

Dog Talk

The official *unofficial* newsletter for FEMA dog handlers

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Colorado Training Opportunity

Who: Colorado Task Force One (CO-TF1)

What: Canine Open Training

When: May 30 & 31, 2009, Time 0900-1700 each day

Where: Rubble pile near Denver International Airport (DIA)



Canine Coordinators/Managers & Handlers:

All FEMA handlers either certified or in training, and State affiliated handlers, are invited. Canine teams will have the opportunity to train at a huge multi-dimensional and dynamic rubble pile, agility station and directional field.

Stations are set that focus on a particular training topic, with the ability to adjust to level of training from beginner to advance. Possible topics include: deep burials, defused scent, multiple victims, wide area search, and alerts. Please feel free to suggest topics of interest to you. Space is limited to 50 canine teams, broken down in groups of 5-7, to ensure ample training time. This is not an instructional event; however, each group is a mixture of handlers of all experience levels. Trading ideas and training methods as well as offering assistance to one another is what this training is all about.

The following will assist task forces in allocating cooperative agreement funds for this type activity:

Task Forces may use funds to cover salary and travel for the purpose of Task Force personnel to collaborate with a Federal, State US&R system asset(s) or other emergency responders to enhance the capabilities of the US&R system (excerpt from Page 6, #6, Sponsoring Agency Responsibility and Requirements/Administration and Management section of the CA2008 Statement of Work)



Training at the DIA Rubble Pile will be from 0900-1700. (see attached map) If we are able to arrange lunches we'll let the participants know via e-mail prior to the training. Otherwise, participants will need to pack their own lunches. The site is too far away from restaurants to leave during the short break for lunch.

Denver International Airport is the closest airport to the site. We recommend the Quality Inn (formerly the Red Roof Inn), 6890 Tower Road, Denver CO (303-371-5300). We are not going to block out rooms, but your handlers can ask for a government rate when they book a reservation. There are many hotels and restaurants on Tower Road, approx. 15 minutes drive to the training site. Handlers will be responsible for their own transportation.

Please write Roxanne Dunn at rdunn@westmetrofire.org.

- 1) Dog's name & training level
- 2) Handler's current training level

It is undetermined at this time if we will have the Leadville training event. If it becomes available, we will let you know as soon as possible.

We hope to see you in Colorado!

Roxanne Dunn, Canine Coordinator & Grants Manager, CO-TF1

Let your fingers do the dogtalking...

Check out Dog Food Analysis - Reviews of kibble

<http://www.dogfoodanalysis.com/>

Latest information on Exercise Induced Collapse

<http://www.cvm.umn.edu/vdl/ourservices/canineneuromuscular/taylor2008/home.html>

Link to good article on how to bandage your dogs paw

http://sports.espn.go.com/outdoors/hunting/columns/story?columnist=character_ben&page=sd_col_Character_foot_care



Focused Scenting

Hi All!

I started a blog to assist in educating folks about the Focused Scenting method. With all the questions rolling in, I thought it best that I post the information publicly so that everyone interested can have the benefit of learning more about the method.

<http://focusedscenting.blogspot.com/>

If you have specific training questions, please feel free to either post them to the blog or email me and I'll answer them on the blog. I plan to post new entries weekly.

Konnie Hein (k9riot@yahoo.com)



☆☆☆☆ Kudos to..... ☆☆☆☆

DOGTALK is pleased to announce that the following Canine Search Teams have recently gained certification (or re-certification) as FEMA US&R Canine Search Specialists:

☆☆ Tacoma, WA- November 2008

Rick Cox & Mocha (WA-TF1), Roxanne Dunn & Chili (CO-TF1) Kent Olsen & Chase (WA-TF1), Keith Taylor & Boone (WA-TF1)

☆☆ Linthicum, MD November 2008

Jen McKay & Rogue (VA-TF2), Scott Fry & Diamond (PA-TF1), Bobbie Snyder & Spirit (PA-TF1), Bob Sessions & Raider (PA-TF1), Elizabeth Kreidler & Safiro (VA-TF1), Christy Borman & Cody (TX-TF1), Linda Neimeier & Daisy (VA-TF2).

☆☆ College Station, TX- December 2008

Bolette Burn & Spenser (NM-TF1), Janalee Gallagher & Dare (IN-TF1)

Phoenix, AZ- February 2009

Dana Medlin & Hoss (AZ-TF1), Kim Norman & Ben (AZ-TF1), Adam Skiver & Tug (AZ-TF1), Tim Steckler & Rogue (AZ-TF1), Jeaneen McKinney & Mac (AZ-TF1), Sonja Heritage & Czaro (VA-TF1), Doug Van Iwaarden & Wylie (CA-TF5), Mark Hopkins & KC (MD-TF1), Marc Valentine & Val (CA-TF5), Sally Timms & Echo (CA-TF6), Carol Carlucci & Sonny (CA-TF6), Chris Holleyman & Petzl (VA-TF1)

2008 Comparisons

Below is the summary of 2008 and comparisons of prior years:

Dec, 2008

228 certified teams/195 actual resources
120 teams tested/88 passed (73%)

Dec, 2007

201 certified teams/173 actual resources
119 teams tested/79 passed (66%)

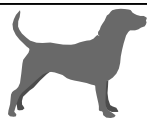
Dec, 2006

166 certified T-1 teams (didn't track actual resources)
118 teams tested/76 passed (64%)





Random rubble photos from recent CE's...



Teris

Handler: Rayanne Chamberlain, OH-TF1

At less than 18 months of age, Teris had already experienced more than most dogs 5 times his age. His training as a disaster dog took him to many states from an early age. Teris came home at 7½ weeks of age. Two days later, he was participating in a search dog demonstration and his life continued on that pace.

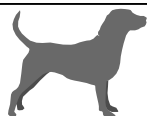
It was his personality, though, that made him almost bigger than life. Teris met every day with enthusiasm, expecting each one to be new, exciting and fun. He was a clown, with an over-the-top sense of humor, who loved an audience. He was sure that every person, dog and even cat loved him and was always surprised when someone didn't think he was 'all that'.

He was on the verge of being prepared to participate in the Type II/FSA evaluation, but his life was cut short due to complications resulting from the removal of a foreign object in his intestine.

The highlight of his search life came in October at the Doberman Pinscher Club of America's annual meeting. 2008 was the Centennial of the Doberman in America and several WWII Marine Canine Handlers were in attendance. We were asked to do a SAR talk and demonstration and most of those Marine handlers attended. Teris played the clown throughout the talk period, but the minute we asked him to show off his disaster skills, he went into work mode and couldn't have done a better job. He closed that demonstration with a 'stupid pet trick' my husband had taught him – 'take a bow'. He stole the show and it was a humbling moment to be doing this demonstration in front of handlers who'd risked their lives with their Dobermans so many years earlier.



Although he was with me only a short time, he captured my heart. When he died he took a piece of it with him. He is loved and will be missed.



Exercise Induced Collapse

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Groundbreaking discovery leads to genetic test for EIC in Labrador retrievers By Fran Howard

Judy and Jim Powers, Sheboygan, Wis., understand firsthand the heartbreak of buying a dog affected with exercise-induced collapse (EIC). EIC, the once-puzzling neurological syndrome, has become prevalent in pedigreed Labrador retrievers over the past couple of decades. "The dog we had that was affected with EIC could have been a competitive dog," says Judy. But he never got the chance. As the 3-year-old dog progressed through more rigorous training exercises, he started to exhibit signs of the dreaded condition, weakness in the rear limbs during strenuous exercise that can spread to the forelimbs. If not immediately rested, the dog would collapse. After making a significant financial investment in the animal, Judy and Jim removed the dog from training. Judy and Jim are competitive participants in retriever field trials and the owner of Ram, a two-time National Amateur Field Champion and Field Champion Labrador retriever, not affected with EIC.

Until recently there was no test for EIC, and while veterinarians, Labrador retriever breeders, and owners of field trial dogs suspected the syndrome was becoming more common, no one knew just how prevalent it had become. Breakthrough research at the University of Minnesota College of Veterinary Medicine has changed that. Genetic researchers have pinpointed the mutant gene that causes EIC. The far-reaching discovery has vast implications, not only for the Labrador retriever population, but also for molecular research in both veterinary and human medicine.

"This extraordinary research is a great example of the strong emphasis the College of Veterinary Medicine places on comparative medicine," says Trevor Ames, D.V.M., dean of the veterinary college. "Discoveries of this magnitude involving naturally occurring diseases of animals can help the affected animals as well as humans with related conditions." Further study could lead to a better understanding of the processes that occur in other neurological diseases.

EIC involves a mutation in a gene critically involved in the communication between nerves within the central nervous system. "Communication between neurons occurs at synaptic junctions and involves the release of neurochemicals from the terminal of one neuron that interact with the adjacent neuron," says James R. Mickelson, Ph.D., professor of veterinary biosciences at the University of Minnesota and one of the lead researchers. "This synaptic communication requires structures called 'synaptic vesicles' to contain necessary neurotransmitters. The gene involved with EIC is responsible for making new synaptic vesicles and enabling nerve communication to continue. A naturally occurring mutation in this gene has not been identified (in any mammal, including humans) until now."

Mickelson was one of several researchers to publish the breakthrough discovery, "A Canine Dynamin 1 Mutation is Highly Associated with the Syndrome of Exercise-Induced Collapse," in the October 2008 issue of the journal *Nature Genetics*. Others in the College of Veterinary Medicine's research team were: Edward "Ned" E. Patterson, D.V.M, Ph.D., internal medicine specialist; Katie M. Minor, B.A., R.N., junior scientist; Anna V. Tchernatynskaia, M.S., junior scientist; and Kari J. Ekenstedt, D.V.M., postdoctoral



fellow. Susan M. Taylor, D.V.M., internal medicine specialist at the Western College of Veterinary Medicine at the University of Saskatchewan, and G. Diane Shelton, D.V.M, Ph.D., professor of pathology at the University of California San Diego School of Medicine, are also authors of the findings.

Not only did the genetic researchers identify the gene involved in EIC, they also developed and submitted a patent application for a genetic test that can identify affected dogs and carriers of the disease. The \$65 test is available exclusively through the University of Minnesota Veterinary Diagnostic Laboratory. The test is welcome news because the Labrador retriever is the most common dog breed in the world. The American Kennel Club (AKC) alone issues more than 120,000 new registrations for Labrador retrievers each year. “Basically, there is no treatment for EIC, so the test will allow Labrador retriever breeders to make knowledgeable decisions to reduce the prevalence of EIC in the breed,” says Christine Haakenson, Ph.D., director of research program development at the AKC Canine Health Foundation, which sponsored the latest round of research.

While many Labrador retrievers are genetically susceptible to EIC, some may never exhibit signs of the disease because they typically don’t reach the level of exercise that hunting and field trial dogs achieve. “It takes 5 to 10 minutes of very strenuous exercise before the first clinical signs appear,” says Patterson. “If you stop dogs right away when they first become wobbly on their back legs, and you rest them, they’ll be fine. But sometimes, if dogs are not stopped, it affects their front legs, and later maybe their breathing—we are not certain. In severe episodes, a dog can die.” Dogs gripped in an episode of EIC continue to try to perform, dragging themselves along in pursuit of their goal. They do not exhibit pain and their temperatures, while elevated, are no higher than normal dogs exercising at a similar level.

Shelton was the first to describe the disease. She first saw Labrador retrievers affected with EIC in 1990, and presented the condition to the veterinary community three years later. Shelton and Taylor began investigating EIC, analyzing owner questionnaires and evaluating affected dogs in an attempt to determine the root of the problem: muscular, cardiovascular, or neurological. They compared symptomatic dogs with asymptomatic dogs during and after strenuous exercise, but found that clinically, both populations are identical: their blood is normal, their hearts and lungs are normal, and their muscle pathology is normal. Suspecting the syndrome had a genetic basis, Shelton and Taylor turned to the University of Minnesota researchers in 2001.

The breakthrough

“We had previously found a mutation in a mixed population of dogs that causes a primary high temperature problem called ‘malignant hyperthermia.’ EIC looked different to us, but we thought we should explore whether the two conditions were the same,” says Patterson. “We suspected EIC was an inherited condition and that it might be inherited by a single gene based on the pedigrees.” That led researchers from the University of Minnesota and the University of Saskatchewan to solicit blood samples and pedigrees for the genetic research.

After ruling out any connection with malignant hyperthermia, the genetic research team still had to isolate which of the 20,000 or so genes might be responsible for the syndrome by testing genetic markers spread throughout the dog’s chromosomes. Mickelson likes to think of DNA markers as flags and chromosomes as linear filing cabinets that contain genes. “We look at flags all along the chromosomes,” he says. “If we see a colored flag at



one position on a chromosome that all of the affected dogs have, and it is a different colored flag than what the normal dogs have, the location of that flag tells us what genes might be involved in causing the condition.” Five years after beginning their work, the research team in the fall of 2006 found a linked marker in a small area of one chromosome, with 10 or so genes nearby. Within eight months of narrowing the area down, the team isolated the responsible gene: dynamin 1.

The prevalence

Their next step was to determine how prevalent EIC was in the breed. To do that, Minor traveled to field trials in Minnesota, Wisconsin, and the Dakotas, and Taylor traveled to trials in Western and Central Canada throughout the summer of 2007, collecting DNA samples from the cheek of nearly every dog enrolled in the competitive events. “We went to seven field trials in the area and we swabbed almost every dog there,” says Minor. “We also sent swabs to a national show dog competition, where DNA was collected from 200 conformation dogs.” The group also tested dogs that exhibited signs of EIC that were seen at veterinary hospitals.

“That’s when we started getting a really strong idea of the frequency of this mutant gene in Labrador retrievers,” says Mickelson. The group’s estimate is that 3 to 5 percent of all Labrador retrievers are affected and carry two copies of the mutant dynamin 1 gene. Another 30 percent are carriers with just one bad gene. “That’s true of field trial and hunting dogs, and show dogs, as well as pets,” Mickelson adds. The team also found EIC-affected Labrador retrievers from Europe, the Middle East, and Australia. “EIC occasionally occurs in Labrador retriever crosses, and in two other retriever breeds that are closely related to the Labrador retriever: the Chesapeake Bay retriever and the curly coated retriever,” he says.

Now that a test is available to identify carrier and affected dogs, breeders will be able to breed dogs in such a way that no offspring receive two mutated genes. Rankin, a Grand Hunting Retriever Champion and a Super Retriever Series winner, carries two copies of the mutant gene, but unlike many dogs affected with EIC, she is able to compete. Her clinical signs appear only during play. Rankin’s puppies could have brought her owners, Beverly and Dave Garcia, Duluth, Ga., thousands of dollars. Puppies of champion dogs can sell for as much as \$5,000, and a trained dog can cost as much as \$30,000. “We were going to breed her,” says Beverly. Three to four weeks before the breeding date, however, the Garcias heard that Minor was at the 2007 summer field trials testing dogs. They couldn’t attend the trials, but they called Minor and arranged to send a sample of Rankin’s blood for testing. “When the test came back that she was affected, not just a carrier, we made the personal decision to have her fixed and not breed her,” notes Beverly. “We made the decision not to take the money and run.”

In the future, Dave and Beverly Garcia and Jim and Judy Powers have decided that before breeding a dog they will test it for EIC. They also plan to test any puppy they buy. “Most breeders and buyers will want the test done,” says Beverly. “The ethical person will want to give a guarantee to the buyer of the puppy that it is not an affected dog.”

Please forward any news, scheduled events, letters to the editor, or other info you want disseminated via **DOGTALK**, the underground canine newsletter to Anne McCurdy: amccurdy@clarian.org

