

**ENS Taryn Haddox
JRCOSTEP Summer 2017
Western Carolina University
Whiteriver Service Unit
Whiteriver, Arizona**

Hi, my name is Taryn Haddox. I am a rising senior at Western Carolina University, Cullowhee, NC. I am perusing a Bachelor of Science in Environmental Health and will graduate in May 2017. I was assigned to the Whiteriver Service Unit for my JRCOSTEP which serves the White Mountain Apache Tribe and is located in northeast Arizona. I was also able to serve on the Hopi Reservation and the San Carlos Apache Reservation for special events such as rabies virus vaccination clinics or trainings. My preceptor was LTJG Stephanie Bridges but I was also able to go in the field with the LCDR Sarah Snyder, District EHO, on many occasions.



ENS Taryn Haddox holding a pug during a rabies virus vaccination clinic

This summer was spent doing things that I never would have imagined myself doing. When I decided to major in environmental health I was not quite sure what it would entail or what I would be doing once I graduated. After my JRCOSTEP however, I am very glad I chose this path. There was no such thing as a typical day at the office.



ENSs Haddox and Maloney flagging for fleas

During my first week in Whiteriver, staff from multiple departments were responding to a *Shigella* outbreak. We did community outreach in schools and childcare facilities to try and stop it from spreading. Also, during my first week there was a possible plague case on a neighboring reservation. It was really amazing to actually see things in action that we learn about in school. After the patient was interviewed about where they may have been exposed, we went to where the patient had been working to flag for fleas. We wore Tyvek suits and used toilet snakes, white cloth, and dry ice to attract the fleas. After this, we stuck the snake down into prairie dog burrows to catch the fleas. We caught several and sent them off for testing. They were negative for plague.

Another part of this internship that I was not expecting but absolutely loved, was how much I got to work with animals. I had the opportunity of doing two rabies virus vaccination clinics. Each clinic lasted for five days and we vaccinated hundreds of animals. The Veterinarians we worked with taught me how to prepare syringes with the rabies vaccine as well as the parvo vaccine. We also worked at a Rural Area Veterinary Services clinic. They provide several veterinary services absolutely free, including spay and neuters, wellness checks, and vaccinations. We were lucky enough to be able to see both spay and neuter surgeries; it was really interesting. It was great to see what they do and how they help rural communities gain access to some services.

Rocky Mountain spotted fever is huge health concern for many living on reservations in eastern Arizona. RMSF prevention programs and campaigns began in the early 2000s to combat a spike in cases on reservations. During my JRCOSTEP, I went door-to-door spraying pesticides to kill ticks, educating the public, checking the animals for ticks, putting tick collars on dogs with ticks, and spraying puppies with tick repellent. These campaigns were a great way to get involved in the community and reduce the tick population.

I thought having an externship meant I was going to be observing the whole time, but this was definitely not the case being a JRCOSTEP. I had the opportunity to conduct food, pool, hotel, institutional, and home inspections and write reports and letters. I was also able to educate the community by teaching a food handler class and part of a food manager class, going door-to-door with RMSF education, and participating in several health fairs. I learned how to trap for mosquitoes using CO₂ traps, identify and sort mosquitoes and run RAMP tests, and I even got to do an individual project.

My individual project was focused on creating a database for the Rocky Mountain spotted fever prevention campaigns done in Whiteriver. I did my project in Access and Google Maps. The database includes RMSF prevention-related data associated with homesites: the date, the homeowner's name, the address, how many ticks were present, the amount of dogs collared, if pesticide was sprayed, the zone the home was in, and how many dogs were present. Once all of the information was in the database I plotted all of the hot spots for ticks on a map. This data is very useful to the RMSF prevention program when it comes to using time and resources wisely by being able to see where exactly the tick hot spots are located on the reservation. Going forward they hope to monitor whether or not hot spots are spreading, moving or staying the same.

Most of the summer I was out in the field rather than in the office which was absolutely amazing. Being able to work with the things I have been learning about in school in a hands-on way has helped me grow and made me learn more than I ever imagined. I worked in Hopi, San Carlos, and Whiteriver which was really great for getting to know Native American culture because of the fact that I was able to work with several different tribes. I cannot wait to graduate and work in the field permanently. Another fantastic part of this opportunity was how many great people I met and had the pleasure to work with. It was quite a change coming from North Carolina to Arizona for an entire summer but I can easily say I will never forget this amazing experience, and I will forever be grateful for all it has taught me. I would highly recommend environmental health students to apply for this opportunity. It was a great experience and I was challenged every day to be the best I could be.