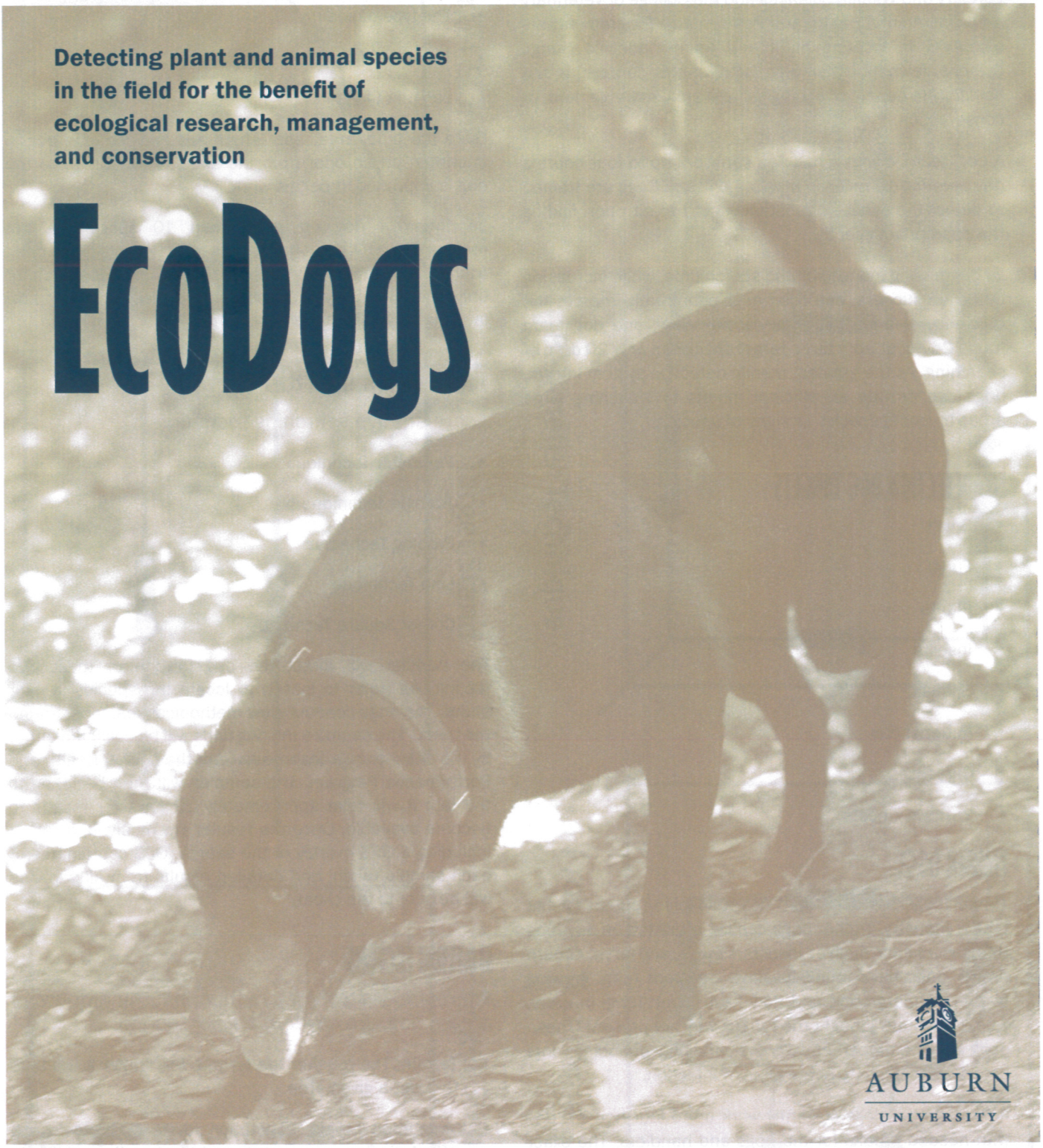
ANIMAL HEALTH AND PERFORMANCE PROGRAM

Canine Detection Research Institute - Canine Detection Training Center - Veterinary Sports Medicine

Detecting plant and animal species in the field for the benefit of ecological research, management, and conservation

EcoDogs



AUBURN UNIVERSITY

College of Veterinary Medicine

School of Forestry and Wildlife Sciences

ECODOGS

A new program developed by the Auburn University School of Forestry and Wildlife Sciences and the College of Veterinary Medicine Animal Health and Performance Program assists biologists in locating plant and animal species (fungi, pythons, fawns) or their sign (scat, sheds, carcass) in the field for the benefit of ecological research, management, or conservation.

A dog, teamed with a handler, can work up to four hours a day covering 10 miles in a zigzag pattern. Dogs are trained to detect the scent of substances and to sit upon finding the appropriate scent.

By decreasing manpower and search time, while increasing detection success, detection dogs can greatly improve the efficiency of a search. In a recent study, one dog team found 267 scat from three target species in only 20 days of searching. As the greatest mobile detection system known, dogs can provide an efficient means to searching large areas to locate species or signs of species.

ECO DETECTION DOG TARGETS

- Scat*
- Fungi
- Plants
- Insects
- Snakes
- Antler sheds
- Carcasses
- Burrows / nests

TIMBER DOGS

Timber dogs are dogs that locate specific targets for the timber industry. Timber dogs can be imprinted on anything that has an odor, such as insects, fungus, and larva. Auburn timber dogs have found invasive tree root fungi growing two feet underground and they have found fungi in areas where foresters thought the fungus was not present. These dogs give the timber industry the capability of finding fungi before trees begin to show signs of infection.

Auburn timber dogs currently work up to four hours a day with needed breaks for the dogs and handlers. The exact amount depends on ambient conditions, sampling protocol, and terrain. Depending on terrain and vegetative cover, dogs cover up to 10 miles during a four-hour search. The dogs have the ability to significantly impact data collection.

BEFORE A SEARCH BEGINS

When hiring a timber dog team, you will select:

- The type of search
- The area of search
- Length of lease

Once the type, area, and length are decided, the dog is imprinted on an odor from the species sought. Once the dog is imprinted, it begins work.

Imprinting a dog on more than 10 species is not recommended. A dog searches for all the scents it has been trained. A dog trained on multiple scents cannot search for only one. When layering scents, one must consider how layering may influence the search.

SEARCHING FOR THE SPECIES

There are five searching techniques:

- Perimeter Technique
- Triangle Technique
- Probing Technique
- Line Technique
- Corner Square Technique

The handler will direct the dog in one of these five techniques (refer to insert) to locate the species in your stand. The dogs conduct slow methodical searches around the trees. The samples the dog finds will be collected either by the client or by a technician from the Animal Health and Performance Program. The samples will then be taken to the lab; it will take approximately 22 days for results to become available. Once the results are received, a report including a GPS overlay of the search, GPS coordinates of each sample taken, and detailed results from all samples will be sent to the client.

LIMITING FACTORS

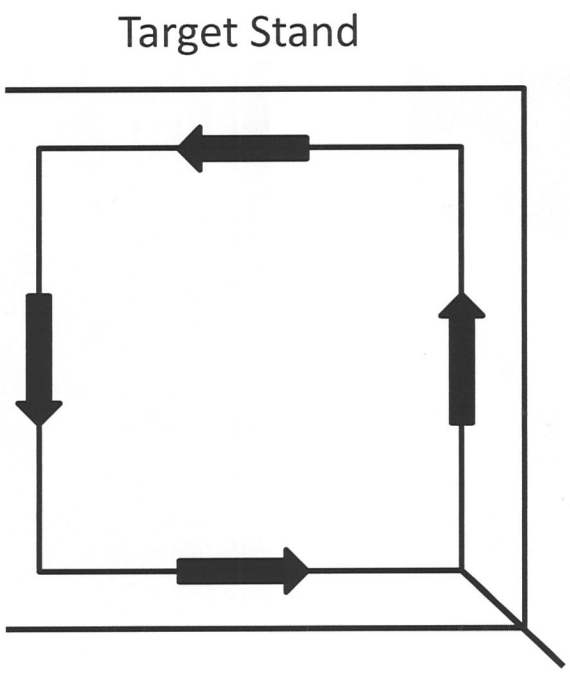
There are several factors that limit the amount of area a dog can cover in a given period:

- Terrain: The rougher the terrain, the longer it will take to cover a given area.
- Vegetation Levels: Vegetation levels (refer to insert) affect air flow, movement, and the handlers ability to interpret the dog's signals.
- Travel Time: It will take time to travel from stand to stand.

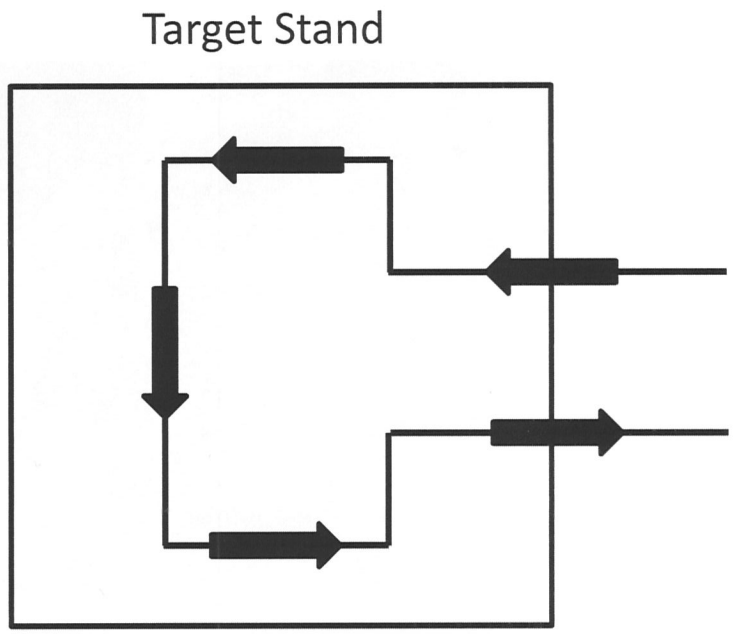
*(spotted skunk, mountain lion, black bear, weasel, striped skunk, bobcat, gray fox, and coyote)

DETECTION TECHNIQUES

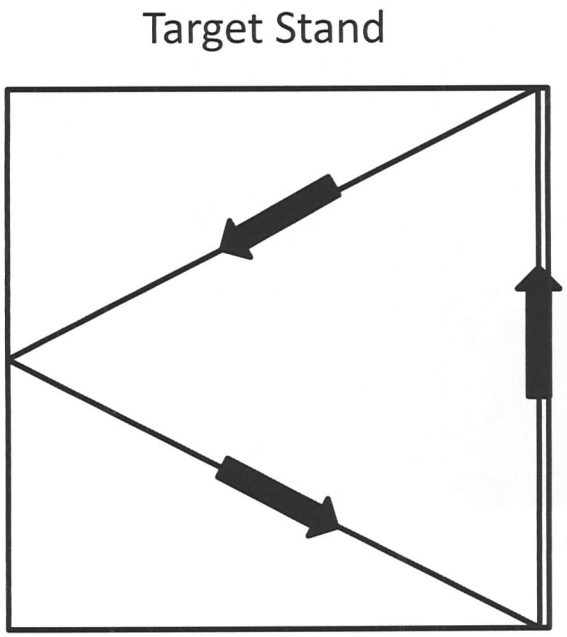
The handler will direct the dog in one of these five techniques to locate the species in your stand. The dogs conduct slow methodical searches around the trees. The samples the dog finds will be collected either by the client or by a technician from the Animal Health and Performance Program. The samples will then be taken to the lab; it will take approximately 22 days for results to become available. Once the results are received, a report including a GPS overlay of the search, GPS coordinates of each sample taken, and detailed results from all samples will be sent to the client.



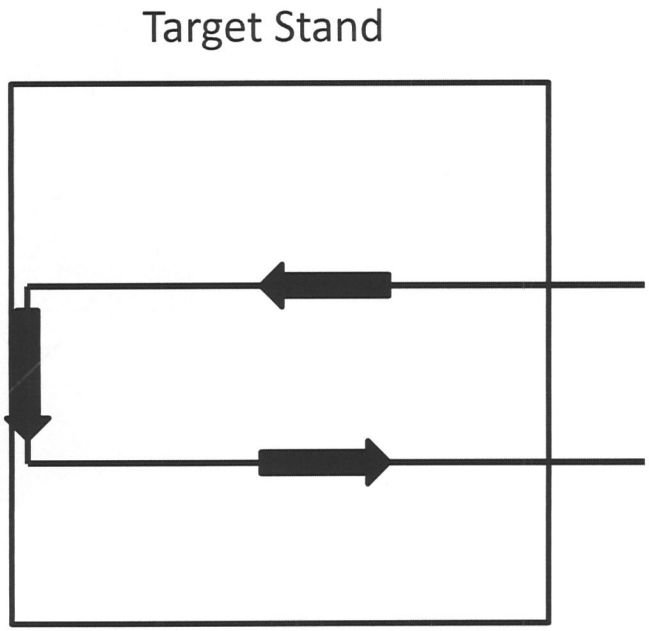
Perimeter Technique



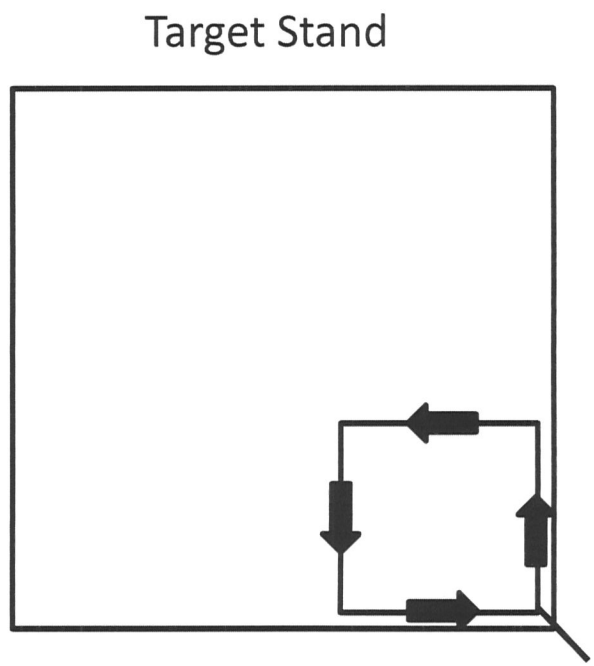
Probing Technique



Triangle Technique



Line Technique



Corner Square Technique

Vegetation Level One

Vegetation Level Two

VEGETATION LEVELS:

Vegetation levels affect air flow, movement, and the handlers ability to interpret the dog's signals.

Vegetation Level Three

- Heat (Temperature can impact the amount of time the dog is allowed to search and needs to rest.)

LEASING A TIMBER DOG

Timber Dogs can be leased to search your stands. The leased canine team will consist of one handler and two dogs. The dogs may be worked for a minimum of four hours to a maximum of six hours of searching time per day. The dogs can be trained to find numerous items. We would not recommend imprinting a dog on more than 10 species, two to three is recommended.

The following are the types of leases:

• Exclusive Lease: An exclusive lease is one in which a company leases a dog team for six months to a year. The dog team will be devoted to only working for the specific company that leases it.

• Partial Lease: A partial lease is where the dog team will work for weeks or a month at a time for a specific company. This is a first come first serve lease and the dog team will serve the clients in the order in which they come.

• Special Arrangements: We are also willing to work out special arrangements for unique situations.

The handler and dogs must be rented together. The handler serves a very important purpose; his or her job is to interpret the signals the dog presents and provide feedback and instruction to the dog. The handler also ensures the welfare of the dog.

The cost of renting dog and handler teams varies depending on what you want to find (i.e., training involved), whether we already have a dog trained to find the target, the duration or intensity of the search, distance from Auburn, and other services that may be provided. Rental of the team greatly increases your data collection abilities and increases your abilities for species location and early detection.

Please contact Terry Fischer directly for pricing.

CONTACT US

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ANIMAL HEALTH AND PERFORMANCE PROGRAM

Canine Detection Research Institute
Canine Detection Training Center
Veterinary Sports Medicine

vetmed.auburn.edu/ahapp

Auburn University's Canine Detection Research Institute (CDRI) is uniquely qualified to conduct state-of-the-art research and training. Established in 1989, CDRI has over 20 years of directed research activities encompassing canine detection and the process of canine olfaction. The Auburn University program is the largest dedicated canine detection research program in the United States and its associated Canine Detection Training Center (CDTC) is one of the largest canine detection training programs outside of the federal government. CDRI & CDTC are the only programs affiliated with a Veterinary Sports Medicine Program (the only one of its kind) and a College of Veterinary Medicine. The CDRI & CDTC are organizational components of the Animal Health and Performance Program at the College of Veterinary Medicine.

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