

Historic Human Remains Detection Dogs

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Four main categories of detection dogs aid in the search for missing individuals: search dogs, human remains detection dogs (HRDDs) — also known as cadaver dogs — historic human remains detection dogs (HHRDDs), and cremains detection dogs (CDDs). Similar to search dogs, both HRDDs and HHRDDs are trained to detect human scent. Whereas search dogs are trained to sample air currents for traces of live human scent, both HRDDs and HHRDDs are trained to detect the scent of deceased individuals. HRDDs detect more recently deceased individuals through the scent of decomposition, while HHRDDs search for historic and ancient buried remains, focusing on the scent of old bones and teeth. CDDs are trained to search for burnt remains or ash in the absence of other human traces (i.e., body or bones). HRDDs and HHRDDs are also often cross-trained to search for both recent and historical remains, while CDDs have their own specialized training. When searching for remains, it is important to ensure that the organization providing the dogs have ones with the specialized training required for that particular search.

What Role Can These Dogs Play in Detecting and Identifying the Remains of Missing Children?

HRDDs and HHRDDs can be extremely useful when searching for missing children, particularly if vast areas must be covered. Search dog and handler teams can cover 60–100 acres per day, depending on how many teams are involved and whether human remains are located; once these are detected, the search slows considerably. Detection dogs can also effectively narrow the search area prior to remote sensing methods being used, which can greatly reduce the cost and time required to conduct geophysical surveys. Confidence in GPR and other remote sensing results is increased by positive identification from detection dogs.

What Are the Challenges of Using HHRDDs?

Detection dogs alert on decomposition odour when compounds released into the soil eventually rise to the surface. However, this can occur in any number of ways, including through soil disturbances caused by animal tunnelling. HHRDDs and HHRDDs therefore will not necessarily identify the exact location or number of burials but can confirm with relative confidence whether human remains are present.

Inclement weather can also affect a search. Working during winter months on frozen or snow-covered ground is not recommended. The summer months may also present challenges to detection, since hot temperatures cause odours to rise quickly from the earth's surface, reducing detectability. The most ideal search times are the spring and fall, when the weather is cooler and the scent remains closer to the ground, but searches can continue in the summer months if conducted early or late in the day. Areas with dense vegetation are also challenging for odour detection and naturally take longer to survey than areas lacking debris.

Although search dogs are typically trained over a two-year period, receiving an average of 2,000 hours of training and experience, Canada has no recognized national certification program. Several Canadian organizations do, however, hold American certification. It is important to determine what types of training and certifications each particular dog and handler team have.