Clear and Effective Communication Student Work: Student 9A

Dear Mr. Porter,

**Issue Description and Background**

I am a student in a high school biology class and I recently learned that whitetail deer have started to come into the suburbs and have conflicts with humans. They eat our flowers and farmer’s crops, and get into collisions with cars. I’ve seen in other states deer that don’t have any fear of humans, and I don’t want that to happen here.

There are some areas of our state where the whitetail deer population exceeds the carrying capacity, resulting in over browsing of plants that deer eat. Some of these plants are threatened by the deer population, because it’s higher than what they are adapted for. This affects plants such as trillium and ginseng that are favorites of the deer. According to the Oxford Journal’s “A Plague of Deer,” the wild ginseng harvest has declined by at least 25% since 1800. Once a forest is over browsed it takes years for the natural environment to return, because the forest is dominated by plants that deer don’t eat, and they crowd out the new ginseng plants. These impacts of overpopulation can be seen in places where deer can’t browse, such as on top of large boulders, where there is greater diversity of understory plants. Also when whitetail deer have eaten all the food in the forest they are driven to populated areas such as towns and farms, where they eat people’s gardens and orchards. Too many primary consumers messes up the trophic pyramid, so there isn’t enough energy from producers to go around in their natural habitat. This leads to conflicts such as collisions with vehicles. In Vermont there is one deer collision for every 170 drivers (ABC News). The current management of the Vermont deer population is based on hunting, but only on hunting of bucks, which has hardly any effect on the number of whitetail deer.

**Proposed Regulations**

In order to limit the population of whitetail deer to save understory species and prevent human conflict, I propose a doe season without a lottery. People could still get one deer for each of the three hunting seasons, but they could be any deer, doe or buck. This would limit the deer population because deer are polygamous, so the number of bucks doesn’t have a direct impact on the number of fawns born that year. There can only be as many births as there are females. This would also put humans in a place of natural predators such as wolves or mountain lions, which we have eradicated. Also, on Native American reservations they don’t have problems with deer overpopulation because they hunt does (Oxford Journals). The former predators of deer were much more effective at population control because they took deer for food only and not for their antlers. The number of does that can be taken could be changed in a year with an especially cold winter, so that the deer population doesn’t completely die off.

This proposal might get some opposition from hunters because it aims to reduce the population of deer. But if you can hunt does as well, that’s twice as many huntable deer. The total population could be half the size with the same number of deer you can hunt! Also, to keep animal rights organizations happy, I propose that an additional rule apply to does. You can’t shoot a doe with fawns that still have spots, so they aren’t left to starve to death.

**Data Collection**

After the first year when hunting does is legal, a count could be done of the fawns born the next spring, compared to the number the previous year. This would reveal how much of an impact the hunting does has on the future population. Repeating this for several years would tell about the long term effects, and if the population declines too much doe hunting could be cut back.

Sincerely,