

INTRODUCTION

Are shelter dogs' reliable candidates for service work, and what is the best way to utilize the dogs selected to be successful in the field of work? In this research project we were able to broaden our data by temperament testing more dogs in the Cookeville/Putnam County Animal Shelter (CPCAS) using three steps of evaluation. We tested behavioral issues such as fear, aggression, lack of confidence, etc. If the dogs did not show signs of the above stated issues, we continued temperament testing. With the selected few dogs we were able to pursue training in the areas of diabetic detection, cancer detection (Ambrosone 2006, Dorman et al. 2017), peanut detection (Bueche 2008), and therapy work. With these selected dogs the goal was to remove them from a shelter setting as quickly as possible, to truly be successful with this some of the researchers adopted the dogs to further train in the tasks assigned to the dog. Some of the dogs will stay with the researchers and others will be placed in homes where the trained skill sets can be utilized in the day-to-day life of the participant (Hines 2003). For the dogs doing scent detection, we are in the beginning stages of designing a scent wall using a 3-D software. The scent wall will be useful during odor discrimination and scent proofing (See Figure 1).

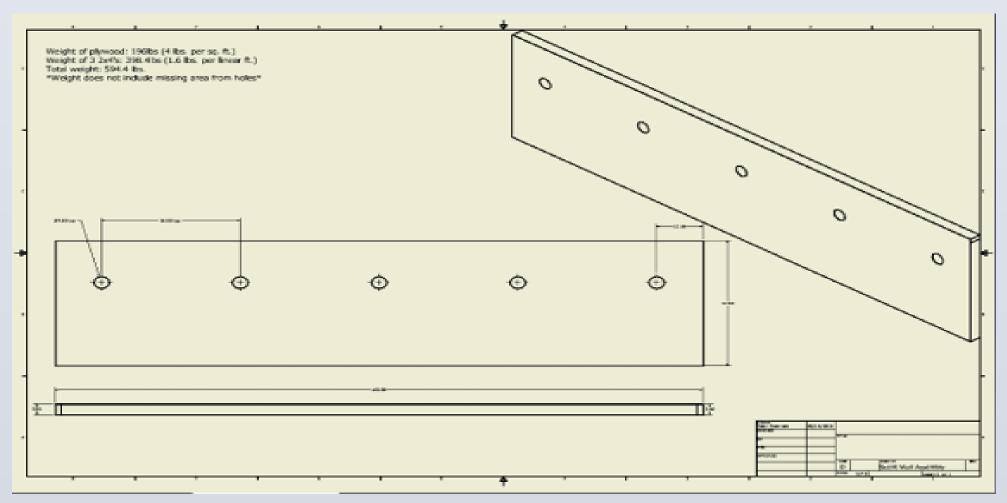


Figure 1: 3-D Scent Detection Wall

OBJECTIVES

- Temperament test and evaluate dogs in the CPCAS (Lisle et al. 2010).
- Select evaluated dogs to pursue training in service work such as Peanut Detection, Cancer Detection, Diabetic Detection, Task Work, ESD.
- Building and designing a scent detection wall to be utilized to condition selected dogs to odor source.
- Find the most efficient way to contain tissue samples to avoid contaminating the odor source.
- Find suitable homes for the dogs selected for service work (Weiss and Greenberg 1997).



Figure 2: Testing Food Aggression

Figure 3: Environmental Work

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URECA Team Grant

METHODS

For the full duration of the research project the team continuously evaluated dogs as they cycled into the shelter. The most important attributes of the dogs were confidence and ability to engage with the handler in new environments. Throughout the entire process of evaluations, the dogs were introduced to new environments slowly to decrease the amount of stress and develop communication with the handler (See Figures 2 & 3). The dogs had to pass through four phases of evaluations. The first phase, was checking their initial temperament. This included their confidence, aggression, and drive (See Figure 4). During the first phase, we also kept the dogs at the shelter and checked if they were good with dogs, cats, and strangers. The second phase took place at a local park and allowed the dogs to experience new surfaces and textures; in addition, we built more on their drive. Also, we could observe how the dogs handled being in a crate while in transit to the park. Phase 3 is the biggest leap for the dogs because they were introduced to busy locations, such as pet friendly businesses, and the introduction of the odor. Phase 4 built on phase 3 and evaluated the dog's ability to behave in distracting locations, along with their hunt drive for odor source (See Figure 5). For the odor conditioning and scent discrimination, we have looked into designing a scent wall to minimize the contact the handler has with the odor. We have been using 3-D drafting software to design a scent wall (See Figure 1). We had a large amount of lightweight metal tubing called Creform donated to us as our material to build the frame, and we will use plastic sheets for the face of the wall.

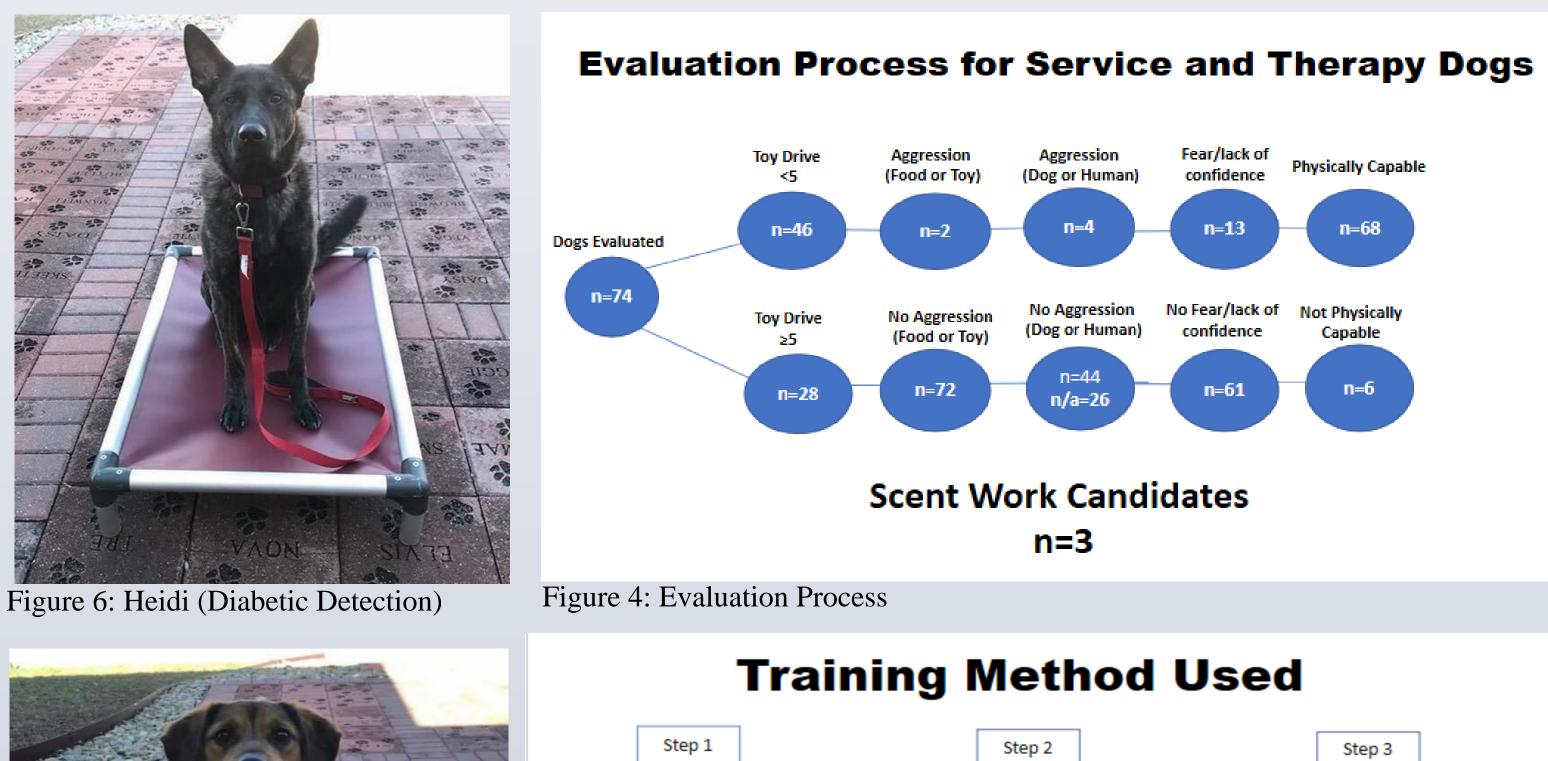
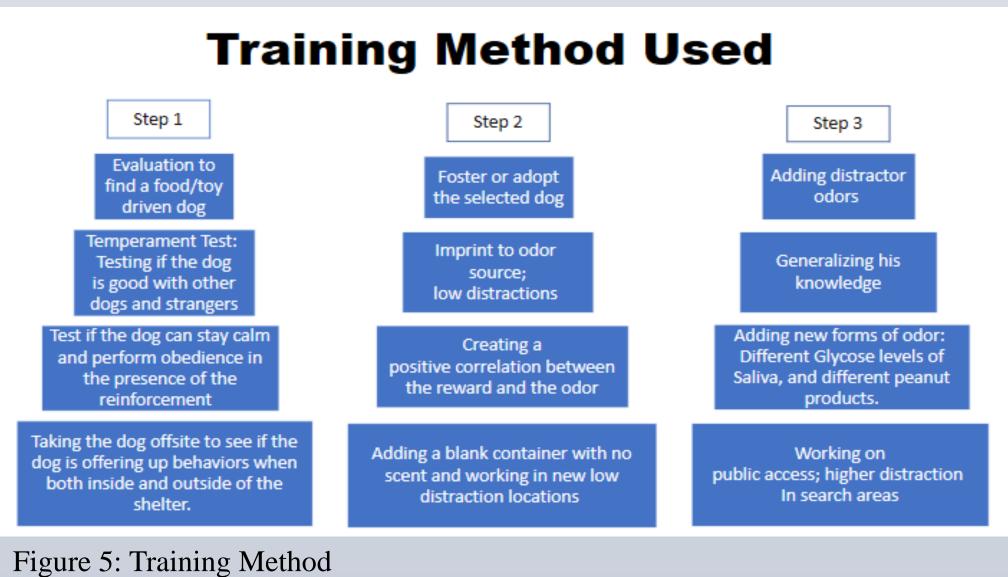




Figure 8: Parker (Peanut Detection)



RESULTS

Out of the dogs evaluated we found many to be unsuitable candidates for service work. The main reason was from lack of confidence, fear, or lack of drive and engagement with the handler. With these behavioral traits we cannot get the dog to engage or to not self-stimulate on their environment. The dogs we selected to pursue training with was Parker a one-year old beagle hound mix who is being trained in peanut detection to become a service dog to someone suffering from severe peanut allergies. The other dog we selected is a six-month-old beagle mix named Oliver. With Oliver we hope to imprint him on cancer positive urine samples of dogs. This can be a great help to local veterinary practices the dog will be on call to indicate urine samples of dogs being tested for bladder cancer. Another dog we are working with is a two-year old Dutch Shepherd named Heidi. We have now imprinted her on the saliva of a diabetic individual. (See Figures 6-9)

Parker's Characteristics

- Started training young.
- High food drive and moderate toy drive.
- Friendly, playful, and engaging.
- Can have issues with environmental work and when introduced to large men.
- Plan to continue: working around different people, positive environmental work, and introduce him to different forms of peanut products.

Oliver's Characteristics

- Moderate drive for food and toy.
- Young, easy to shape desired behaviors.
- Happy-go-lucky.
- Can tend to be unsure when doing environmental work.
- Plan to continue: building food drive, positive environmental work, socialization, introduce to cancer positive urine samples.

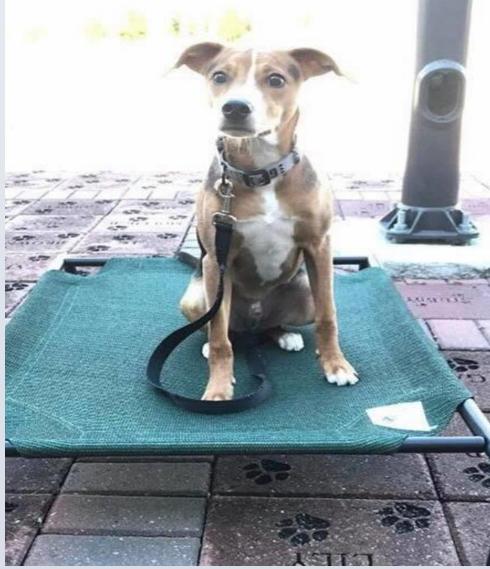


Figure 7: Oliver (Cancer Detection)



Figure 9: Parker doing detection work

Heidi's Characteristics

- Moderate drive for toy and food.
- Desire to please.
- Doesn't get distracted by strangers in her environment.
- Does tend to be equipment shy.
- Plan to continue: building drive, socialization, imprint her on saliva sample of participant with diabetes.

In conclusion, we have a long way to go before we have a "finished" dog ready to be put on the job or placed in a home, however we do have "started" dogs in their training progress and, with time and patience, these dogs show promise (See Figure 10). We are still evaluating dogs in the animal shelter. Some of the dogs show potential but a challenge of working with dogs in shelters is that they come and go so quickly. This is one of the reasons we try to get the dogs out of the shelter once they get past the third evaluation phase. We recently made forms for shelter visitors to fill out if they are looking for a dog for a specific task; this way we can better place dogs in homes. The scent wall is in the process of being built, now having the materials needed to complete the project. The Creform is proving to be the best choice of material thus far due to easy construction, adaptability, stability, and light weight.



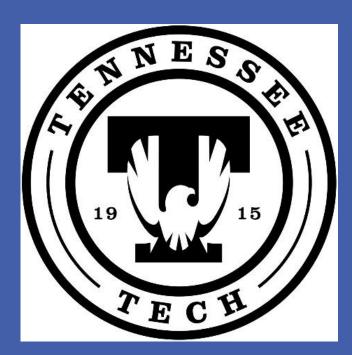
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CONCLUSION

Figure 10: Parker, Heidi, and Oliver practicing place

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