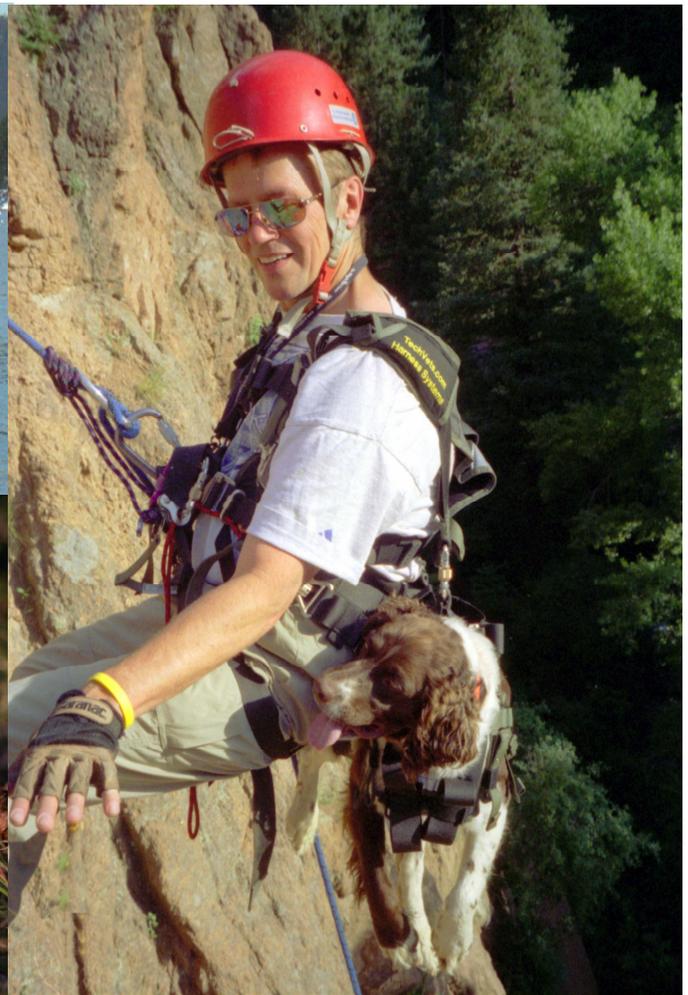


Scent Articles

March 2007



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**SARDOC offers certified dog teams for
Airscent, Trailing, Cadaver, Water, and Avalanche Search and Rescue Operations.**



TO REQUEST SARDOC DOG RESOURCES:

Call Larimer County S.O. dispatch at **970-416-1985**

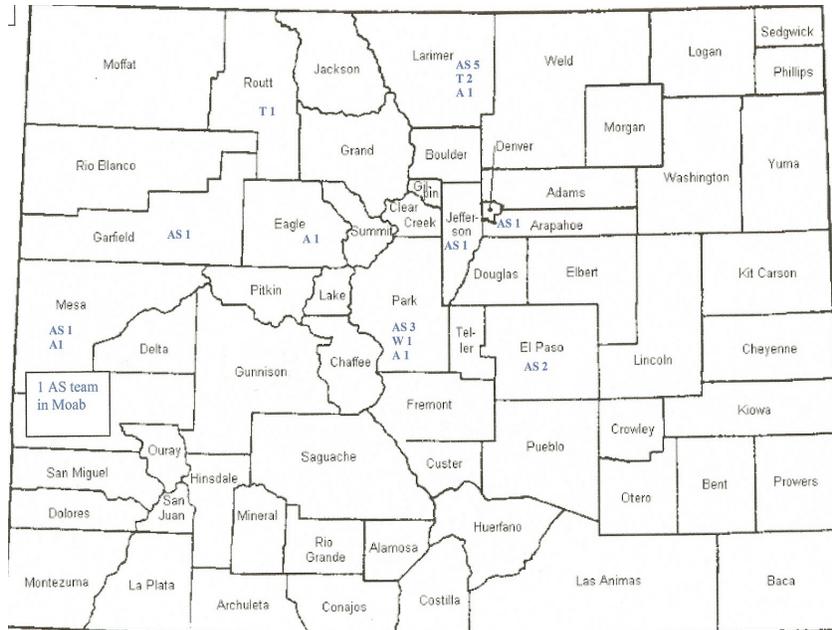
Ask the dispatcher to page the “**SARDOC dispatcher**” (be very specific) to call you back regarding a request for dog resources. Provide the dispatcher with appropriate call back information for the page to the SARDOC dispatcher.

If you do not receive a call from the **SARDOC dispatcher** within 10 minutes, call Larimer County SO dispatch back at 970-416-1985 and again request that the **SARDOC dispatcher** be paged. If the on duty SARDOC dispatcher has not received the pages for any reason, another SARDOC dispatcher should answer the second page.

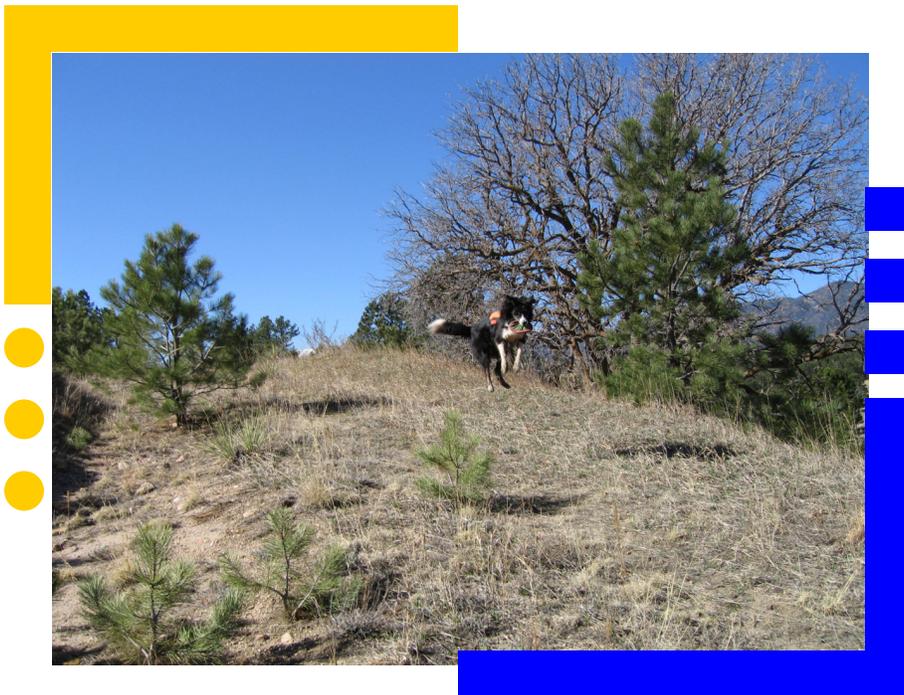
It is requested that problems with obtaining SARDOC resources, dispatch problems and the like be reported to the SARDOC Dog Coordinator for follow up. Please also contact the SARDOC Dog Coordinator with any questions or special requests at any time. Our goal is to provide prompt, effective service to any agency requesting assistance.

Marcia McMahon 719-836-2826 (h) or 719-651-4231 ©
2007 SARDOC Dog Coordinator

SARDOC Resource Map as of 3/2007



AS=Air Scent/T=Trailing/W=Water/E=Evidence/A=Avalanche



Search & Rescue Dogs of Colorado Statistics and Report for 2006

Search and Rescue Dogs of Colorado (SARDOC) dog teams responded to 51 search missions and numerous PSAR events during 2006.

SARDOC dog teams were responsible for 6 “finds” (a total of 7 people) and 2 “assists” – where a dog team provided information which led to the subjects being found by other searchers such as ground teams or helicopter. The finds involved 2 hunters (deceased), 1 hiker (deceased), 1 lost boy and his grandpa (found alive), 1 boater (deceased), and 1 suicide.

Analysis of the available information shows that SARDOC dog teams fielded on 73% of the missions responded to and made “finds” or “assists” on 22% of the missions where dogs were fielded. As in 2005 dog teams along with other SAR resources responded to several multi-day missions throughout the state, most notably the search of the 8 year old boy near Canon City and the ”missing” marine in Eldorado Canyon.

SARDOC currently has 13 operational air scent dog teams, 3 operational trailing dog teams, 1 operational water search dog team, and 4 avalanche dog teams available to SAR managers and law enforcement agencies. In addition, we have several teams currently in the testing process and hope to certify 3 teams in water early next spring.

If you are in need of SAR dog resources please contact CSRB or call our dispatch direct at 970-416-1985 and ask for the SAR dog dispatcher on-call to be paged.

Thank you everyone so much for your support in this past year, we strive to do the best we can and appreciate the trust you show in our dog teams when you call us out to assist you in your searches.

Ina Bernard
2007 SARDOC Director at Large

Mission Reports for July 2006 thru December 2006

July 4th, 2006 – Dog team located missing subjects

Location: Buffalo Mountain, Summit County

Subjects: 7 year old boy and his 65 year old grandfather from Puerto Rico.

Dog team on mission: Patti Burnett and Sandy (SCRG)

Mission: The boy and his grandfather were part of a bigger party hiking Buffalo Mountain. They decided to stay behind while everyone else hiked to a snowfield. After a while, the two decided to walk back down and got lost.

Patti and Sandy started at the believed PLS. At that point Sandy led Patti up a ridge and found a pair of sunglasses that turned out to belong to the boy's cousin. Patti contoured around the mountain and let Sandy choose their route as much as possible, because he appeared to have faint scent. Eventually, they got on to Buffalo Mountain Trail and Sandy was getting scent from below. When Patti called out the boy's name she got a reply. The two had planned to spend the night out because they didn't want to get any more lost, they were hungry, tired and the boy was very cold.

July 6th, 2006

Location: Rampart Range Road, Woodland Park, El Paso County

Subject: ~29 year old male teacher, possibly suicidal

Dog teams on mission: Dennis McLaughlin and Grits (EPCSAR), Marcia McMahon and Koert (PCSAR)

Mission: This was a follow-up mission to the one on the same subject from June 23rd. The subject now had been missing for about 4 weeks. The dog teams searched high probability areas, but again no clues were found.

July 16th, 2006 – Dog teams located the deceased subject

Location: Hill Trail, Buford, Rio Blanco County

Subject: 47 year old, male, reported to be a terminally ill cancer patient, but a strong hiker.

Dog team on mission: Wyman Bontrager and Dundee (GCSAR), Scott Havener and Duke (RCSAR)

Mission: The subject signed the trailhead register with plans for a day hike on July 14th, destination listed as "Wilderness". The subject did not return and his vehicle was found by sheriff deputies on the morning of the 16th. Upon arrival, Wyman took Dundee to the trailhead and did a small area search where Dundee found some pockets of scent along the trail and in the drainage. After Scott and Duke arrived, it was decided to wait until temperatures dropped in the evening before resuming the search. About 19:30, both dog teams began hiking up the Hill Creek Trail with plans on spending the night searching the trail and upper lake areas. Duke found the 54 hour old trail of the subject immediately and followed it for 1.5 miles up the trail. At that point Duke alerted on a small pill bottle cap on the trail. As Scott examined the cap, Duke alerted to a small pouch and then multiple items including a day pack, jacket and Nitro Quick pills. After catching up to Scott and Duke, Wyman took Dundee down slope about 40 feet where Dundee alerted and took them in to the subject (about another 40 feet). The subject appeared to have succumbed to a heart attack and had fallen into dense underbrush.

July 18th, 2006

Location: CR 16, Loveland

Subject: 22 year old, developmentally disabled female in good health

Dog teams on mission: Dan Fanning and Bear, Mike Erickson and Merlin, Robin Anderson and Toss (all LCSAR)

Mission: Dan and Bear picked up the subject's direction of travel down the driveway and then to the north toward CR 16. Bear was working strongly when the word came that the subject had been picked up in a vehicle by some local residents.

July 20th, 2006

Location: Molas Pass Area, South of Silverton, San Juan County

Subject: Male trail runner in his 30's who had left on July 17th to bag three peaks.

Dog team on mission: Wyman Bontrager and Dundee (GCSAR) were stood down when the subject was found deceased.

July 25th, 2006

Location: McInnis Canyons National Conservation Area, near Fruita, in Mesa County, CO

Subject: Overdue ~64 year old male hiker in good health.

Dog team on mission: Shannon Young and Maggie (MCSAR)

Mission: The dog team was assigned to search Kodels Canyon starting at the subject's car. After searching Kodel's Canyon, the team was to search the base of the cliffs near Kodels Canyon. As the dog team entered Kodels Canyon the subject was found by a tracking team, 1 ½ miles from his car. The subject suffered from a separated pelvis and a broken ankle and was severely dehydrated.

July 29th, 2006

Location: Fort Collins, Larimer County

Subject: 16 year old female in good health, possibly abducted.

Dog teams on mission: Dan Fanning and Bear, Robin Anderson and Toss, Jayne Zmijewski and Lakota (all LCSAR) were stood down before fielding when subject was reported to be at home.

Mission: On the evening of July 28th the subject was returning home after visiting a girlfriend when she did not arrive home. Police found her vehicle in front of the girlfriend's house. One shoe and her keys were found behind the vehicle. A police canine was used to track the subject toward the North. A police canine found the subject's cell phone further down the street. Just before SARDOC dog teams could be fielded, the girl was reported to be at her home. Subject's condition and the story behind her disappearance are unknown.

August 7, 2006

Location: Brown's Lake, Larimer County, west of Fort Collins

Subject: 65 year old hiker, no further info

Dog team on mission: Estelle Purvis and Thunder (LCSAR) were stood down upon arrival as the missing subject had been located.

August 7, 2006

Location: Long Draw Trailhead, West of Fort Collins in Larimer County

Subject: 56 year old hiker, no further info

Dog team on mission: Estelle Purvis and Thunder (LCSAR) were stood down while en route as the subject had been found.

August 8, 2006

Location: Pine Junction, Woodside Inn, Park County

Subject: 24 year old intoxicated female

Dog team on mission: Roger Matthews and Loki (PCSAR)

Mission: Subject was last seen as she left the Inn, very intoxicated, to get something from her car and never returned. Roger and Loki searched for 30 minutes around the Inn and then picked up the subject's trail out to the highway where her footprints were found. The trail ended abruptly and she was soon found at home in Lochbuie.

August 8, 2006

Location: Rampart Range Rd, El Paso Co County, Utah

Subjects: Two 21 year old males, possibly suicidal, last seen July 30th

Dog teams on mission: Kim Veitch and Ruffian, Gayle Humm and Jenna with Deb Sapashe as support (EPCSAR), Patti Burnett and Sandy (SCRG) with Damon of SCRG as support, Marcia McMahon and Koert (PCSAR) with Jill Wohlbach (EPCSAR) as support.

Mission: Search was conducted in area around where subjects left their vehicle several days earlier. Some dogs gave indications (in retrospect, some distance away) that they were in the area but they were not located this date. An unaffiliated dog team located the bodies several days later in an area that was not searched by SARDOC dog teams this date.

August 11, 2006

Location: Moon Gulch, near Rollinsville, Gilpin County

Subject: 69 year old, Asian, female, mushroom picker

Dog team on mission: Laura Plantell and Raven (GCSSR) were stood down as the subject had been located by a deputy using his siren for attraction.

August 11, 2006 – Dog team responsible for finding subject

Location: Off Milam Road, Black Forest, El Paso County

Subject: 40 year old male, possibly despondent, missing two days

Dog team on mission: Gayle Humm and Jenna with Deb Sapashe (all EPCSAR) as support

Mission: Searched for missing subject in area previously searched by LE personnel and LE dog team. The dog team located the subject in less than 15 minutes, deceased from a gunshot wound, less than 200 ft from where he left his vehicle.

August 15, 2006

Location: Larimer County, near Wellington

Subject: 22 year old male, depressed

Dog teams on mission: Dan Fanning and Bear; Robin Anderson and Toss; Mike Erickson and Merlin; Estelle Purvis and Thunder; Jayne Zmijewski and Lakota responded but were stood down when the young man was located by his father on their property. He was OK, but depressed due to a domestic situation.

August 18-19, 2006

Location: Devils Garden Trail, Arches National Park, Moab, Grand County, Utah

Subject: 46 year old male, hiker, good condition, missing 22 hours at start of dog search

Dog team on mission: Nancy May and Shalla (Grand Co SAR) with Glenn Scherell (NPS) as support

Mission: The dog team cleared the Devils Garden Trail and the Primitive Loop first and then worked an area north of the Arches National Park where they picked up a trail and followed it until 0500 hours on the 19th. Nancy decided to suspend her search as Shalla was tired from searching 7 hours and the cactus was very thick in the area. The missing subject walked out on his own several hours later.

August 20, 2006

Location: Crystal Lakes, Larimer County

Subject: 40 year old male hiker, lost

Dog team on mission: Estelle Purvis and Thunder (LCSAR) were stood down while en route as the subject had been located.

August 26, 2006

Location: Dead Man, Larimer County, west of Fort Collins

Subjects: 35 year old male and 9 year old boy, hikers missing 8 hours

Dog teams on mission: Estelle Purvis and Thunder with Kathy Kosorok as support; Dan Fanning and Bear, Robin Anderson and Toss (all LCSAR).

Mission: The dog teams searched a large area south of the subjects' campsite for 6 hours but had no alerts, only some interest to the west of the search area. The subjects walked out after daylight and got a ride from a rancher.

August 30th – September 3, 2006

Location: Eldorado Canyon, Boulder County

Subject: 21 year old male, Marine with a possible head injury due to blood evidence. Friend reported that he fell off trail at night but was gone when LE returned to site. Later determined to be a staged disappearance so as not to be deployed to Iraq.

Dog teams on mission: On August 30th – Mike Erickson and Merlin with Kathy Kosorok (all LCSAR); Roger Matthews and Loki; on August 31st - Laura Plantell and Raven (GCSAR) with a member of RMRG as support; Robin Anderson and Toss with Jake Udel as support (all LCSAR); September 1st – Marcia McMahon and Koert with Dave White (PCSAR) as support; September 3rd – Robin Anderson and Toss with Kathy Kosorok (all LCSAR) as support

Mission: Dog teams searched assigned areas with some interests but no real alerts. The terrain was very rugged and steep in some areas at 7000 ft in elevation. After several days of searching by hundreds of SAR ground searchers and many dog teams from FRRD and SARDOC, it was determined that this was a staged disappearance by the young man with the help of his friend. He has not been located as of early 2007.

The overall mission was an excellent example of the ability of various SAR assets and dog teams to work well together toward the common goal of attempting to locate the subject. SARDOC's handlers praised the work of the command staff, particularly those handling dog assignments, on this mission.

September 2, 2006

Location: El Paso County, Colorado Springs

Subject: 11 year old female, possible runaway, missing 7 hours

Dog team on mission: Kim Veitch and Ruffian with Brenda Veitch as support (EPCSAR).

Mission: The Colorado Spring PD requested assistance in searching for the missing girl. The dog team determined direction of travel away from where girl said she was going. The dog team then lost the trail at a large, urban intersection. The search was suspended by the police after 1 ½ hours. The girl was found the next morning after spending the night at a friend's home.

September 5 – 6, 2006

Location: Cataract Lake, near Heeney in Summit County

Subject: 50 year old male hiker in fair condition, missing 4 days

Dog teams on mission: Andrea Reller and Tracker (with Coordinator's approval) with Dan Burnett as support, Patti Burnett and Sandy (all SCRG); Marcia McMahon and Koert (PCSAR) with Brian (SCRG) as support.

Mission: The dog teams were assigned to search heavily wooded, steep terrain and trails between 8500 and 12,200 ft. in elevation with the last dog team above camping in the field overnight and then resuming the search the next day. Each dog team had some interest in their assigned areas (along intended route of missing subject) but no strong alerts. The man got lost near Mirror Lake on Monday (day before SAR began searching) and bushwhacked until he got out on his own on Wednesday, the 6th. Total dog search time: 25 hours

September 8 - 9, 2006

Location: Grand Junction, Mesa County

Subject: No specific info available, subject drowned

Dog team on mission: Marcia McMahon with Yeti and Koert (PCSAR) were stood down while en route as the subject had been located at the bottom of a dam prior to their arrival.

September 11, 2006 - Divers recovered body in area where dog teams alerted.

Location: Frisco Marina, Summit County

Subjects: Male in his late 50's

Dog team on mission: Marcia McMahon with Yeti and Koert (PCSAR) with a Summit County deputy Sheriff as support.

Mission: A water search, both along shore and in a boat, was conducted in the marina which had about 100 boats tied up to buoys out in the bay. Yeti strongly alerted in an area near the man's boat which was farthest from shore. Koert also alerted in that area after checking out most of the boats in the marine due to scent pooling. Yeti worked a second time off the boat and again alerted near the man's boat. The Summit County Dive Team, using an underwater camera, located the subject's body close to his boat and then made the recovery.

September 13, 2006 – Dog team responsible for finding the subject

Location: North of Nucla, Montrose County, CO.

Subject: 41 year old male hunter in good physical condition who failed to return to camp. Missing subject had not been heard from for 6 days before being reported as missing by the property owner.

Dog team on mission: Nancy May and Shalla with Margy Baker as support (all Grand Co. Utah, SAR) assisted Montrose County searchers and friends of the missing subject.

Mission: Dog team was assigned to re-search the highest probability area, which had previously been searched by another dog team, ground searchers and helicopters. When the man was located, it was apparent why others had not been able to see him. After nearly 5 hours, Shalla ran past a ground searcher and alerted near a pinon tree where the man's body was located. The man, who had been struck by lightning, was tucked into the tree and was not even visible to the ground searcher who had just passed within 20 feet of the body.

September 29, 2006

Location: Arches National Park, Devils Garden, near Moab, Utah

Subject: 56 year old female hiker missing 12 hours at start of search

Dog team on mission: Nancy May and Shalla with Mike Coronella (all GCSAR) as support

Mission: Dog team searched for two hours with strong interest to the east. Dog team picked up subject's trail and was working it when subject circled around and returned to camp on her own.

October 6, 2006

Location: Canyonlands National Park, San Juan County, Utah

Subject: 76 year old male hiker

Dog team on mission: Nancy May and Shalla with Margy Baker (all GCSAR, Utah) were stood down prior to arrival as the missing subject had been located.

October 15, 2006

Location: Medicine Bow Forest, Carbon County, WY

Subject: 72 year old male hunter, good condition

Dog teams on mission: Estelle Purvis and Thunder with Jose Negron as support; Mike Erickson and Merlin with Thad Hoff as support (all LCSAR)

Mission: The SARDOC dog teams began searching 3 days after subject did not return while hunting. Dogs from Capital City Dogs (WY) had begun searching the day after the man's disappearance. The SARDOC dog teams searched large, assigned areas with some slight interest in a couple of areas. This information was passed on to the IC but the subject was not located.

October 15, 2006

Location: El Paso County, CO

Subject: An angry 11 year old Boy Scout who ran away

Dog teams on mission: Kim Veitch and Ruffian with Brenda Veitch as support (EPCSAR); Nancy May and Shalla with Margy Baker as support (Grand Co. SAR, Utah); Laura Plantell and Raven (GCSAR) with Debra Schnackenberg (DCSAR) as support. Just as the dog teams were being fielded, the missing boy was located.

October 18, 2006

Location: Sugarloaf Mountain, Craig, Routt County

Subject: 53 year old male hunter

Dog teams on mission: Scott Havener and Duke (Routt Co. SAR); Marcia McMahon and Koert (PCSAR) with Janet Panebaker (Routt Co. SAR) as support

Mission: Dog teams worked several hours in snowy, 20 degree weather at over 8000 ft in elevation but did not locate the subject. He walked out in the evening, 3 miles away from their search area. He had been walking in circles for two days before deciding to get his compass out and heading towards a known area.

October 22 - 23, 2006

Location: Arches National Park, Devils Garden Area, Grand County, Utah

Subject: 52 year old female tourist from Taiwan who missed a turn in the trail.

Dog team on mission: Nancy May and Shalla with Margy Baker (all GCSAR) as support

Mission: On day one, the dog team was assigned to clear the Devils Garden Trail. Shalla trailed the subject to an area where there seemed to a large scent pool (with footprints). The next day, they returned to that area and began to work a semicircle around where the scent pool was located when Shalla started working a wide scent cone for over two hours. A helicopter was sent in that direction and located the subject, alive. She had stayed in one place after she realized that she really was lost.

October 26 – November 1, 2006

Location: Battlement area, near Meeker, Rio Blanco County

Subject: 53 year old male hunter from Texas who separated from his partner for hunting purposes prior to a severe blizzard in the area which dumped up to 2 feet of new snow

Dog teams on mission: Wyman Bontrager and Dundee with Jennifer Deese as support (all GCSAR); Shannon Young and Maggie (Mesa SAR) with support from Rio Blanco Co. SAR member; Marcia McMahon and Koert (PCSAR) with Rio Blanco SAR member support

Mission: All of the dog teams were assigned different areas that were extremely difficult to work due to deep snow (2 to 3 ft deep) and very cold temperatures at an elevation of approx. 10,000 ft. Each of the dog teams were transported to their search areas by various modes of transportation - horseback, snowmobile and helicopters. The dog teams had some slight interest in drainages but conditions (wind, snow, etc). made it almost impossible to search thoroughly for the missing hunter who was not located after several days of searchi

November 1, 2006

Location: Battlement area, near Gypsum, Rio Blanco County – Continuation of search for man missing since October 25th and reported in October’s reports.

Subject: 53 year old male hunter from Texas who separated from his partner prior to a severe blizzard in the area which dumped up to 2 feet of new snow.

Dog teams on mission: Wyman Bontrager and Dundee with Jennifer Deese as support (all GCSAR); Shannon Young and Maggie (Mesa SAR) with support from Rio Blanco Co. SAR member; Marcia McMahon and Koert (PCSAR) also with Rio Blanco SAR member.

Mission: All of the dog teams were assigned different areas that were extremely difficult to work due to deep snow (2 to 3 ft deep) and very cold temperatures at an elevation of approx. 10,000 ft. At various times, the dog teams were transported to their search areas via horseback, snowmobile and helicopters. Each of the teams had some slight interest in drainages but conditions (wind, snow, etc). made it almost impossible to search thoroughly for the missing hunter who was not located.

November 2, 2006

Location: Pueblo State Wildlife Area, Pueblo County

Subject: 50 year old suicidal female

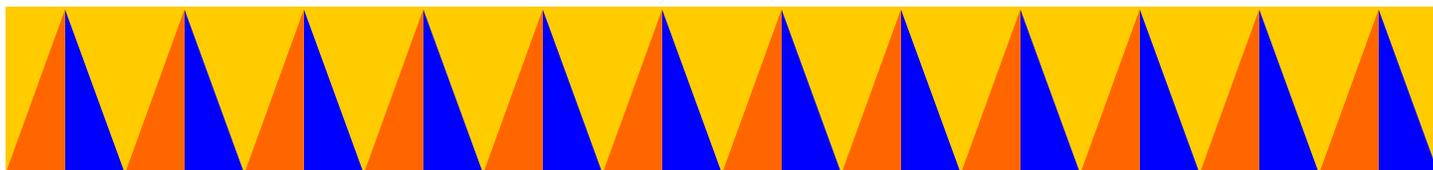
Dog team on mission: Kim Veitch and Ruffian with Brenda Veitch and Ina Bernard as support were preparing to deploy when a helicopter crew spotted the woman’s body on a bluff overlooking the reservoir.

December 31, 2006

Location: Between Loveland Pass and A-Basin, Summit County

Subjects: Male adult and son from Oklahoma- hikers -caught in avalanche.

Dog team on mission: Marcia McMahon and Koert (PCSAR) were stood down while en route as one subject dug himself out and the second person before rescuers could respond.



“Clicker Training”

by Angela Eaton Snovak

ClickerExpo 2006 Tucson, AZ

I've been working dogs since 1976 and have generally employed traditional techniques to train my dogs to competition level in obedience, sheepherding, schutzhund, tracking, and other dog activities, including search and rescue. I became interested in learning more about clicker training during the Fall of 2005 while raising a young dog who reacted to these conventional techniques, in ways I'd never experienced and didn't seem to be able to resolve. Following a SARDOC weekend where I met Suzanne Martinez (thanks Roger) who demonstrated some clicker training, I began experimenting with the clicker on my own using a technique called “targeting”.

Initially, my goal was to get Shakti to touch some object with her nose. I didn't tell her what to do and I didn't use a leash or collar. I was impressed with how quickly she figured out what I wanted *without any manipulation or control by me*. I was also impressed by how relaxed she became during the learning process and how this relaxed demeanor carried over to other training opportunities throughout the following days, weeks, and months. I read several books and began to use the clicker to teach a variety of behaviors. I quickly decided that I needed to know more about this technique.

So, on January 27, 2006 my 2 ½ year old Belgian Malinois, Shakti, and I flew to Tucson, AZ to participate in Karen Pryor's ClickerExpo 2006, a 3-day learning conference. Karen Pryor is a behavior biologist who has written several books and articles on training and behavior including, *Don't Shoot the Dog*, *The New Art of Teaching and Training*. As a marine biologist, Karen trained dolphins at Sea Life Park in Hawaii and has since used similar techniques to teach mammals, reptiles, fish, birds, primates, and even humans. Clicker training is an outgrowth of the principles and methods used to train dolphins.

In addition to Karen Pryor, the staff at the ClickerExpo included a police K9 training veteran, athletic coaches and ballet teachers, a behavior analyst, zoologists, marine mammal trainers, service and pet dog trainers, wild animal, and horse trainers. This broad array of experience in teaching provided a rich opportunity to learn. There were several options at all levels, including intermediate and advanced as well as the foundation level. I signed up for the foundation level classes and learning labs (dog and handler workshops) so I could absorb the basics of this technique.

The Science of Clicker Training

During the first class, taught by marine biologist Kathy Sdao, M.S., I learned about the science behind clicker training, learning theory and more about how learning occurs and why it's retained. As a form of operant conditioning, the clicker is used to mark specific behaviors the trainer or teacher wants to keep. The clicker is also referred to as a “bridge” to connect the precise behavior to the reward or reinforcement. Often the reinforcement (such as treats) can only be delivered after the desired behavior has completed, creating confusion for the animal around exactly what response is being rewarded.

The marker is also powerful in that it eliminates the need for verbal communication and translation and ‘speaks’ directly to the brain (more about that later). The animal, fish, bird, person, etc., is given the opportunity to think about what action caused it to be rewarded and, consequently, becomes actively involved in the learning process and excited about new opportunities to learn. One common effect is that the animal begins to demand to do clicker training in the same way it asks to play!

Brain studies have shown that the brain releases serotonin (believed to play a role in regulating moods) when it registers the ‘click’. That explains why Shakti became visibly relaxed almost immediately after I started clicker training with her. Verbal cues are added *after* the animal learns which behavior achieves the reward. The need for translating verbal language from one species (human) to some meaning for the other species into action is also by-passed. Instead, the brain communicates directly to the body's nerves and muscles upon hearing the ‘click’. This response works for all species – even goldfish!

Shaping

Karen Pryor taught a session and learning lab on shaping behavior effectively. Free-shaping involves clicking behavior that

an animal spontaneously offers on its own, without provoking it or using the environment. I saw how to click the vector, or direction toward the movement, instead of waiting for the full movement to be accomplished before marking it with the clicker. Using a very high rate of reinforcement (many clicks and treats), I learned how to mark incremental actions in a small amount of time to achieve the final behavior pattern in minutes. Ultimately, the animal gets rewarded more often during the learning process and achieves the goal sooner.

Karen's example from the audience was a Standard Poodle who raced up the steps three at a time to get to the top. The goal was to get the poodle to walk up the steps in a civilized fashion. Standing on the stage with the poodle on the ground level with the audience, Karen clicked as soon as the poodle lifted its shoulder before placing a front foot on the first step (which it usually leaped over anyway). The poodle stopped when it heard the click and Karen threw the treat. When the poodle ran up the steps it was ignored by Karen and called back down to the audience by the owner.

Shaping for calmly walking up the steps continued for about 5 minutes, in which time the dog was able to walk up 3 steps calmly, being reinforced each time a shoulder or foot moved slowly instead of waiting for the dog to complete a whole series of responses. Although it only made it up 3 steps slowly in 5 minutes, this was achieved without correction and with the dog thinking hard about what it was doing. In fact, when the owner sat back down in the audience and Karen continued to talk, the dog left the owner and walked up the steps to get to Karen, the source of the rewards.



“Behavior chains involve linking a series of on-cue behaviors using one cue as reinforcement for the next behavior.”

Cues

Cues are specific stimuli tied to reinforcement for the right behavior, whereas commands are tied to corrections for wrong behavior. Karen's cueing class and lab focused on the most effective use of cues, eliminating extra cues, fading cues for increased attention, and replacing cues. It was certainly interesting to see how the dogs began to work for the cue instead of the food reinforcement. Once a behavior is learned the cue can be delivered at variable intervals (2 seconds, 10 seconds, 5 seconds, etc.). The result is that the dog becomes intensely focused on receiving the cue so it can perform the behavior and often the value of the reward fades as the cue becomes the prize!

In the learning lab Shakti and I used her 'sit' cue for the exercise. Initially I used either a hand signal or a verbal 'sit'. I quickly realized she responds more quickly to the verbal 'sit', so I eliminated the hand signal for this session. The next step was to replace the verbal cue with a sign that read "SIT". I used the word 'sit' and the sign simultaneously at first and gradually used the

verbal cue only randomly in conjunction with the sign. The goal was to eliminate the verbal ‘sit’ and get Shakti to respond when she “read” the sign.

I believed Shakti would make this transfer quickly, since she responds so quickly to cues I give at home. However, I noticed that other dogs were catching on faster than my brilliant Malinois – how could that be? When I ran out of the treats I’d brought, I grabbed a handful of hotdog pieces from a bowl. As I turned back, the sign moved in front of Shakti’s eyes and she immediately sat! Another lesson I learned is that the higher the value of the reward to the animal, the quicker the response when learning something new. I realized that I would be more willing to learn a new job for \$1,000,000.00 than \$100.00.

Behavior Chains

The use of cues is also important in building behavior chains. Behavior chains involve linking a series of on-cue behaviors using one cue as reinforcement for the next behavior. Most of dog training is based on behavior chains. A classic behavior chain is search and rescue – search, find, recall or report, and re-find. Using cues to reinforce behavior within a chain is more effective than using motivation to push an animal to the next behavior in the chain.

In the class on building chains Karen discussed how performance breaks down because a part of a chain breaks. Instead of fixing the whole chain of behaviors it may only be necessary to reinforce a single behavior by pulling it out of the chain momentarily to mark and reinforce. For example, if a recall starts to deteriorate, pull it out of the chain and reward for fast recalls in short, targeted bursts.

Behaviors in a chain don’t need to occur in the same sequence every time either. This is an important point in search and rescue because we can’t control our environment. Once a behavior is learned and a chain is built, it can be re-built by re-arranging the sequence of the behaviors and adding or eliminating behaviors. This seems to happen quickly because the animal has actively determined which response is tied to each cue. Steve White, an instructor and a thirty-year veteran of police K9 training, has built chains for working dogs that contain as many as ten linked behaviors without any deterioration in performance.

Training for Life

Because learning occurs at a deep level in the brain, it appears as if the animal retains the information for life, with only occasional ‘tune-ups’. Karen described a wild animal rehabilitation center in Namibia where they rescue young animals when the parents are poached. The zoologist called Karen when a leopard, who had been clicker trained for veterinary examinations while being raised, had been released into the bush two years earlier. She apparently lost her radio collar and they needed to locate her for examination. Karen assured him that animals seem to retain the behaviors when clicker trained. I saw the slide of the leopard on the man’s chest licking his face! He said that she bounded out of the bush when he called, jumped on him and acted like he’d finally come home after being away. He gave her the learned cues, examined her, put a new collar on her neck and sent her on her way to re-join her pride.

Clicker training has also been adapted for use with humans. Dog trainers began using this technique with children in class and sports training when they saw how effective it was for their dogs. Called ‘Tag Teach’ when used with humans, it’s now used to train competition-level athletes, teach children, work with learning disabled people, in organizational team building, and by behavioral psychologists for their clients. It’s basically the same technique, but instead of ‘treats’ the individuals move a bead down a cord. After they’ve moved a pre-defined number of beads they get some form of payment – chocolate, for example. Like other animals, the reward must be something the person values.

By the third day Shakti and I were happy and a bit tired with all the new information and experiences. I wanted to know more, but it was time to go home and put the new information into action. I’m using exclusively operant conditioning now, (although I sometimes revert to my Linda Blair voice when a rabbit’s around). As I get Shakti ready for the breed show ring and continue to train her for SAR I see infinite possibilities, limited only by my creativity. And I have a relaxed, happy and smarter Belgian Malinois!

About the Author...

Angela Eaton-Snovak is a Veteran SARDOC Handler. Her first dog “Isis” was a certified trailing dog, and worked many missions as a member of Alpine Search and Rescue. After Isis retired, Angela began training “Shakti” a 3 year old Belgian Malinois, and hopes to certify in airscent and avalanche rescue.