

# Ohio Court Reporters Association

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## K9 Response Search and Rescue

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<http://k9response.org/>



# About K9 Response

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- Founded in the 1990s
- All volunteer
- No charge for service
- Non-Profit organization
- Assist authorities with searching for lost or missing persons, drowning victims, human remains
- Respond statewide
- Member of North American Police Working Dog Association (NAPWDA)
- We use air scenting dogs as well as tracking and trailing dogs
- We have multiple areas of specialization: Area Search, Water Search, Tracking, Evidence, Recovery, and Cadaver Search

## What do we assist with?

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| <ul style="list-style-type: none"><li>• Suicides</li><li>• Nursing home 'walk-aways'</li><li>• Missing children</li><li>• Clearing wilderness areas</li></ul> | <ul style="list-style-type: none"><li>• Drownings</li><li>• Flood disasters</li><li>• Homicides</li><li>• Fires</li></ul> |
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<p><b><u>Handler/Field Support</u></b></p> <ul style="list-style-type: none"><li>• First Aid &amp; CPR</li><li>• Crime Scene Preservation</li><li>• Lost Victim Behavior</li><li>• Incident Command System (ICS)</li><li>• Scent Theory</li><li>• Sector Strategy</li><li>• Map and Compass/GPS</li></ul>	<p><b><u>Handler/K9 Evaluations</u></b></p> <ul style="list-style-type: none"><li>• Field Support</li><li>• Area Search Day</li><li>• Area Search Night</li><li>• Water</li><li>• Tracking</li><li>• Evidence Recovery</li><li>• Cadaver</li></ul>
<p><b><u>Scent Inhibitors</u></b></p> <ul style="list-style-type: none"><li>• Highly Volatile Substances<ul style="list-style-type: none"><li>○ Acetone</li><li>○ Gasoline</li><li>○ Kerosene</li><li>○ Engine Exhaust</li></ul></li><li>• Other Noxious Chemicals</li><li>• Dehydration</li></ul> <p><b><u>How does scent behave?</u></b></p> <ul style="list-style-type: none"><li>• Rafts rise when they are warmer than their surroundings</li><li>• Carried easily by wind &amp; water</li><li>• Rises and floats in water (salt &amp; fresh)</li></ul>	<p><b><u>What is Scent?</u></b></p> <ul style="list-style-type: none"><li>• Each human has a unique smell</li><li>• Humans shed approx. 30,000 cells per minute</li><li>• Many of the cells fall to the ground</li><li>• 1/3 of the cells are lighter than 14 microns and float through the air like smoke</li><li>• Gases and vapors are released</li><li>• Particulate matter, usually referred to as "rafts"</li><li>• Dead skin cells constantly:<ul style="list-style-type: none"><li>○ Exfoliating (150,000 cells / hour)</li><li>○ Oils</li><li>○ Sweat (exocrine / apocrine)</li><li>○ Exhaled breath</li></ul></li></ul>

<p><b><u>What Affects Scent?</u></b></p> <ul style="list-style-type: none"> <li>• Air currents</li> <li>• Water currents</li> <li>• Weather</li> <li>• Temperature</li> <li>• Humidity</li> <li>• Rise and fall with thermals</li> <li>• Time of day</li> <li>• Foliage</li> <li>• Topographical features</li> <li>• Fumigating - pooling</li> <li>• Looping - convection and cooling</li> <li>• Coning - 'V' pattern</li> <li>• Channeling</li> <li>• Chimney effect</li> <li>• Hot side cold side</li> </ul>	<p><b><u>K9 Selection</u></b></p> <ul style="list-style-type: none"> <li>• Prefer working breeds</li> <li>• Good breeding line</li> <li>• High play drive</li> <li>• Obedient</li> <li>• Temperament</li> <li>• Best to start young</li> <li>• Bond with handler</li> <li>• Show willingness to work</li> </ul>
<p><b><u>Training Progression – Air-Scenting</u></b></p> <ul style="list-style-type: none"> <li>• Start with master runs</li> <li>• Make more complex, slowly</li> <li>• Master / stranger</li> <li>• Stranger only</li> <li>• Return to handler</li> <li>• Introduce indication</li> <li>• Sector Work</li> <li>• Find</li> <li>• Return to Handler</li> <li>• Indication</li> <li>• Re-find</li> </ul>	<p><b><u>Cadaver Training</u></b></p> <ul style="list-style-type: none"> <li>• Aversion testing</li> <li>• Start with cadaver</li> <li>• Train indication</li> <li>• Progress to skeletal remains</li> <li>• Sector work</li> <li>• Progress to water</li> </ul>
<p><b><u>Water Work</u></b></p> <ul style="list-style-type: none"> <li>• We prefer working from inflatable boats</li> <li>• Locate general vicinity in order to use divers</li> <li>• Lighter particles of scent rise to the surface</li> <li>• Scent become air-borne with evaporation</li> <li>• Thermoclines, current, strainers, wind, humidity, water and air temperature</li> <li>• Dog alerts ... handler reads</li> <li>• Dog has no direct find</li> </ul>	<p><b><u>Search Strategy</u></b></p> <ul style="list-style-type: none"> <li>• Plan and execute search strategies</li> <li>• Sector assignments</li> <li>• Track progress</li> <li>• Clear assigned areas</li> <li>• Communicate positions</li> <li>• Identify hazards</li> <li>• Saves time by having maps ready before needed</li> <li>• Aerial photos useful</li> <li>• County auditor's office maintains up-to-date topographical and aerials maps</li> <li>• Many types of mapping software available</li> </ul>

# SAR (Search and Rescue) Dog Fact Sheet

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## Air scenting search dog units

When someone is reported lost or overdue, volunteer SAR dog teams are available to respond, day or night, to help in the search effort.

SAR dogs can find :

- Children lost in the wilderness, parks or hidden in shrubbery around houses
- Old people who have wandered away from homes and hospitals
- Hikers and hunters lost in the woods
- Victims of drowning accidents
- Victims of avalanche, earthquake, flood, explosion, fire, train wrecks, plane crashes, tornadoes and other disaster
- Evidence of crime and the bodies of homicide victims

SAR dog units search under the direction of law enforcement and emergency services agencies, at no cost to the agency. Units will not respond to requests by private individuals, and will not respond to known criminal searches that may present a threat to dog or handler.

## How do SAR dogs work?

All humans, alive or dead, constantly emit microscopic particles bearing human scent. Millions of these are airborne and are carried by the wind for considerable distances. The air scenting SAR dog is trained to locate the scent of any human in a specific search area. The dog is not restricted to the missing person's track and can search long after the track is obliterated. Many air scenting search dogs are also trained in trailing/scent discrimination.

Upon arrival at the search site, dog handlers work directly for their unit's operations leader, who reports to the incident commander of the local agency. Many units provide their own base camp operation, with trained radio operators, SAR dog advisors, and other support personnel.

After initial hasty searches of trails and paths, each dog/handler team is usually assigned a segment of the search area to cover systematically. Handlers work their dogs downwind of the section assigned to them or cover the area in a way that provides dogs with the best scenting coverage. Handlers map the area they have covered and report their POD (probability of detection) to the plans section or operations leader upon completing their assignments.

Search dogs can work previously searched areas, and they can work with other search resources, such as man trackers. Using scent articles, they can discriminate for the missing person in heavily populated areas. They can work day or night, in most kinds of weather, and are especially effective where human sight is most limited -- in the dark, in dense woods or heavy brush, in debris (as found in earthquakes, floods, and tornadoes) and under water.

## **What are the requirements for SAR dogs and their handlers?**

SAR dog handlers must enjoy working with dogs and being in the outdoors in all kinds of weather. They must be physically fit and able to respond to emergencies. They must become proficient in land navigation, map and compass, radio communications, wilderness survival, and first aid. (Most units require a minimum of Advanced First Aid with CPR.)

Requirements for the SAR dog include trainability, agility, endurance, and the ability to get along with other dogs and people. A search dog is a valued member of his handler's family, and he regards people as his friends. SAR dogs are usually the larger working and sporting breeds of dogs. German Shepherds, Dobermans, Rottweilers, Golden Retrievers, Giant Schnauzers, and Labradors are among the breeds found on SAR unit rosters.

The job of searching for a missing person can be an emotionally trying experience. A child is lost, a traveler is missing, a home with a family inside is devastated by an earthquake, and hikers are caught in an avalanche. Human lives may be in danger; the ability to save a life is often dependent upon how quickly the person can be found.

Dog teams have a very special role in the world of search and rescue. The dogs' ultra-sensitive sense of smell has continually proven to be invaluable in the effort to locate missing persons. Because of their extraordinary abilities, dogs are often able to reduce the search time, thereby increasing the chances that the person will be found alive. Experts estimate that a *single dog team can be as effective as 20 to 30 trained human searchers* in locating missing persons in a given period of time.

Trailing dogs are trained to pursue specific individuals by following the scent left from the particles that have drifted from the body to the ground and surrounding vegetation. Trailing dogs are particularly effective when they have an item of the missing individual to be used for scent identification. Search dog groups are best called early in the search but can be effective days afterwards, and in all types of weather.

Our country has an impressive array of agencies that count search and rescue among their activities. They have used search dogs to help find: lost hikers, skiers, climbers, missing children, senior citizens, mental patients, hunters, missing aircraft and crash victims, potential suicide victims, avalanche victims, and drowning victims.

The dogs are not the only members of the team. Handlers are skilled at interpreting how their dogs' behavior might be affected by wind conditions, ground currents, temperatures and weather. Most are also skilled in terrain orientation, land navigation, radio communication, first aid, emergency medical care and CPR, wilderness survival training, boating safety and navigation, search strategy and tactics, and clue awareness.

When a life is in danger, it is never too early to call in a search dog team. In life-threatening situations, time is critical. Search and rescue dog teams would much rather be called to the scene to find that the missing person has already walked to safety, than to arrive too late to save a life.

If you are part of a SAR group and are called out as a first responder, you can help the dogs and handlers begin to work with you immediately and most efficiently if you follow a few simple steps. Here is what the National Association for Search and Rescue recommends:

- Start by setting up roadblocks and patrols to confine the missing person to a reasonably sized area.
- Provide topographical maps of the area to be searched.
- If practical, keep vehicles away from the “place last seen” and have all motors shut off. Vehicle fumes may affect the dogs’ scenting ability.

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## Lost Person Characteristics

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**Children under 3 years** usually do not understand being lost, wander aimlessly, and seek the most convenient location to rest or sleep (under a log, rock or heavy brush).

**Children 3-6 years** usually are more mobile, will generally try to return home, are easily distracted, might run away from strangers, will sleep when tired.

**Children 6-12 years** may intentionally run away, are often well versed with the terrain, will often not answer when called, darkness brings willingness to be helped, will feel greater loss of helplessness than an adult.

**Elderly (65+)** often suffer from senility, are easily distracted, are very much like children, orientation based more on past than present, are likely to over-extend and exhaust themselves, and may be hard of hearing.

**Mentally handicapped people** will often act like children (6-12) and will seek shelter from elements or because of fright, usually will not respond, many stay in same spot for days.

**Emotionally depressed people** seek solitude, will often not respond to searchers, will generally be within sight or sound of civilization and be found near prominent locations (lookouts).

**Hikers** will rely on trails, drainage, and travel aids for navigation, become lost when trails are hidden, tend to be young but not well prepared, misjudge distances and time, often communicate, 55% descend in elevation, 90% move less than 24 hours, 33% travel by night, 40% well-equipped, most have little experience, most found within 5 miles, 40% found by hasty search.

**Hunters** concentrate more on game than navigation, often become excited pursuing game, tend to over extend themselves into darkness, typically unprepared for severe weather, most are in good mental and physical condition, most are properly equipped, civilization and landmarks, are not attractors, most communicative and mobile, 66% found within 2 miles, good chance they will move at night, 45% found themselves.

**Rockhounds, berrypickers, and photographers** often intend to stay in one location, carry no survival gear or extra clothing, are often misled by terrain, are a high risk for survival, most are between 8 & 65, most good physical and mental condition, communicative, likely to wander and 90% found within 5 miles.

**Fishermen** are generally well oriented; usually overdue because of an accident (often water related) and rescue will mostly be a recovery mission.

**Climbers** are generally well equipped and self-sufficient, tend to remain near designated routes; caused by weather and hazardous conditions, technical climbing experience is a must.

**Skiers** usually good physically, mentally and experience-wise, usually well-equipped, most mobile, communicative, follow paths, most found within 5 miles, 45% move at night, 50% find themselves.

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