Police Dog Lab

Samantha Coombs

AVS 146-0004

University of Maine

Summary

The first half of lab on October 23, 2019 was spent observing a demonstration by Officer Verhille of his K9 partner, Clint's, training in the riding arena. The second half was then spent conducting snap tests on blood concentration to see if there were any signs of lyme disease, heartworms, ehrlichiosis, and/or anaplasmosis in the dog's sample's bloodstream. We conducted this by putting drops of conjugate and some of the blood concentration in a tube and pouring this into a snap device. We then waited about 8 minutes for results. The result window had one dot that showed the test had worked and only a light dot representing the possible disease. We were able to conclude that the blood concentration we tested had slight possible symptoms of ehrlichiosis because the dot was only a light blue instead of the bright, blue it should have been. Overall, Client was a happy K9 and very healthy for his older age of 8 and retiring soon. The snap tests showed a quick way to test if your dog has gotten a disease from a tick.

Introduction

The purpose of this lab was to introduce AVS 146 students to both the relationship between K9s and their handlers and how to conduct snap tests. The relationship between the K9 and the handler is very strict. K9s are not required to live inside the handler's house and instead can live outdoors with the proper needs for survival such as: shelter, food, and water. The handler's dog, a German Shepherd named Clint, was introduced during lab and was the center of the demonstration. He is eight years old and is getting near the end of his career. He originates from the Czech Republic (Czechia) and his handler is Officer Eric Verhille from the Maine State Police in Augusta, ME. The main four different trainings done with K9s are: "cadaver,...trailing,...drugs,...[and] explosives" ("Police K-9 Unit", n.d.). Clint is trained for patrol; meaning that he is trained to find people and/or evidence. He used to be trained for drugs, specialized in marijuana, but with the new laws in place for certain ages to legally be allowed to have it he is not needed any longer. Once he retires completely he will be adopted by his handler. Officer Verhille explained that Clint lives in his home already, but in a crate that is big enough to provide a very comfortable living space. He does not live in the house and interact with Officer Vehille's family because he is not a pet. One of the reasons the dogs live this way until they retire is because they "are expected to be on-call all the time, whenever the department needs a K-9 assist" (Beahm, M., 2016). This means that training is an everyday event because they must always be ready for work and "training", which is how they earn most of their food. Officer Vehille explains that their K9s are not given bowls of food like most people do for their house pets. Instead K9s are trained to not be sure when and how much food they will get. This is designed for training purposes as well as making sure the animal eats only what it needs in order to maintain a healthy and balanced living condition. "Ideally, proteins should make up approximately fifty percent of your dog's diet", especially for K9s because of high demanded energy ("Diet & Conditioning," n.d.).

The last objective of lab was conducting snap tests to find if any of the blood samples given to us contained "...C6 antibodies [which] can be detected as soon as four weeks after a dog is bitten by an infected tick, and may be found...before the dog shows signs of illness" of having lyme disease, heartworms, ehrlichiosis, and/or anaplasmosis (Llera, R., n.d.).

Methodology

Officer Vehille gave many commands, some in German, for Clint to respond to. The commands ranged from sitting, staying near him, laying down, crawling, staying, rewarding, and to go searching. After Clint obeyed a command well he was either treated with food or his toy. When Client was sent to find the knife that a member hid in the barn he followed the scent, circling the area until he could keep closing on the trail of where it was hidden. Once found he had been trained not to pick it up, but lay down with it between his paws.

During the second part of the lab we conducted snap tests on given blood samples. We then followed the directions of putting three drops of the blood sample into a sample tube, using a pipette. Then four drops of conjugate in with the blood sample and mixed them together. Then poured the solution on to the sample well of the of the snap device and waited 8 minutes for results.

Results

Image 2 shows the German Shepherd, Clint, was a happy dog and ready for training. Images 3 and 4 display Clint being impatient for commands and beginning to circle his handler. Image 1 shows where our lab was held, the riding arena, and where Clint started exploring to find something to do before geting his first command. Image 5 shows Officer Verhille giving Clint commands to lay down. In image 6 Clint was commanded to stand near his handler and walk with him. Image 7 shows when Clint obeyed staying while his handler walked near the opposite side of the riding arena. For obeying these commands, Clint was awarded either "treats"/food or his toy with great patience, as seen in image 8. Clint was also commanded to find the "evidence", meaning a knife hidden by a member of the group. Once found, he laid down with the "evidence" between his front paws, as seen in image 9.

Image 10 shows the setup of the snap test procedure. Image 11 shows the result window of the snap device with two dots that can be understood by looking at image 12. The first dot on the top left represents that the snap test worked and the dot below it, also on the left, showed signs that blood concentration contained signs of ehrlichiosis (flu like illness caused from bacteria).

Image 1



Image 2



Image 3



Image 4



Image 5



Image 6



Image 7



Image 8



Image 9



Image 10



Image 11

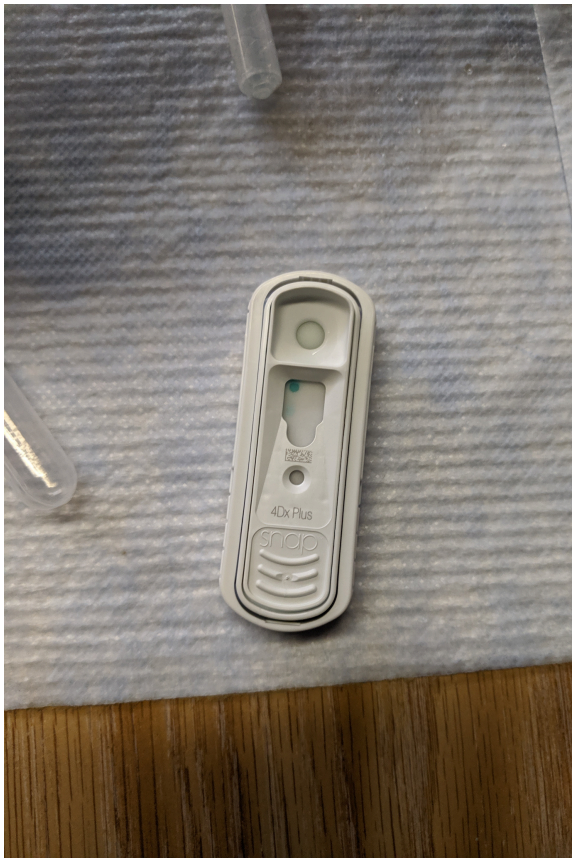
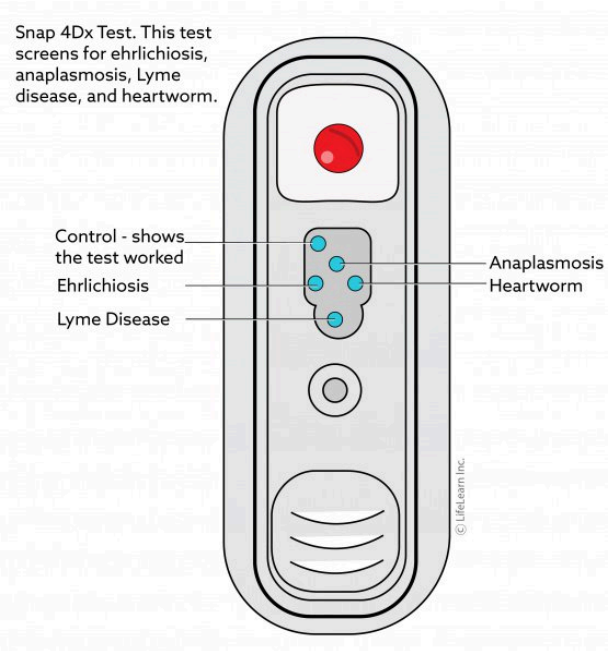


Image 12



Discussion

Though Clint was a happy dog and was ready for commands, he became pretty impatient when not getting commands. He then started roaming and sniffing the riding arena. “Dogs have 225 million scent receptors in their noses (compared to a human’s 5 million),” making their scent their strongest attribute (Finlay, K., 2019). K9s are then trained, like Clint is, to lock onto one particular scent. While roaming and exploring the area he was getting an adjustment to the area and its various scents, which had started distracting him because many people and animals have been in and out of the riding arena. Each person and animal has their own scents because everyone has their own body cells that produce a specific scent that Clint has been trained to pick out among all the other scents. He was able to hinder his curiosity once his handler started giving him commands such as the ones seen in results (images 6-8). Clint was also commanded to find a knife that was hidden by one of our members and Officer Verhille explained that the human scents would now be on it. Client would now be able to pick out that scent and follow it among other scents to find its location, however Clint struggled with this for a small whil. After having to assist Clint in finding the object by unburying it some and having his handler wak near it with him Clint was finally able to find the knife. The amount of scents in the building could have had something to do with this hindrance as well as a slight breeze coming in that went unnoticed. “The natural canid response appears to be to always follow the freshest trail out or that which is strongest” and if there was a scent that Clint found to be the freshest he might have been focusing on that particular scent instead of the one he was being commanded to (Schettler, J., 2013). Once Client found the knife he had been trained not to pick it up, but instead to lay down with the “evidence” between his front paws. Officer Vehille explained that this was done because if the dog were to pick it up it could harm someone, the animal, or damage the evidence depending on what it was.

The snap test showing the bright, blue dot on the upper left of the result screen shows that the snap test worked, which was the desired goal. The second dot below it, showed signs of ehrlichiosis, which is the same symptoms of the flu caused from a bacterial disease (“Ehrlichiosis”, 2019). However, the lightness in color suggests that these signs might not be severe.

Conclusion

We observed the K9 Clint and his handler go through a basic demonstration on some of the tactics and skills that Clint is trained to do. We learned the importance of why K9s are trained the way they are until they are retired because they are not pets, they are working. Discovered the correlation of nutrition and physical demands of K9s compared to household dogs as pets. We also conducted snap tests to discover short and quick tests that can be performed to figure out if a dog has been bitten by a tick and might have a disease from it.

References

Beahm, M. (2016, December 5). K-9 Units: the benefits and importance to the community. *Daily News*. Retrieved from https://www.kitsapdailynews.com/news/k-9-units-the-benefits-and-importance-to-the-co the community/.

Diet & Conditioning. (n.d.). Retrieved October 30, 2019, from https://www.cqbk9.com/diet-and-conditioning/.

Ehrlichiosis. (2019, July 13). Retrieved October 30, 2019, from https://www.mayoclinic.org/diseases-conditions/ehrlichiosis/symptoms-causes/syc-20372 142#targetText=Ehrlichiosis is a bacterial illness,two of a tick bite.

Finlay, K. (2019, October 3). What Do Police Dogs Do? *American Kennel Club*. Retrieved from https://www.akc.org/expert-advice/lifestyle/what-do-police-dogs-do/.

Llera, R. (n.d.). Testing for Lyme Disease in Dogs. Retrieved October 30, 2019, from https://vcahospitals.com/know-your-pet/testing-for-lyme-disease-in-dogs.

Police K-9 Unit. (n.d.). Retrieved October 30, 2019, from https://www.criminaljusticeschoolinfo.com/police-k9-unit.html.

Schettler, J. (2013, July 22). Trailing versus tracking: The keys to success. Retrieved October 30, 2019, from https://www.policeone.com/police-products/k9/k9-training/articles/trailing-versus-trackin g-the-keys-to-success-bjtllYuJ6GIHxvAS/.