Fall 2017/Winter 2018 Field Report

Field operations ended this year at 7:00 AM on January 14th when our 8th and last newly sterilized doe awoke and toddled off. This brings the total number of sterilized deer to 59. Our field camera survey, conducted during the second half of January, showed an overall deer population reduction of ~19% since the program began in December 2015, and that ~91% of the adult does in our herd have now been sterilized.

Once again, Clifton residents and U.C. students contributed over 700 volunteer hours while leafleting homes in the study area, cleaning the surgical center before and after operations, setting up and dismantling the command center, transporting deer to and from their surgeries, and monitoring recovering deer till safely up and going again. Four homeowners volunteered their yards for bait stations, release sites, and weeks of camera surveying. These contributions, along with cash donations and reports through the website of deer sightings and behaviors, are making this extraordinary research project possible.

Volunteer hours not included above are those contributed by two new local veterinarians and our new darter-in-training. The new darter has attended two chemical immobilization schools and interned with White Buffalo capture specialists in field operations here and in Ann Arbor; and the new vets worked in the surgical center with our lead veterinarian from Columbus. This year and next, we hope to develop a local cadre of expertise to assume responsibility for capture and surgical operations as our contract with White Buffalo winds down, thus dramatically reducing costs and making sustained use of this method of population control more viable.

Of all the moving parts and variables field operations must contend with, weather is one we cannot control. While freezing temperatures and snow on the ground did not interfere, a winter ice storm did shut down operations for one night. Precautions like ground tarps and blankets help protect recumbent deer from hypothermia. Hand warmers and space heaters at the outdoor command center helped keep the transport and recovery team volunteers from freezing!

Last year the Discovery Channel produced a video documenting project field operations. This year, a French environmental film company tagged along, interviewing and filming the White Buffalo team. They plan to broadcast the program in Germany and France sometime next year. We have been promised a copy and will post it on our website.

An interesting and important sidenote: After reports from neighbors and field camera photos of three tagged does traveling with fawns, the decision was made to recapture and examine them. Two were found to have one fully re-grown ovary and are believed to have had fawns since their original surgery in Year One operations. Both were retreated. Two of the new ovary specimens have been preserved and are being submitted to a pathologist for examination, but our working theory involves the combination of two unique circumstances. First is "Ovarian Remnant Syndrome" —re-growth of an entire ovary from even microscopic amounts of ovarian tissue left

after surgery—which is known to occur in a small percentage of spayed dogs and cats. In the case of dog and cat spaying, however, the uterus is also removed so re-grown ovaries cannot result in pregnancies. The second circumstance was the use of ligation (tying off) to seal the fallopian tubes after ovary removal in the Year One surgeries. We believe this method allowed a few ova to pass and pregnancy to occur in two of the three does. In Year Two our program began using electro-thermal vessel sealing to seal the fallopian tubes which our vets and biologists believe likely destroys any remnant cells and makes the passage of ova and therefore pregnancy impossible. We will continue to monitor Year One does, but our lead veterinarian thinks the likelihood of new fawning in these animals is low (in fact, this issue has never arisen in any other of the White Buffalo sites). While disappointed to think this may have added a few deer to our herd, we are glad to have found and solved the problem and will advise others using these methods of our discovery. Thanks to neighborhood "citizen scientists" for helping make this discovery.

We were sad to learn during this week that one of our tagged does was killed in a deer-vehicle collision on I-75 near our study area. This is the third known auto strike of a tagged doe since the program began. Volunteers are planning to inspect the fence along the highway bordering the study area to see if anything more can be done to keep both deer and drivers safer.

Our thanks go out again to all who support this effort to treat deer as part of the ecosystem we all want to preserve.