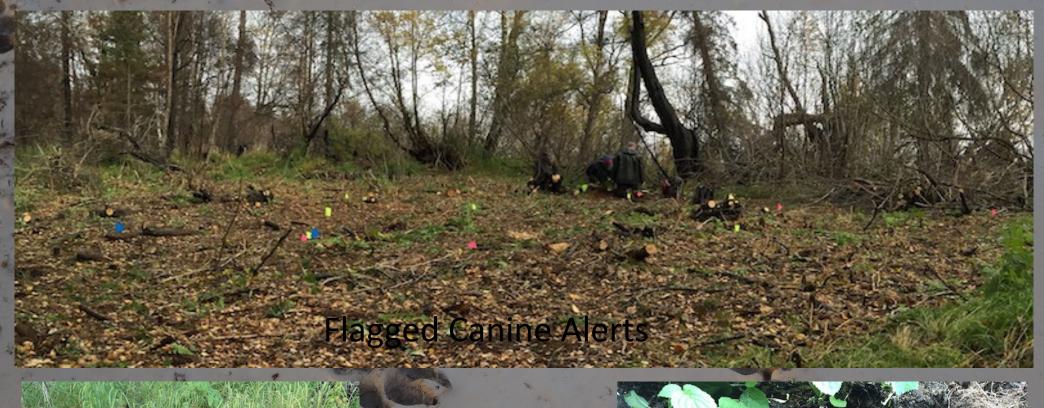


Access and Wildlife Protection











Test pit proof of in situ cremations





#### **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**

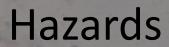




Working with Native Monitors

# **Ocotillo Valley Desert**













Shade is hard to find in the desert







#### Cremains Recovery Team

Recovering previously cremated remains after catastrophic wildfires



Recovery of those cremains is life-changing

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





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

## Canine – Archaeologist Teamwork



The dogs find and the archaeologists recover

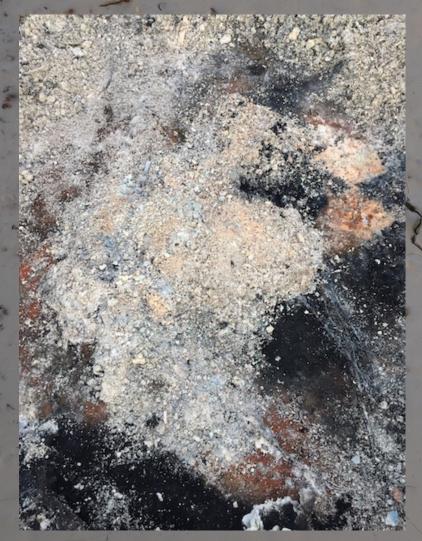








Hazards



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?

