

INTRODUCTION

At SAR/Disaster training and deployment scenes it is not uncommon to recognize that there are vast differences in the quality of canine teams across their search performances. Some teams regularly demonstrate outstanding search capabilities; others only marginally perform or altogether fail. There are a number of reasons for inconsistent performances between teams and within teams. From these authors' standpoint many of the complaints regarding poor and inconsistent performance of search teams can be traced to the selection and employment of unsuitable canine search candidates.

Repeatedly, search units--whether civilian or police--have accepted donated canines into their training programs because they were readily available. For example, police units accepted donated canines that generally fit the traditional "police dog" look (e.g., German Shepherds, Doberman Pinschers). Additionally, these units would do little in the way of screening candidates other than seeing if candidates barked when given a threat ("defense drive") and chased a thrown ball ("ball drive") in their own backyards. This often was the extent of their pre-screening.

For civilian search units, many canines came as part of a package deal. Volunteers began training with their search units as ground searchers or support staff. Later, they would show up with their pets and assert that their companions would make good search dogs. The search units did little to screen the dogs and, regardless of their overall search performance at training or deployments, accepted and integrated them into the units

The tools for screening canines for their chosen application have existed for years. One only has to speak with the excellent police, Schutzhund and confirmation trainers across the country to learn that there are specific evaluations that provide an indication how well a canine will perform throughout its lifespan whether it be search, sport or show. To some extent, trainers in the SAR/Disaster community have adopted and adapted a number of evaluative exercises for canine search prospects. However, there is a lack of uniformity and agreement of what tests should be used and needed. Additionally, there is disagreement as to the weight that should be given to the various tests and how much one may be more important than another. The intent of this article, then, is to provide SAR/Disaster trainers and training directors with some guidelines and the appropriate tests which lead to a quantitative and qualitative instrument by which they can accept or reject proffered canine search candidates.

CANINE DRIVES AND NERVE STRENGTH

Search trainers and training directors acknowledge that there are a number of factors they consider when screening canine candidates. They look at such things as a canine's fitness, sociability, size, and trainability. These are very important factors with regard to determining a canine's suitability for entering search work. As important as these factors are, however, there are two that must be stringently evaluated: a) a canine candidate's drives, and b) a canine's nerve strength. It is these authors' assertion that without the proper combination of drives and nerve strength a canine candidate will not be successful in search work, regardless of their performance in other screening instruments.

OVERVIEW OF DRIVES

For the purposes of this article, a drive is defined as an innate impulse that prompts a

canine to action (e.g., retrieve, play). Canine literature is replete with numerous theories on what behaviors or actions are outward manifestations of a drive and how many “drives” exist in a canine. Nonetheless, there is agreement that canine drives are innate and are essential to a canine’s survival.

There is also agreement that there are differences to the quantity and quality of drives in and between canines. That is, canines are not equal with regard to the amount of drive they have. For example, some canines have a very pronounced “prey” drive while others do not. Canines with little or weak “prey” drive will not be successful in the sporting and working fields (e.g., Schutzhund, police service, SAR); they may make excellent family pets and companions, however. At a minimum, a SAR/Disaster canine candidate with pronounced drives will maintain search intensity across a myriad of conditions and environments (e.g., hot and cold climates, large wilderness areas, stressful urban disaster scenes), will be very trainable and moldable, and will provide years of consistent and successful search work. Therefore, it is imperative that prior to being selected for SAR/Disaster work, canines be properly and thoroughly “drive-tested.”

Currently, there are six drives enumerated in the canine literature: a) pack or social; b) play; c) food; d) prey; e) hunt; and f) defense. Pack or social drive refers to a canine’s desire to interact with a group. The group may comprise other canines, a handler and their family, or other members of a search unit. A canine candidate with an established and stable pack drive will integrate well into a search (handler and canine) unit composed of other teams and personnel. A canine with a dominating pack drive may be difficult for the inexperienced handler to control or display aggression toward other canines, but with proper training and handling by an experienced trainer or handler can become an outstanding performer. A canine with a diminished pack drive may be shy around other search teams and members; this is equally problematic as they will not integrate well with other team members (humans and canines) during SAR training and operations.

A canine’s desire to entertain itself or engage in entertaining behavior with others is play drive. A canine who readily roughhouses, runs, or engages in tug-of-war with his handler has high play drive. A high play drive is essential for easing obstacle training, introducing searching, promoting stress relief during training and search missions, and building a handler-canine bond. Canines with diminished play drive will not recover as quickly from stress after intensive training and deployments.

Hunger is a canine’s most primitive and basic drive; without food a canine cannot survive. Food can be positively used to enhance and reinforce training. Therefore, a canine search candidate’s motivation for obtaining sustenance should be strong—they should be very animated and demonstrative at feeding time. However, as with other drives, there are differences between canines in their desire to seek and obtain food.

In its most elemental form, prey drive is a canine’s desire to pursue, capture and kill quarry. Pronounced prey drive is mandatory for success in all search work. It goes without saying that in SAR/Disaster work, there is no desire for a canine to kill the quarry (the victim). Relatedly, it should be noted that in Schutzhund sport and police service work there isn’t a need for a canine to kill the prey in any of the training exercises and deployments. Rather, the goal is for a canine to “capture and hold” the lost or hiding subject. An elevated prey drive goes far towards helping a canine attain this goal. Related to prey drive and as equally important is hunt drive.

Hunt drive is a canine’s desire to search using their nose for the prey that is not visible. In the wilderness, canines and lupines regularly search for prey via their noses as most game animals conceal themselves from predators. A canine with a distinct hunt drive can be readily trained to “hunt” for victims in SAR/Disaster work. A canine candidate exhibiting outstanding prey and hunt drives has the potential for being a distinguished SAR/Disaster dog.

The final canine drives to be discussed are defense and fight drive. These are the drives that galvanizes a canine to fight to protect themselves from a resisting prey, other canines invading their territory or coming close to it’s pack, and other canines that attempt to take their prey from them. Police service work requires that a canine have a well-defined defense and fight drive so that the canine can be trained to protect it’s handler and themselves during criminal apprehension work. Schutzhund sport also requires a pronounced fight/defense drive to enhance their performance in the protection phase of a competition. High defense drive in SAR/Disaster work can be

problematic. For example, a search canine with a pronounced defense or fight drive may become so protective of their "prey" (a victim) that it prevents rescue workers from getting to them. Finally, although police service dogs may have a high defense or fight drive and extensive protection training, this does not preclude them from working in SAR/Disaster work. Most police service handlers have control of their canines and, thus, will be able to recall them away from trapped victims so that rescue workers can get to them.

Although the above discussion has configured canine drives into six categories, in reality a canine regularly engages a combination of drives at any given time. For example, a hungry canine in the wild can join with a pack of other hungry canines to hunt for food. Once prey is located, the canines will pursue and hunt until they have seized it. These same canines will protect their kill from other predators until they have been sated. Thus, it can be difficult to delineate what drive a canine is operating in a specific situation. Nonetheless, it is imperative a fair and thorough attempt be made to evaluate individual drives when assessing a canine search candidate. Equally important is the evaluation of a canine search candidate's nerve strength.

OVERVIEW OF NERVE STRENGTH

Nerve strength refers to a canine's ability to deal with or adapt to stress-producing environmental stimuli. The nerve strength of a canine is partly determined through its breeding and heredity and partly through its exposure and socialization to a variety of environments and stimuli across their lifetime. For example, police trainers have reported that it is not uncommon to observe high-scoring and pronounced courage Schutzhund canines raised in country kennels timidly react to urban sights and sounds (e.g., buildings, buses, machinery). However, because of breeding and with proper exposure, these canines quickly and successfully adapted to the urban environments they were employed in. It is important that SAR/Disaster canine candidates have the nerve strength to adapt to a variety of tactile, aural, visual and olfactory stimuli.

Tactile nerve strength refers to a canine's ability to adapt to the various physical surfaces and surroundings their bodies may come into contact during search exercises. A canine may encounter a variety of floor coverings (e.g., slick vinyl, smooth tile, rough stone); numerous outside surfaces (e.g., rough concrete, thorny ground covering, slick decking); unstable surfaces (e.g., and confining obstacles (e.g., tunnels, crawl spaces) which they must negotiate during searches. If a canine becomes panicked upon encountering any of these conditions then their search skills may greatly diminish.

Aural stimuli such as banging, pounding, and digging will confront a search canine. Additionally, loud machinery such as generators, trucks, saws, and steam shovels are present at many disaster scenes. In some hostile disaster environments (e.g., Kenya) search canines may hear gunfire. Therefore, a search canine candidate must be stable and not become overwhelmed by these loud noises and machines.

Search canines cannot be unsettled by visual stimuli such as collapsed structures, large trucks and road building machines, smoke from burning fires and large groups of people (e.g., rescue workers, media, onlookers). Even if not socialized to these stimuli, a canine must have sufficient nerve strength to continue searching upon encountering them.

Finally, while it is not recommended that canines work in areas inundated with fumes and smoke (e.g., diesel engines, fires), it may become necessary that searches be completed in such environments. And, although these stimuli may diminish the olfactory capabilities of a canine, the handler will have to make the adjustment to his search strategy to compensate for the loss.

EVALUATION TESTS

PRE-EVALUATION REQUIREMENTS

CANINE CANDIDATE

Every dog handler has her or his favorite breed. However, not all breeds are suited for SAR/Disaster search work. Canine candidates for SAR/Disaster work will most likely come from the hunting, herding and sporting breeds--breeds that predominantly search/hunt with their noses as opposed to their sight. Additionally, the canine candidate must be athletic, agile, durable, sociable, tractable and moldable. Consideration must also be given to the candidate's size; extremely large breeds will not be as surefooted as smaller breeds, will require more food and water on sustained search operations, and will take up more space in transport vehicles. Breeds commonly seen in successful searches and deployments include but are not limited to: German Shepherds, Labrador Retrievers, Golden Retrievers, Belgian Shepherds, Border Collies, Doberman Pinschers, Australian Shepherds and some mixed breeds. Regardless of the breed chosen, the potential search candidate should be at least one-year old. By this age, a candidate should have been thoroughly socialized and medically screened; she should be able to participate in the drive and nerve strength testing without being excessively mentally and physically stressed.

TESTING AREAS

Considering that a SAR/Disaster canine will travel to a number of unfamiliar areas in its searching lifetime, it is imperative that the drive and nerve screening take place in neutral locations alien to the canine candidate. Many canine candidates are adept when performing tests on "home fields" but flounder when brought into strange territories. For example, good police trainers note that canines often adequately perform "protection" tests on their own home grounds. However, when tested outside the home territory environment, these same candidates fail to exhibit adequate "protection" behavior--a must for police search and apprehension work. Relatedly, many canines are very comfortable searching for their toy or reward around their play areas. However, for some canines the desire to search for a toy diminishes or disappears in unfamiliar surroundings. Thus, the "home field" advantage must be nullified.

DRIVE TESTING

Drive testing will encompass only two of the drives mentioned above: a) prey and b) hunt.

PREY DRIVE TESTING In the prey drive test, a canine is evaluated on their eagerness to pursue and capture prey. This test is run 10 times. The handler provides the canine's favorite toy or object (e.g., ball, jute toy) to the evaluator. The evaluator excites the canine with the object and then throws it so that it remains visible to the canine. The canine is evaluated for the speed and enthusiasm by which he pursues and takes hold of the object.

HUNT DRIVE TESTING In the hunt drive test, a canine is evaluated on their willingness to use it's nose to search for prey. There are four subsets to this test; they are differentiated by the amount of time between the hiding of the object and the release of the canine to search for the object. While the candidate is restrained by the handler, the evaluator throws the candidate's toy into thick brush or grass so that it is out of sight. In the first subtlest, the canine is immediately released upon the object dropping out of sight into the brush. The canine is evaluated for her willingness, eagerness and tenacity for entering the area and searching for her toy. The successive tests are similarly conducted. However, the second subtlest requires a 15-second delay before the candidate is released to search for the object. The third subtlest requires a 30-second delay and the final subtlest requires a 60-second delay. Each successive subtlest is evaluated according to the standards applied to the first test.

NERVE STRENGTH TESTING

There are 12 tests in this section of the evaluation. There are six tactile tests, four aural tests and two visual tests. There is no specific olfactory test conducted in this section. The authors presume that a canine will be exposed to enough olfactory stimuli in the visual - smoke and aural - machinery tests. Additionally, the risk of permanently diminishing the olfactory capabilities of a search candidate far exceed the need to see a canine function in noxious fumes and smoke.

TACTILE NERVE STRENGTH The first four tactile tests consist of footing evaluations: slick flooring, unstable surface, rough surface, and elevated surface. For slick flooring, a canine is brought into a building or area that has finished vinyl, tile or stone surfaces or a similar type surface. The canine is evaluated on it's ability to move across the flooring without panicking or requiring assistance from the handler. One of the most useful unstable surfaces can be found at a playground or park--a swinging bridge on a children's playset. The surface moves from side-to-side and dips and a canine candidate may find this unsettling. Generally, a rock or concrete pile functions well as a rough surface; on this surface, a canine is evaluated on it's ability to move precisely and diligently across the surface and not attempt to run off. Finally, an elevated surface can be fashioned from a 2 x 10 approximately 12 feet long set up on boxes approximately 2 - 3 feet off the ground. The narrowness of the surface forces a canine be precise and sure in his stepping. A long banquet table could serve as an appropriate substitute.

One of the best confined space test areas is a machine room of an office building. A canine has to maneuver between furnaces, compressors and piping in these rooms. Their body generally stays in contact or brushes up against these object for the time they are in there. In this test, a canine is evaluated on their ability to stay focused although they may be squeezed by pipes and furnaces. This test is run first under lights and second without lights.

AURAL NERVE STRENGTH In the aural evaluations, a tied out canine is observed as running lawnmowers and weed eaters, pounding hammers, and discharging guns are brought near their location. A canine with solid nerve strength will observe the going-on but will not attempt to run at or away from the testing.

VISUAL NERVE STRENGTH An excellent place to conduct the visual - moving machinery test is at a warehouse where numerous tractor-trailer rigs are constantly moving in and out. The candidate should be leashed to prevent them from running from the location or into traffic. Finally, a smoke grenade or bomb can be set off in an open area and the canine can be walked through it. A canine should not become so disoriented in the smoke that they become disoriented or frightened.

SCORING Each test is provided with an adjective and numerical score. The evaluator should pick the score that best represents the performance of the evaluated canine at the time of it's performance. All drive tests scores are totaled and divided into the number of tests given. The nerve strength tests are totaled and divided into the number of tests given. The drive test score and nerve strength score is derived from the rounding off tables at the bottom of the individual worksheets. The two scores are converted into an adjective rating borrowed from Bodingbauer's adjective puppy ratings and represent a candidate's potential in SAR/Disaster work: "very promising," "promising," "less promising" or "unpromising."

CONCLUSION

Proper selection and testing of SAR/Disaster canine candidates is essential in order to reduce the time needed to bring the canine to Mission ready status, and also reduce the wash out or failure rates. It will also enable trainers and handlers to be confident that their canine will be able to quickly overcome the many environmental stresses that may face them in the often confusing and hectic environment that the SAR/Disaster canine is faced with in it's operational search functions.

APPENDIX 2

BROWNELL – MARSOLAIS SCALE:

DESCRIPTION OF CATEGORIES

BROWNELL – MARSOLAIS SCALE: Description of Categories

VERY PROMISING - Candidate for disaster search:

Scores from the screening instrument fall into the following range:

Total Weighted Score of 90+,
with minimum Motivation / Drive Score of 45

A VERY PROMISING Candidate for disaster search is very balanced. The canine demonstrates high overall drive and nerve strength. This canine is friendly toward people and other canines. This candidate will quickly excel at all search, obedience and agility tasks across a myriad of conditions and environments with the appropriate training. The canine will work well with an experienced and accomplished handler as well as with an inexperienced handler. Exposure to consistent and challenging training will bring this candidate to mission-ready status quicker than other candidates. Trainers and training directors must ensure that their training programs and regimens take full advantage of this canine candidate's abilities and motivation. Additionally, the training staff must ensure that the canine's assigned handler is up to the task keeping pace with such a favorable candidate.

Promising - Candidate for disaster search

Scores from the screening instrument fall into the following range:

Total Weighted Score of 80 - 89,
with minimum Motivation / Drive Score of 40

A PROMISING canine is a good search candidate. He is balanced with regard to drive and nerve strength, and well socialized. Because his nerve and drive strengths are not as pronounced as the "Very Promising" candidate, he will require a longer and patient training period prior to attaining mission-ready status. This candidate may experience minor problems with some task and environments. However, with appropriate training and familiarization he will overcome and/or adapt to them. A patient, knowledgeable and experienced handler will bring out the best in this candidate. An inexperienced handler under the watchful eye of a competent training staff with a challenging and regimented program will be able to work this canine to his fullest search potential.

BROWNELL- MARSOLAIS SCALE: Description of Categories

LESS PROMISING - search candidate

Scores from the screening instrument fall into the following range:

Total Weighted Score of 70 - 79,
with minimum Motivation / Drive Score of 35

A LESS PROMISING canine is a poor search candidate. The canine will require extensive and lengthy training and problem solving. Even with these efforts, there is no guarantee the candidate will be a successful searcher. The canine will not readily adjust to new environments or situations. This candidate may have limited success in search work tailored to her strengths. For example, With high drive (3) and low nerve strength (1) this candidate might be able to successfully search in wilderness settings. Urban and disaster searches with there overwhelming environmental stimuli would incapacitate this canine. Conversely, the low drive-high nerve strength candidate (1,3) would be confident in the urban search setting but would be easily distracted. This canine may have poor social behaviors. To get the topmost performance out of this canine, the training staff and the handler must be exceptionally knowledgeable and experienced. A unit's training director should give serious consideration to not employing this canine in a search training program.

UNPROMISING search candidate

Scores from the screening instrument fall into the following range:

Total Weighted Score of less than 70,
OR Motivation / Drive Score of less than 35

AN UNPROMISING canine search candidate should not be permitted to enter a search training program. Regardless of the length and depth of training, he will not be deployable for search work. This canine will exhibit behavioral problems when stressed at training scenarios. It would be unfair to the canine, the handler and the unit to retain this candidate in a search training program.

DISASTER CANINE QUALIFICATION SCREENING

This screening is designed to evaluate the potential of a canine to perform disaster search work. The process will exam inherent qualities of the canine including: the canine's resilience, nerve strength, agility, boldness, friendliness, motivation to work, focus, prey drive and hunt drive. In addition, the screening provides an opportunity to assess the working relationship between the handler and canine and the skills the canine has been trained to perform. The age of the canine and previous training are taken into account. Regardless of the breed, potential search candidates must be at least 12 months of age.

The screening is divided into two parts:

PART 1. Inherent Ability

Overview

Phase A. Sociability

Test 1a. & Test 1b. - Toward People
Test 2. - Toward Other Canines

Phase B. Motivation and Drive

Test 1a, Test 1b, Test 1c. - Commitment to Reward (Toy) & Play Drive
Test 2. - Prey Drive Test
Test 3a. - Hunt Drive: No time delay
Test 3b. - Hunt Drive: 15 Second delay
Test 3c. - Hunt Drive: 30 Second delay
Test 3d. - Hunt Drive: 60 Second delay
Test 4. - Handler / Canine Interaction

Phase C. Nerve Strength

Test 1. - Surface Sensitivity: Slick Surfaces
Test 2. - Surface Sensitivity: Unstable Surface
Test 3. - Surface Sensitivity: Rough Surface
Test 4. - Height Sensitivity: Elevated Stable Plank
Test 5. - Confined Space: Lighted
Test 6. - Confined Space: Dark
Test 7. - Sound Sensitivity: Machinery
Test 8. - Sound Sensitivity: Pounding and Rattling
Test 9. - Sound Sensitivity: Gunfire (optional)
Test 10. - Visual Sensitivity: Moving Machinery (optional)
Test 11. - Visual Sensitivity: Smoke (optional)

Part 2. Performance Skills

Overview

(Canine proceeds to this stage only at the recommendation of the evaluator.)

The Canine is asked to perform the following skills at its current level of ability. This part of the screening will assess the level of performance to which the canine has been trained. This will aid trainers in planning future training and setting goals and objectives for each canine.

Phase A. Obedience

- Test 1. Figure 8 (loose lead heeling testing sociability)
- Test 2. Heeling
- Test 3. Down Stay
- Test 4. Recall
- Test 5. Emergency Stop (Optional)

Phase B. Bark Behavior

- Test 1. Barks for Toy
- Test 2. Barks for Toy from stranger
- Test 3. Bark Alert at subject in alert prop (need not be concealed)

Phase C. Directability

- Test 1a. - Partial course (for less experienced dogs)
- Test 1 b.- Full course

Phase D. Agility and Comfort on Easy Rubble

- Test 1. See Saw
- Test 2. Tunnel
- Test 3. Ladder or stairs
- Test 4. Travel over easy rubble

Phase E. Rubble Search (Only at the recommendation of the evaluator)

This screening program has been developed through a collaborative effort involving the following organizations: Chilport U.S.Inc. (D. Brownell); Dog Speed One (M. Marsolais); and Emergency Response Canines (P.Hawn, M.Remer). [August, 2000]

DISASTER CANINE QUALIFICATION SCREENING

PART 1. Inherent Ability

Phase A. SOCIABILITY

The disaster canine must be friendly and comfortable around strangers and other canines. A canine must allow another person to move it to a different location in the absence of its owner. The canine must work, live, and be transported in the presence of other canines. The canine must not show aggression.

Personnel:

1 logistics personnel
1 assistant to untie canine from fence (not familiar with the canine)

Equipment:

1 6ft. lead
2 carabineers
3 cones
1 stopwatch
1 canine
numbered arm bands for each handler

Testing site:

open area, place to tie out canine, fence preferred

Test 1a, 1b & 2. - Sociability towards People and Other Canines

The disaster search canine must be friendly and comfortable around strangers and other canines. One canine is screened at a time. The handler will attach the canine to a secured lead. The handler proceeds to a designated area out of the canine's sight. After 1 minute a stranger walks laterally by the canine at a distance of five feet beyond reach of the tied canine. The distance from the canine will be clearly marked. A stranger then walks laterally and just out of reach of the tied canine with a non-testing canine, selected by the evaluators, on lead at heel. The canine on lead will be between the stranger and the tied canine. The passes are to be repeated. The stranger then returns alone, unties the canine and returns the canine to the handler using the handler's lead.

Test 1a. Sociability Towards People (Stranger walks by canine)

- [0] Shows defensive flight behavior; growling and moving backwards; ears not fully up; hackles up. Shows stress as stranger approaches; cowers; recoils from stranger; urinates; stays uncomfortable; totally avoids the stranger. Unable to perform exercise.
- [1] Shows defensive fight; aggressive forward behavior, lunging toward person; stands its ground; barking and / or growling; hackles up; tail up; ears pricked; direct eye contact.
- [2] Canine maybe indifferent or tentative; may freeze; wide eyed; crouched body; wrinkled brow; tail tucked and wagging; yawning; initially backs up or retreats, then becomes more comfortable towards stranger.
- [3] Ambivalent toward stranger; stays relaxed; tail wagging; demonstrates no stress and exhibits confidence when a stranger moves by; sociable attitude.

Test 2. Sociability Toward Other Canines (Canine and stranger walk by twice)

- [0] Shows defensive flight behavior; may have growling and barking; not lunging forward; moving backwards; ears not fully up; body crouched; hackles up (either along entire back or just up front). Shows stress as canine approaches; urinates; stays uncomfortable. Unable to perform exercise,
- [1] Defensive fight behavior; aggressive forward behavior; lunging towards canine; stands its ground; barking and/or growling; hackles up; tail up; ears pricked; direct eye contact.
- [2] Canine maybe indifferent or tentative; avoidance behaviors; yawn; stiff tail wag; some attempts to initiate positive social behaviors; becomes over stimulated by presence of other canine.
- [3] Canine maintains position but is clearly relaxed; positive interest in other canine; tail wagging; relaxed body carriage curiosity towards other dog in playful manner; Shows ambivalence towards canine.

Test 1b. Sociability Toward People (Stranger unties canine)

- [0] Shows defensive flight behavior; growling and /or barking; moving backwards; ears not fully erect; body crouching; whiskers back; hackles up (either along entire back or just up front). Shows stress as stranger approaches; cowers; recoils from stranger when approached. Unable to perform exercise.
- [1] Shows defensive fight behavior; aggressive forward behavior; lunging towards person stands their ground; barking and/or growling; hackles up; tail up; ears pricked; direct eye contact.
- [2] Canine may be indifferent or tentative; may freeze; wide eyed; crouched body; wrinkled brow; tail tucked and wagging; yawning; backs up retreating then becomes comfortable and playful with stranger. Goes willingly to stranger.

- [3] Eagerly greets stranger with enthusiasm; tail wagging, demonstrates no stress and exhibits confidence when meeting a stranger; is indifferent; makes body contact, moves forward in an engaging, sociable way.

Phase B Motivation and Drive

Canine drive is defined as an innate impulse that prompts a canine to action (Brownell-Marsolais). The more instinctive an action is, the more reliable it will be (K. Most). A handler must provide something the canine wants which will stimulate the canine into a desired response. Disaster search canines must be highly motivated to search for long periods of time in an environment that is challenging.

Personnel:

- 1 logistics person
- 1 assistant trained to interact with canine
- 1 timer
- 1 person to throw rewards

Equipment:

- Box of assorted toys or rewards
- Stop watch
- Canine's favorite reward or play toy
- 1 milk crate

Test site:

Unfamiliar open area with places to hide thrown toys;
tall grass, shrubs,

Test 1a, 1b, 1c Commitment to Toy/Reward and Play Drive

The dog's commitment to his reward system is evaluated. A canine that readily roughhouses, runs, or engages in tug and/or retrieves with his handler as well as strangers has a high play drive. High play drive is essential for motivating the dog to work and to relieve stress during training and search missions. It also builds a bond between handler and canine partner.

Test 1a. Handler plays with canine/familiar toy.

The handler is asked to play with his dog using the dog's favorite type of play. They are asked to demonstrate retrieve and/or tug play.

- [0] Canine does not engage in play, ignores handler, more interested in environment than toy.

- [1] Grabs toy only if teased; starts to play but quickly loses interest ;runs away with toy but soon drops it.
- [2] Grabs the toy and plays but occasionally needs to be coaxed back to play. Plays keep-away; may drop toy when distracted but picks it up again.
- [3] Plays vigorously. Never loses interest, presents toy for continued play , nudges , whines, bark, or paws to get toy for more play, stays focused on toy.

Test 1b. Plays with new /unfamiliar toys with handler

- [0] Canine does not engage in play, ignores handler, more interested in environment than reward.
- [1] Canine chooses to play with toy similar to their own, ignores others. Loses interest easily.
- [2] Canine plays with other toys, but with less intensity, still prefers toy similar to his own, but continues to play.
- [3] Canine plays with all available toys enthusiastically; never loses focus.

Test 1 c. Plays with stranger with familiar toy

- [0] Canine does not engage in play, ignores stranger looks toward handler for support, more interested in environment than reward.
- [1] Canine grabs toy only if teased, starts to play but quickly loses interest, runs away with toy but soon drops it, may look for handler support.
- [2] Canine grabs toy and plays but occasionally needs to be coaxed back to play. Plays keep-away; may drop toy or return to handler, but comes back to stranger.
- [3] Canine plays vigorously. Never loses interest, presents toy for continued play, nudges, whines, barks, or paws to get toy for more play, stays focused on reward.

Test 2 Prey Drive

In the prey drive test, a canine is evaluated on his eagerness to pursue and capture prey. This test is run ten times. The handler provides the canine's favorite toy or object to the evaluator. The assistant or evaluator excites the canine with the object and then throws it so that it remains visible to the canine. As the object hits the ground the canine is released. If possible, the canine should not be held but is focused on evaluator and toy. The Canine is evaluated for speed and enthusiasm by which he pursues and takes hold of the object.

- [0] Canine **walks** toward object; canine sniffs object but does not pursue or carry it; canine gets distracted and goes off to explore surroundings. Canine loses interest after less than 5 throws.
- [1] Canine **trots** toward object; canine picks up object, but does not retrieve or consistently carry object; behavior declines after 5 throws or maintains slow pace on all throws.
- [2] Canine goes to object at a **steady** pace; Canine picks up object and carries it around or back to handler and evaluator; canine is **mildly distracted** by surroundings; canine performs consistently on pursuit and seizure of object. Behavior declines after 7 throws.
- [3] Canine **quickly** and **enthusiastically** runs after object; canine energetically seizes the object and carries it around or back to handler and evaluator; canine is **not distracted** by surroundings; canine performs similar pursuit and seizure. Behavior is maintained on all retrieves; stays consistent in its focus and enthusiasm for the object.

Test 3a, 3b, & 3c. Hunt Drive

In the hunt drive test, a canine is evaluated on their willingness to use their nose to search for "prey" that is not visible. A canine with a distinct hunt drive can be readily trained to "hunt" for victims in SAR/ Disaster search work. A canine candidate exhibiting outstanding prey and hunt drives has the potential for being a distinguished SAR/Disaster search canine. There are four sub-tests. While the handler restrains the candidate, the evaluator or assistant throws the candidate's toy into tall grass, brush etc. so that it is out of sight. The canine is evaluated for its willingness, eagerness and tenacity for entering the area and searching for its toy. Allow 1 minute for each hunt test. No commands are given.

Test 3a. Hunt Drive: No Time Delay

- [0] Canine **does not enter** brush; Canine searches on outside of brush; canine does not find and retrieve object; canine begins exploring other areas or returns to handler and evaluator.
- [1] Canine **trots** to brush line and tentatively enters area; canine searches for short period and repeatedly comes back out of brush; canine may locate object but sometimes quits searching when object is not quickly located.
- [2] Canine goes to brush line at a **steady pace** and looks for easy access into brush; canine searches for object; but occasionally exits area and returns to handler and evaluator; canine searches area thoroughly and locates object or until evaluator determines search has gone on long enough.
- [3] Canine **quickly** and **enthusiastically** commits to brush area without delay; canine works area until object is located or evaluator has determined canine has searched long enough; canine

retrieves object and brings it back to handler or evaluator; canine never leaves search area.

Test 3b. Hunt Drive: 15 second delay

- [0] Canine **does not enter** brush; Canine searches on outside of brush; canine does not find and retrieve object; canine begins exploring other areas or returns to handler and evaluator.
- [1] Canine **trots** to brush line and tentatively enters area; canine searches for short period and repeatedly comes back out of brush; canine may locate object but sometimes quits searching when object is not quickly located.
- [2] Canine goes to brush line **at a steady pace** and looks for easy access into it; canine searches for object but occasionally exits area and returns to handler and evaluator; canine searches area thoroughly and locates object or until evaluator determines search has gone on long enough.
- [3] Canine **quickly** and **enthusiastically** commits to brush area without delay; canine works area until object is located or evaluator has determined canine has searched long enough; canine retrieves object and brings it back to handler or evaluator; canine never leaves search area and stays focused

Test 3c. Hunt Drive: 30 second time delay and canine is turned around 360 before being released

- [0] Canine **does not enter** brush; Canine searches on outside of brush; canine does not find and retrieve object; canine begins exploring other areas or returns to handler and evaluator.
- [1] Canine **trots** to brush line and tentatively enters area; canine searches for short period and repeatedly comes back out of brush; canine may locate object but sometimes quits searching object is not quickly located.
- [2] Canine goes to brush line **at a steady pace** and looks for easy access into it; canine searches for object but occasionally exits area and returns to handler and evaluator; canine searches area thoroughly and locates object or until evaluator determines search has gone on long enough.
- [3] Canine **quickly** and **enthusiastically** commits to brush area without delay; canine works area until object is located or evaluator has determined canine has searched long enough; canine retrieves object and brings it back to handler or evaluator; canine never leaves search area and stays focused.

Test 3d. Hunt Drive: 60 Second Delay and canine is turned 360 before being released

- [0] Canine **does not** enter brush; canine searches on outside of brush; canine does not find and/or seize object canine begins exploring other areas or returns to handler and evaluator.
- [1] Canine **trots** to brush line and tentatively enters area; canine searches for short period and repeatedly comes back out of brush; canine may locate object but sometimes quits searching when object is not quickly located.
- [2] Canine goes to brush line at **a steady pace** and looks for easy access into it; canine searches for object but occasionally exits area and returns to handler and evaluator; canine searches area thoroughly and locates object or until evaluator determines search has gone on long enough.
- [3] Canine **quickly** and **enthusiastically** commits to brush area without delay; canine works area until object is located or evaluator has determined canine has searched long enough; canine retrieves object and brings it back to handler or evaluator; canine never leaves search area and stays focused.

Test 4. Handler/Canine Interaction

The interaction between the handler and canine is observed during the screening. The handler is also asked to sit canine. When directed by the evaluator, handler releases the canine from a sit and follows with a reward.

- [0] Canine ignores handler. Refuses reward. Handler and canine do not have an established working relationship.
- [1] Canine needs to be refocused, takes reward but immediately drops it and becomes distracted. Handler must coax canine to continue interaction. Canine frequently ignores handler. Handler and canine have a weak working relationship and lack a positive working attitude.
- [2] Canine and handler have a fair working relationship. Canine focuses on handler but lacks enthusiasm. Takes reward from handler and continues to interact only with handler's encouragement. Handler and canine work as a team and have a fair working attitude.
- [3] Canine maintains very good eye contact and focus; anticipates and takes toy. Handler and canine work very well as a team, possess well-established relationship, reward system and very good positive working attitude.

Phase C. Nerve Strength

Nerve strength refers to a canine's ability to deal with or adapt to stress-producing environmental stimuli. The disaster canine must have the nerve strength to adapt and work when challenged by working on a variety of surfaces, in confined areas, and exposed to noise distractions.

Personnel:

2 logistic personnel
1 person to deal with noise distractions

Equipment:

Noisy machine; leaf blower, weed whacker, lawnmower, generator
1 wide chain
rough surface
1 tin or metal tray; metal surface; metal container
1 slick surface;
2 plastic barrels bolted together with both ends open;
1 slide,
1 unstable surface; sheets of plywood resting on uneven surface or pile of wood scrap
6 wood pallets
2 - 3ft high spools or 2 stable boxes or platforms to elevate a plank
1 wooden plank 8 or 10 feet in length by at least 16 inches wide
1 confined area (lighted); machine room, office, shed, tunnel
1 confined area (dark); small room, closet, two barrels bolted together with one end opened.

Testing site:

Outdoor area for set up of sound distractions, open area, barn, building with debris, closets, utility room

During this part of the screening the handler may only use a food lure, if needed, on the second repetition. The canine needs to be evaluated without working in drive. If the canine is over-motivated by the toy, a clear picture of the dog's nerve strength may not be reflected. The canine must perform each task twice. The second repetition tests the canine's ability to process and manage a challenge to their nerve strength.

Test 1. Surface Sensitivity; Slick surfaces

The Canine is asked to travel across a slick surface.
The canine must go across twice.

[0] Canine refuses to go across surface. Avoids obstacle, refuses food.

- [1] Canine starts and stops before getting onto surface; looks to handler; handler must repeatedly coax canine to get canine across; canine freezes on surface; on second repetition canine does it slowly, cautiously and/or avoids obstacle, showing a decline in performance. Nails may be out on both attempts.
- [2] During first repetition, canine starts slowly and proceeds cautiously across surface; canine does not freeze on surface; handler infrequently coaxes canine across surface. Canine uses nails and pads to maintain grip. On second repetition the canine may be more confident; performance is maintained and/or improved.
- [3] On both repetitions the canine moves across surface; canine is very confident and stable on the surface. Needs little support or encouragement. Not stressed by the exercise. Performance is maintained or improved.

Test 2. Surface Sensitivity: Unstable surface

Canine is asked to travel across an unstable surface.
The canine must go across twice.

- [0] Canine refuses to go across surface. Avoids obstacle, refuses food. Unable to complete exercise.
- [1] Canine starts and stops before getting onto surface; looks to handler; handler must repeatedly coax canine to get the canine across; canine freezes on surface; on second repetition canine does it slowly, cautiously and/or avoids obstacle, showing a decline in performance.
- [2] At first attempt canine starts slowly and proceeds cautiously across surface; canine does not freeze on surface; handler infrequently coaxes canine across surface.
On second repetition the canine may be more confident performance is maintained or improved.
- [3] On both attempts the canine moves across surface; canine is very confident and stable on the surface. Needs little support or encouragement. Not stressed by the exercise. Performance is maintained or improved.

Test 3. Surface Sensitivity: Rough surface

Canine is asked to travel across a rough surface.
The canine must go across twice.

- [0] Canine refuses to go across surface. Avoids obstacle, refuses food. Unable to complete exercise.

- [1] Canine starts and stops before getting onto surface; looks to handler; handler must repeatedly coax canine to get the canine across; canine freezes on surface; on second repetition canine does it slowly, cautiously and/or avoids obstacle, showing a decline in performance.
- [2] At first attempt canine starts slowly and proceeds cautiously across surface; canine does not freeze on surface; handler infrequently coaxes canine across surface. On second repetition the canine may be more confident; performance is maintained or improved.
- [3] On both repetitions the canine moves across surface; canine is very confident and stable on the surface. Needs little support or encouragement; uses pads; not stressed by the exercise. Performance is maintained and/or improved.

Test 4. Height Sensitivity: Elevated plank

Canine is asked to cross an elevated plank.
Canine must go across twice.

- [0] Canine refuses to jump up onto surface and cross plank. Avoids obstacle, refuses food.
- [1] Canine starts and stops before getting onto surface; looks to handler; handler must repeatedly coax canine to get the canine across; canine freezes on surface; on second repetition canine does it slowly, cautiously and/or avoids obstacle. Performance is maintained or declines.
- [2] At first attempt canine starts slowly and proceeds cautiously across surface; canine does not freeze on surface; handler infrequently coaxes canine across surface. On second repetition the canine may be more confident; performance is maintained or improved.
- [3] On both repetitions the canine moves across surface; canine is very confident and stable on the surface. Needs little support or encouragement. Not stressed by the exercise. Performance is maintained or improved.

Test 5. Confined Space: Lighted

Canine is taken to a confined space and enters the lighted area

- [0] Canine refuses to entire the confined space. Avoids area, refuses food.
- [1] Canine starts and stops before getting into the area; looks to handler; handler must repeatedly coax canine to get the canine to enter; canine freezes; on second repetition canine does it slowly, cautiously and/or avoids obstacle, performance is maintained or declines.
- [2] At first attempt canine starts slowly and proceeds cautiously into area; canine does not freeze on surface; handler infrequently coaxes canine across surface. On second repetition the canine may be more confident; performance is maintained or improved.

- [3] On both repetitions the canine moves into the area; canine is very confident and stable; needs little support or encouragement. Not stressed by the exercise. Performance is maintained or improved.

Test 6. Confine Space: Dark

Canine is taken to a confined area and enters the dark area.

- [0] Canine refuses to enter confined space. Avoids area, refuses food.
- [1] Canine starts and stops before getting into the area; looks to handler; handler must repeatedly coax canine to get the canine to enter; canine freezes; on second repetition canine does it slowly, cautiously and/or avoids obstacle, showing a decline performance.
- [2] At first attempt canine starts slowly and proceeds cautiously into area; canine does- not freeze in area; handler infrequently coaxes canine into area. On second repetition the canine may be more confident; performance is maintained or improved.
- [3] On both repetitions the canine moves into the area; is very confident and stable; needs little support or encouragement. Not stressed by the exercise. Performance is maintained or improved.

Test 7. & Test 8. Sound Sensitivity: Machinery and Pounding/Rattling

Canine is on a loose lead and is walked by the handler and passes by the running machinery and then continues on into second area walking by the pounding chain on metal or similar noise. The dog is reversed and walks past both sounds again.

Test 7 Sound Sensitivity: Machinery

- [0] Canine runs from object; Canine flees scene; pulls away; hides behind handler; lays down; freezes and refusing to walk on.
- [1] Canine clings to handler or jumps up on handler; whines, and looks to handler; handler must repeatedly coax canine; moves away from sound source but canine does not flee area and moves on; On second repetition performance declines or is maintained.
- [2] Canine infrequently looks around at sound source; canine displays some anxiety and is tentative on approach but stays in area; alert but wary; goes toward sound source. On second repetition may be more confident; performance is maintained or improved.
- [3] On both repetitions the canine acknowledges the sound source; canine is alert, relaxed and confident; performance is maintained or improved.

Test 8. Sound Sensitivity: Pounding and rattling

- [0] Canine runs from object; Canine flees scene; pulls away; hides behind handler and lies down; freezes and refuses to walk on.
- [1] Canine clings to or jumps upon handler; whines, and looks to handler; handler must repeatedly coax canine; moves away from sound source but does not flee area and moves on; On second repetition behavior declines or is maintained.
- [2] Canine infrequently looks around at sound source; canine displays some anxiety and is tentative on approach but stays in area; alert but wary; goes towards source. On second repetition may be more confident; performance is maintained or improved.
- [3] On each repetition the canine acknowledges sound source; canine is alert, relaxed, and confident; performance is maintained or improved.

Test 9. Sound Sensitivity: Gunfire (Optional)

Starter pistol is fired 30 feet behind canine.

- [0] Canine runs from sound; canine flees scene; canine hides behind handler and lies down; canine is stressed and unnerved.
- [1] Canine clings to or jumps up on handler; whines; moves away from sound but does not flee area; handler repeatedly reassures canine.
- [2] Canine looks around and displays some anxiety; canine is tentative and stays in the area; canine is alert.
- [3] Canine acknowledges sound; canine is alert, and relaxed and confident.

Test 10. Visual Sensitivity: Moving Machinery (Optional)

Canine and handler enter area with moving machinery.
The canine is on a loose lead.

- [0] Canine attempts to flee scene; canine hides behind handler and lays down; canine is stressed and unnerved.
- [1] Canine clings to or jumps up on handler; whines; moves away from activity but does not flee area; is stressed; handler repeatedly reassures canine.
- [2] Canine looks around and displays some anxiety; canine is tentative and stays in the area; is willing to move toward machinery; canine is alert.
- [3] Canine acknowledges activity; canine is alert, relaxed and confident.

Test 11. Visual Sensitivity: Smoke (Optional)

Canine is walked into an area on loose lead where a smoke bomb has been set off.

- [0] Canine becomes disoriented; canine refuses to enter area or attempts to flee area canine lies down, becomes submissive.
- [1] Canine clings to or jumps up on handler; canine whines; canine moves away from handler but does not flee area; handler repeatedly reassures canine.
- [2] Canine infrequently looks around; canine displays some anxiety; canine moves through smoke with handler; handler infrequently reassures canine.
- [3] Canine is not distracted by smoke; canine is alert, relaxed and confident; handler does not have to reassure canine.

BROWNELL-MARSOLAIS SCALE SCORE SHEET

Handler _____ Phone (w) _____ (H) _____

Address _____

Date _____ Canine _____ Breed _____ Age _____

Evaluator Signature _____ Handler Signature _____

Phase A: Sociability Total Score _____ Calculated Score _____

Phase B: Motivation / Drive Total Score _____ Calculated Score _____

Phase C: Nerve Strength Total Score _____ Calculated Score _____

Canine is screened as a/an _____ candidate

Phase A - Sociability (Scored independently from Phase B & Phase C)

Score

___ **Test 1a - Stranger walks by**

___ **Test 1b - Stranger unties canine**

___ **Test 2 - Unfamiliar canine walks by**

Comments On Sociability: _____

___ Total score of all tests administered

___ Number of tests conducted

___ Sociability Calculation (Total scores / number of test)

Sociability Score

0 = 0.0 – 0.9 unpromising candidate

1 = 0.9 – 1.6 less promising candidate

2 = 1.7 – 2.4 promising candidate

3 = 2.5 – 3.0 very promising candidate

Phase B - Motivation and Drive

Score

___ **Test 1a - Handler Plays with Canine.** (Handler uses a familiar toy)

___ **Test 1b - Canine Plays with New / Unfamiliar Toys with Handler**

___ **Test 1c - Canine Plays with Stranger.** (Stranger uses a familiar toy)

___ **Test 2 - Prey Drive**

___ **Test 3a - Hunt Drive.** (No time delay)

___ **Test 3b - Hunt Drive.** (15 Second delay)

___ **Test 3c - Hunt Drive.** (30 Second delay)

___ **Test 3d - Hunt Drive** (60 Second delay)

___ **Test 4 - Handler / Canine Interaction**

Comments on Motivation and Drive: _____

___ Total score of all tests administered

___ Number of tests conducted

___ Motivation and Drive Calculation (Total scores / number of tests)

Motivation and Drive Score

0 = 0.0 – 0.9

1 = 1.0 – 1.6

2 = 1.7 – 2.4

3 = 2.5 – 3.0

PART 1. INHERENT ABILITY

Canine _____
Evaluator _____

Phase C – Nerve Strength

Score

___ **Test 1 - Surface Sensitivity: Slick Surface**

___ **Test 2 - Surface Sensitivity: Unstable Surface**

___ **Test 3 – Surface Sensitivity: Rough Surface**

___ **Test 4 – Height Sensitivity: Elevated Plank**

___ **Test 5 - Confined Space: Lighted**

___ **Test 6 - Confined Space: Dark**

___ **Test 7 – Sound Sensitivity: Machinery**

___ **Test 8 – Sound Sensitivity: Pounding and Rattling**

___ **Test 9 – Sound Sensitivity: Gunfire** (optional)

___ **Test 10 – Visual Sensitivity: Moving Machinery** (optional)

___ **Test 11 – Visual Sensitivity: Smoke** (optional)

Comments on Nerve Strength _____

___ Total score of all tests administered

___ Number of tests conducted

___ Nerve Strength Calculation (Total score / number of tests administered)

Nerve Strength Score

0 = 0.0 – 0.9

1 = 1.0 – 1.6

2 = 1.7 – 2.4

3 = 2.5 – 3.