

**Report on Sidney Island Fallow Deer Population and Its Ecosystem**  
**(In relation to Parks Canada plan for eradication**  
**commencing November 26, 2023)**

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## **A Brief History of Fallow Deer on Sidney Island**

The deer were introduced to James Island in the early 1900's for the purpose of hunting. Fallow deer are excellent swimmers, and thus they likely populated Sidney Island by swimming the distance of one to two kilometers between islands. In fact, only four years ago a Sidney Island resident watched a fallow deer stag easily swim the distance between James Island and Sidney Island. There are also some black-tailed deer on Sidney Island, but there currently exists no estimate of their population.

## **The Deer Population and Current Control Methods**

About 10 years ago the population of fallow deer became obviously overabundant, with numbers ranging from 2,000 to 2,500 animals roaming an island of only 8.66 square kilometers. As a result, the vegetation/ecosystem was visibly degraded and residents also complained of increasing incursions of deer to raid gardens on their properties. To combat the problem, Sidney Island residents initiated a series of well-organized hunts that successfully reduced the numbers to likely less than 300 animals today. The number of deer killed on these hunts ranged from 436 in 2014-2015 down to 88 in 2022-2023. At one point, a baited deer capture compound along with a mobile abattoir was employed, which resulted in 229 fallow deer harvested over a three-year period from 2014 to 2017. The deer were given to residents and their guests. Also, during that same period, the residents of the island paid \$5,000 annually to a team of experienced hunters under the auspices of the Island Outfitters store formerly in Victoria, who took out 952 deer for their personal needs. They were given permission to enter private property. Up until and including this year, the annual hunt has continued with roughly 800 to 100 deer taken each year. It is patently obvious due to the lack of deer sightings and the absence of deer feces in the fall of 2023 that the population is declining yearly and is probably no more than 100 to 200 deer with the majority of them residing on private land with no access by hunters. However, to date there has been no proper, science-based censuses of the deer population on the island.

Interestingly, *Parks Canada* has based their own population estimate on the statements of two individuals from Sidney Island as follows:

***“The current population size is unknown, but estimates range from 300 to 900 individuals (Johnston, 2020; K. Poskitt, personal communication, January 2021).”***  
*Draft Detailed Impact Assessment, July 2023 s.5.2 .”* (See attached).

Johnston is a retired accountant and K. Poskitt is a former land owner and a retired radiologist. Neither of them is a biologist.

### **The Vegetation and Ecosystem of Sidney Island**

In May of 2019 a UBC study was completed and published entitled “**Deer Abundance and the Recovery of Woody Plants of the Coastal Douglas-fir Ecosystem**”. This was a collaborative project of “*UBC’s Forest Renewal Chair in Applied Conservation Biology, the Natural Sciences and Engineering Research Council of Canada, Sallas Forest Ecological Stewardship Committee, and Sidney Island Community.*” (See attached study).

In the introduction on page 2, it states:

*“Because Sidney Island, BC, represents among the most dramatic examples of trophic downgrading regionally, we hypothesized that more recent efforts to reduce deer density on the island have the potential to reverse the effects of trophic downgrading by initiating an increase in the richness, diversity, and cover of palatable plant species (‘trophic upgrading’).*

*To test this hypothesis, we re-surveyed 35 plots established in 2013 to assess change in plant communities. **We observed that native species richness and diversity nearly doubled, and native plant cover increased by 30%, from 2013 to 2019.**” (emphasis added).*

The summary on page 13 states:

*“In summary, we observed increases in the cover, richness, and diversity of palatable and culturally significant woody shrub and tree species from 2013 to 2019 as fallow deer density was reduced.*

*Our findings also suggest that deer populations must decline further to facilitate the rapid recovery of native meadow and woody plant species and ensure the re-establishment of many still rare or extinct species on Sidney Island, including many species with substantial aesthetic, food, cultural, and/or habitat values.*

*Actions could also be taken to facilitate re-establishing or augmenting a few highly desirable species as ‘sentinels’ which could be monitored annually by community members to provide direct feedback on the deer densities commensurate with desired state of forest and meadow habitats on Sidney Island.”*

My observation is consistent with the study that the vegetation has rebounded and will continue to do so as the deer population declines. This valuable study is now four years old, and the deer have consistently been reduced in that time.

***It is recommended that the study be updated to provide new data on the vegetation renewal.***

### **The Hunts Run by the Sidney Island Residents**

The deer hunts have been a well-organized part of Sidney Island for many years, managed by a local hunt committee. According to guest hunters from elsewhere, e.g. the U.S., they are among the best-organized hunts in North America. Owners and their guests are allowed to hunt during calendar segments approved by owners at each AGM. The annual hunt typically takes place during a couple of weeks in each month of October, November, January, February and March when the island use is lowest. Hunters have to be hosted by a resident and must provide copies of licenses. They also must pay a fee of \$25 to join the Sidney Island Fish and Game Club, which has a \$5M liability coverage. These hunts are extremely safe for both hunters and residents. The common property is divided into zones. Hunters sign up each day for a specific spot to know who is hunting where, and with no shooting from noon to 1300 to allow relocation of hunters. A sign indicating that a hunt is in progress is displayed prominently at the boat docking area. Any use of a firearm on strata lots is prohibited, the hunt zones obey the 100m from any dwelling rule, and hunters are not allowed to shoot toward surrounding roads. The daily hunt begins at dawn and ends at dusk. The hunters are allowed to keep any deer killed for personal consumption.

Purportedly, a First Nation hunt for deer took place on the Gulf Islands National Park on Sidney Island, but to my knowledge, there has been no report of the outcome.

### **A Proposed Wildlife Management Plan**

In any wildlife management plan aiming to reduce or eliminate a population of any wildlife species, there exists a basic tenet that, before any steps are taken, a proper science-based count be completed to gain a relative count of the animals from year to year. This usually consists of not just a single survey but two or three over the course of the year to cover both pre-hunt and post-hunt periods. According to wildlife management textbooks, there are at least two methods that can achieve such a census: a Road Census and a Strip Transect Census. The road census is relatively easy to achieve, mainly because Sidney Island is bisected by many roads. This kind of repetitive survey using the same route each time can be done by motorized vehicles or even a bicycle. The surveyors need not even be biologists; anyone able to recognize the differences between fallow deer and black-tailed deer and between stags, does and fawns can do the job. Performing a strip transect census involves

more effort, generally consisting of setting up a series of straight-line transects of the same length randomly created all over the island in various habitats and encompassing both residential and hunt-accessible land. Such transects could be set up permanently such that they could be used consistently from survey to survey. The latter technique is a bit more complex and time-consuming and likely could be achieved at a cost of \$5,000 to \$10,000 awarded by a contract to a local, active university professor specializing in biology or ecology, e.g. someone at University of Victoria.

***It is urgently recommended that a proper science-based population count be completed as soon as possible.***

### **An Alternative Management Plan by Contraception**

In 2019 the municipality of Oak Bay, BC embarked on a black-tailed deer management plan by contraception:

*“We observed a significant reduction in relative fawn abundance in Oak Bay, B.C. following a single year of IC treatment of urban female black-tailed deer. Treatment of 60 female BTD in 2019 – estimated as at least 63% of the female population – resulted in a 58% reduction in total relative fawn abundance for 2020. As relative abundance is correlated with population size, our data show a significant reduction to the total fawn population size in Oak Bay as a result of IC.”* (See attached report)

***It is recommended that Parks Canada consider this non-lethal and less costly option, if the current ongoing hunts are insufficient to reduce numbers to an acceptable number to all parties concerned.***

### **First Nation Access to Traditional Plants**

Much has been said by Parks Canada about the need for First Nations to harvest traditional plants on Sidney Island. Since 80% of Sidney Island is privately owned and thereby not accessible to First Nations for this purpose, this seems to us to be a non-argument for eradicating deer on the privately owned side of the island. Since 20% of Sidney Island does belong to Parks Canada, perhaps they could create deer-proof enclosures along with the planting of culturally important plants for harvesting by First Nations. It would also be worthwhile knowing how important the harvesting of black-tailed deer is to the First Nations using Sidney Island. While it would not stop deer from swimming around it, perhaps a deer-proof fence could be erected to separate the Parks Canada property from the privately owned land.

***It is recommended that an investigation be undertaken to determine how important the black-tailed deer population is to the culture of First Nations from both a historical and a current perspective.***

### **The Importance of Current Deer Populations to Other Native Plants and Wildlife Populations on Sidney Island**

Parks Canada has also put forth the argument that bird populations on Sidney Island have declined dramatically due to the over-harvesting of various kinds of vegetation by the fallow deer. They point out that nearby Portman Island is completely devoid of any deer and that bird populations have benefitted from their absence. This is patently untrue. I have birded both Portman and Sidney Islands over the last decade and has found land bird species (not including seabirds and shorebirds which are not affected by the deer) to be of a greater variety and equally important, much easier to see on the latter island due to its myriad edge habitats as a function of the permanent presence of humans. In fact, Sidney Island with its plentiful trails bisecting various habitats is a delightful place to watch birds. Moreover, the island boasts a large population of common ravens and bald eagles which feast upon the discarded organs from the hunter kills. The fallow deer may even provide an unexpected service to the island residents – the control of another invasive species! While not officially documented to my knowledge, residents on Sidney Island have observed a growing presence of scotch broom on their part of the island and that the fallow deer actually include the plant in their diet. It is widely known that Parks Canada has initiated a scotch broom eradication program on the Gulf Islands Park side of the island.

### **The Proposed Eradication Plan by Parks Canada**

To my knowledge, Parks Canada plans to make available \$5.9 million dollars of Canadian taxpayers money to award a contract to Coastal Conservation who have experience in controlling rodents to save seabirds as well as invasive deer. The latter's approach is to place sharpshooters on helicopters flying over the island at night with shooters on the ground accompanied by dogs to kill not just the fallow deer but all of the deer in Sidney Island. If this plan proceeds, Coastal Conservation will bring in shooters and dogs from New Zealand to achieve their goal.

First, the idea of shooting wildlife from manned aircraft is highly unpalatable to the general public. In the U.S., the federal government passed the Airborne Hunting Act to ban the practice of shooting wolves and other wildlife from planes and helicopters, mainly because the

public was horrified by the activity. On Sidney Island, trying to shoot a fallow deer from a helicopter, especially at night, could result in the inhumane wounding of animals. Even using dogs can be considered as a cruel practice. It is why hunters are not allowed to use dogs to hunt deer anywhere in North America due to the stress they impinge on the deer. Canada already suffered a huge international black eye when allowing the highly publicized seal hunt. Does the federal government really want to repeat that scenario with the media broadcasting video of shooters on helicopters trying to kill fleeing deer on Sidney Island?

Second, the company has previously tried this technique on overabundant black-tailed deer populations on an island in Haida Gwaii with limited success. The idea of applying such a technique to fallow deer on Sidney Island is even more challenging, partly because they are much more skittish than black-tailed deer and they also continue to run much further than the latter when spooked. Fallow deer are also smart and often spend much time under the cover of trees and dense brush. Moreover, the residents opposed to the proposed cull are not willing to allow Coastal Conservation shooters on to their properties either by foot or by air. Many of the deer left on the island today have discovered that they are not being shot at while remaining on private property not accessible to hunters. The reason that the Island Outfitters' team was able to kill so many large numbers of deer was because they were allowed to enter private property.

Third, using helicopters to carry sharpshooters is dangerous to both the pilot and the shooters on board. It is documented in the scientific literature that the number one source of mortality for wildlife biologists is dying in a plane or helicopter crash.

Fourth, do we really to spend almost six million taxpayers' dollars for such a localized problem, i.e. an 8.66 square kilometer island, especially when there is already in place an effective system of hunting that costs taxpayers nothing? There are currently over 800 species of plants and wildlife in Canada that reside on the official list of endangered species overseen by the Committee on the Status of Endangered Wildlife in Canada. The number continues to grow annually. Surely, the money could be put to better use. Also, wildfires, possibly connected to climate warming, have ravaged Canada for the last several years, decimating millions of hectares of boreal forest. Could not the funds be applied to that? Moreover, the notion of trying to reverse the loss of traditional vegetation on an island that has evolved so much from not just the invasion of human beings drastically changing the landscape but also from severe summer droughts just does not seem feasible. Perhaps Parks Canada should refocus its efforts on the uninhabited part of the island they own.

## **Conclusions**

It is my feeling that the proposed eradication plan by Parks Canada needs further consideration. Before engaging in such an effort, the following steps are recommended:

- 1) A proper science-based census be set up and undertaken to get a reasonably accurate count of the deer populations on Sidney Island;
- 2) The 2019 study on the vegetation of the island be updated to provide new data on its ongoing renewal;
- 3) Parks Canada provide a full disclosure to the public on how the \$5.9 million will be dispersed for their eradication program;
- 4) An investigation be undertaken to determine how important the black-tailed deer population is to the culture of First Nations from both a historical and a current perspective.
- 5) Should the ongoing hunt sessions operated by the island residents no longer continue to keep the deer at relatively low levels to allow further vegetative growth, Parks Canada should consider engaging in the non-lethal and less costly option of using contraception successfully used by Oak Bay, BC.

*David M. Bird is an Emeritus Professor of Wildlife Biology at McGill University. He taught wildlife management for 30 years and now lives in North Saanich. He has been to Sidney Island on many occasions, both for birdwatching and hunting activities, and he is very familiar with both the deer situation and their impact on the associated environment.*

LINK: [Oak Bay Contraception Results](#)

LINK: [UBC Study 2013 – 2019](#)

LINK: [SIERP Detailed Impact Assessment For Public Review July 2023](#)