

Future Methods, Costs and Risks of Fallow Deer Management

By Ken Poskitt, April 2018

The estimated fallow deer population at midsummer 2018 will be approximately 548 and the target for a healthy ecosystem is estimated to be 60. This requires a 90% reduction from the current population; a similar percentage in population reduction seen from 2008 - 2018.

In order to succeed it is better to begin with large efforts at significant fallow deer reductions as this leads to a faster reduction in the population and less total work in removing deer as we are always battling the large reproductive rate of 37% per year. Even with this approach, it took 10 years to reduce our population by 80%, which was twice as long as projected.

Deer populations consistently and repeatedly get underestimated, even with good methods of estimating the population. It has been our experience on Sidney Island. It is vital to establish the most reliable available method of estimating the population both to assess our progress and to determine that we have reached our target and are maintaining it at a stable number.

The best population-estimation method is to capture, tag and release a small sample population of deer and establish an observation regime. The frequency of sighting a tagged vs. non-tagged deer leads to a good estimate of the population. This would require 5-10% of the population to be tagged, about 30-50 deer. They also need to be from the different subpopulations of herds since they do not readily intermix. I estimated we would need about 5-6 different sites to capture the deer with 5-10 deer from each location. This requires individual trapping with clover traps and any handling of the deer requires we hire a Vet. For the sedation, handling and tagging. This is a Wildlife Branch mandate as I have checked before. Needless to say, this is difficult, time consuming and expensive. I estimate this to cost \$25,000.

We would then mandate that the deer not be shot or removed for a period of 4-6 years, after which we would have to repeat. The observation regime would be passive, but would need to be repeated 4 times a year outside our hunting season, which adversely affects deer behavior.

We know from our previous experience that a successful program relies on a series of methods rather a single type of operation. We have successfully used capture, recreational hunting and professional Cull Hunting. WE HAVE NEVER SUCCESSFULLY REDUCED THE DEER POPULATION BY RELYING ON A SINGLE METHOD OF REMOVAL. All three methods should again be employed to reduce the deer population.

We also learned that any successful effort requires greater access to the areas on the Island that are “safe-havens” for the deer where they can escape hunting and capturing efforts. We must develop methods to have both hunting and capturing in these safe-havens. Parks Canada largely remains outside of our target area.

We must also have a sustained social commitment to the objective, otherwise the efforts are undermined by shifts in attitudes and willingness to shoulder the cost and time required to succeed. Our recent experience saw such shifts in the willingness to pay the costs, maintain the needed monitoring, volunteer exhaustion and commitment to the goal of reducing the deer population down to a sustainable number.

The main tools available to Sidney Island owners are: Capture, Recreational Hunting and Professional Cull Hunting. Each are discussed below.

Capture

A) Centralized Capture

The central capture fields need to be revived and enhanced. The current new grass is hidden by a huge biomass of dead, tall grass that makes the site less palatable. This field need to be cut or burned to improve access to the new growth. The deer also need free and easily controlled access to the fields in order to be habituated to visiting the site. This means the fences and gated need to be repaired and the horses relocated.

Once this is accomplished we can begin to plant attractive cops such as clover to improve the desirability of the site, consider digging a pond for water and putting in large mounded one-way gates. There are many ways to improve the efficacy of the capture facility, but they all entail substantial work and cost.

Finally, the facility would have to be partly rebuilt as some of the holding pens, raceway and deer barns have been stripped and are not functional as is.

Similarly, the squeeze machine that would have allowed the tagging of deer was removed and the room housing this machine damaged and is no longer functional.

B) Remote Capture

Smaller, portable or fixed capture sites are required for this activity to reach the safe-havens of deer that do not frequent the central meadows. This will require additional cost, owner approval, as well as Islands Trust as we will likely want to access Conservancy lands such as Burnt Snag. This will also require substantial addition volunteer time to operate as the facilities are much smaller in size and the deer will more easily panic after their capture. The deer may need to be shot on site after capture rather than held and collected over a few weeks. This means a more complex and volunteer-dense operation than anything we have succeeded at.

Individual capture using baited Clover Traps that can catch a single deer at a time could also be employed. We have two frames on the Island and have no practical experience using them. The Wildlife Branch suggested that we would likely have to place the trap and bait for quite a period before the deer would become familiar with the structure and begin to eat the bait. The method seems very time intensive with a low yield of deer, but it does allow capture on private property or on common land close to homes and people where it is too dangerous to use a rifle.

Our previous capture operations expanded to 4-week efforts, twice a year and took about 300-man hours to operate apart from the time taken to harvest and field dress the deer, I would estimate that expanding this effort to include remote capture would at least double the effort. From 2008 to 2016 the work effort multiplied at least 5-fold as we reduced the population 80%. A similar further 80% reduction would likely require at least this much additional effort thus requiring up to 3,000-man hours of volunteer time in the face of rapidly diminishing yields. Repairing the current facility, mowing the grass, putting in a pond, constructing robust mounded one-way gates and building remote capture facilities would likely cost in the \$100,000 – 200,000 range.

Recreational Hunting

This is essentially an enjoyable pastime and to that extent it conflicts with a mandate to reduce deer numbers. Hunters would like an enjoyable experience and not be pressured for results: hunt when the weather is good, the time is convenient

and the experience enjoyable.

We can maintain this and increase the hunt yield by expanding the number of hunting days and/or expanding the amount of hunting territory. To the extent that the safe-haven territory is reduced in size there will be a better result. We have attempted this in the past and met owner resistance to both the idea of expanded territory and additional days. In fact, the usual pressure has been to reduce the available number of hunting days and this is not helpful in reducing the deer population. Additional hunting days reduce the use of common property by non-hunters and presents a social problem to the Island.

Additional area may be safely hunted by different means such as bows or shotgun. But these again require significant discussion with owners and there is little evidence of an appetite for these types of innovation. Since we have not pursued this in the past, we have no knowledge how much additional success would follow from these changes.

We should also recognize that we have a small but committed group of about 10 to 12 owner-hunters and they cannot do the hunt alone. We rely on a large number of non-owner hunters who are friends to harvest the deer and do most of the hunting. Any expansion of hunting is simply making the Island more available to non-owner hunters.

Perhaps we need to revisit the exclusion of the public from hunting on the Island and run a lottery, much like the Park did when it was under provincial jurisdiction. Alternatively, we can revisit having a commercial guided hunt operation like Mr. Hatter ran in the 1980s. All of these options expose the Island to strangers in the effort to augment hunting yields.

Professional Cull Hunting

This method has been shown to be very effective. The last 2-week effort they removed 45% of all deer taken from the Island during the 2016-2017 winter. The efficacy of this operation would be enhanced by increased access to safe-havens such as private property, the beach and bluffs and a better choice of weeks in which to operate.

Increasing the amount of time of these operations up to 3-4 weeks would also be the best way to have an immediate reduction in the current deer population.

This would require ownership approval for land access and an expansion of the operating budget from \$25,000 yearly to up to \$50,000 for the first 1-2 years of operation. Such hunters could also be employed using additional methods of hunting such as bow hunting if we felt this improved safety.

These operations are more aggressive than recreational hunting and it is preferable that owners remain off Island during operations. Any expansion of time severely impacts the use of common property by owners, an increasingly important issue as the number of permanent owners increases and better winter access has been assured by the breakwater.

Summary

The cost of a successful program to reduce the deer population to 60 deer would likely cost in the range of \$250,000, require overwhelming volunteer hours, and be very intrusive. Our last effort to reduce the deer by 80% took 10 years of work and another 10 years would likely be needed, unless we became very aggressive with effort, well beyond anything we have attempted before. In addition, increased access to safe-haven territory would need owner approval and reduce owner's use and enjoyment of common property. An unwavering commitment to this goal would be required, yet the Strata Act requires annual approval, which introduces uncertainty for a 5- or 10-year plan.

Our experience from 2008-2018 shows that owner interest, commitment, and willingness to pay for such a program, ebbs as the problem reduces in severity. Finally, if the target is achieved there must be ongoing monitoring of the deer population and careful harvesting to ensure the population remains stable. Once the population is small the tagging and observation time required will increase dramatically in cost and time because there are so few deer to catch, tag and observe. Yet failure to do so will allow the population to rapidly spiral out of control again.