



Deer Plan Oak Bay

A campaign of the
URBAN WILDLIFE
STEWARDSHIP SOCIETY

DEER PLAN OAK BAY Q&A

1. How many deer are there in Oak Bay?

No one knows because Oak Bay has never done a scientific count. The UWSS plan involves attaching ear tags to deer, which will allow us to use a scientific technique called “mark and recapture” to quickly get a population estimate.

2. Why can't we just relocate the deer?

Experience in other jurisdictions shows that trapping and moving animals to other areas is expensive, and stressful to the deer.

3. What are the contraception options?

Over the past 25 years, the use of vaccines to control fertility has emerged as the preferred approach. Several approaches to contraception have been explored, including surgical sterilization, hormone implants, IUDs and vaccination. Surgical sterilization is highly invasive but with a large amount of volunteer effort it is being used in Virginia. Hormone implants and IUDs are equally invasive and have to be replaced frequently.

4. What is immunocontraception?

Immunocontraception uses vaccines to produce antibodies that target the reproductive system. The most promising contraceptive is a vaccine called SpayVac, which is a Canadian innovation and has been shown to prevent pregnancy for many years with a single dose.

5. How does SpayVac work?

SpayVac produces natural antibodies in the blood, just like the flu vaccine in humans. The antibodies bind to the surface of the female egg and prevent sperm from fertilizing it. For more information visit <http://www.terramar.bc.ca/>

6. How effective is SpayVac?

With a single vaccination, most does will not get pregnant again in their average lifetime of 5-7 years. In the unlikely event that we see a treated doe with a fawn, we will administer a booster shot from a distance without having to recapture her.

On James Island off Sidney, BC, SpayVac was used on the overly abundant fallow deer. It was 100 per cent effective, meaning that after five years the injected deer were still carrying the antibodies that prevent pregnancy and no fawns were born over a six-year period. An experiment in Maple Ridge, BC, with black-tailed does proved similarly successful.

7. What percentage of the doe population has to be vaccinated for this to be effective?

We estimate that 25 to 30 per cent of does need to be treated to curtail population growth and with more, the faster the population decline will be. We don't need to capture them all at once and can vaccinate deer in subsequent years.

8. How does a contraception technique compare to a lethal cull?

In a lethal cull, deer are caught in baited net traps, stunned with a bolt gun to the skull and the throat is slit until death from bleeding. But there is a more ethical and effective alternative. Experienced biologists will capture deer humanely, inject them quickly with the contraceptive vaccine, attach ear tags and immediately release them.

9. What are the benefits of immunocontraception?

There are immediate benefits. There is a reduction in “aggressive” females because they don’t have fawns to defend. Does that aren’t lactating eat far less. And there are fewer deer since fawns aren’t being born. The population is quickly stabilized and will drop over time.

10. How quickly will the Oak Bay deer population decline?

That depends on what proportion of the deer population is treated and we don’t yet know how many deer there are in Oak Bay. Other studies have achieved a decline of 50 per cent in five years with immunocontraception.

11. When deer numbers drop in Oak Bay, won’t deer move in from other areas?

The vaccinated deer will maintain their home ranges, which tends to deter inward migration. Adult female deer tend to stay very close to where they’re born and won’t migrate in from far away.

12. Have you got approval to use SpayVac?

We have initiated the process of applying to Health Canada for an “Experimental Studies Certificate for a Veterinary Drug” at a cost of \$2,900. Annual renewals are \$480. We also need a permit from the province to trap, handle and tag deer.

13. How much will the SpayVac program cost?

It could possibly be done for as little as \$300 per deer. This is going to be a scientifically valid study so we will budget \$1,000 per deer to trap, treat, tag and collect data. With this larger budget, we will involve graduate students and engage citizen scientists in observing deer and collecting data.

14. How will you catch the deer?

The most effective method is to use baited Clover traps—frames covered in soft netting. Once a doe is captured, an experienced biologist will approach as quickly and quietly as possible, physically restrain her and blindfold her to keep her calm. She will be injected with the vaccine, a visual tag will be clipped into each ear and she will be released. This only takes a few minutes.

15. What will you do if you capture a buck or a fawn?

Any male deer caught will be ear-tagged and released. Female fawns will be vaccinated.

16. What time of year will you be capturing deer?

We can vaccinate at any time but our efforts will be concentrated when deer are easiest to catch—the late summer and fall. If other times prove useful we will modify our plans.

17. What assurances are there that the captures will be humane?

The captures will be carried out by experienced biologists. They are members of the College of Applied Biology, which has strict ethical standards. The lead biologist in this project sits on the college's disciplinary committee. As professional biologists, they care about the welfare of the wildlife they're working with and are committed to handling animals in a safe, ethical and humane way.

18. Is this program supported by the BC SPCA and the Victoria Humane Society?

Both organizations have endorsed our approach. In addition, we will be working closely with the BC SPCA to ensure they remain comfortable with what we're doing.

19. Does this program require support from all three levels of government?

We require permits from the federal and provincial governments, and hope to work with regional and municipal governments too. For local governments, our approach represents a win-win in terms of the science, cost and community support on an issue with which they have struggled.

20. How will the success of the program be evaluated?

We'll be looking at a variety of metrics, including: the number of female deer we're able to vaccinate and the overall number of deer we're able to tag; cost; our ability to assess the size of the population and add to local knowledge of the deer population and its habits; community support and participation; and public education.

21. Will this program get rid of deer in my garden?

Even with lower numbers, a deer can enter a yard and browse on flowers unless it is fenced. It's important to remember that many residents enjoy and support the presence of deer in our community. No one is proposing that deer be eliminated from Oak Bay. The deer are here to stay. There are many proven non-lethal measures that residents and municipalities can take to co-exist with deer, such as fencing, scare devices, repellents, road safety signage and speed enforcement, habitat modification, and anti-feeding bylaws. This is where we will be asking local governments to recognize their responsibility for public education and mitigation measures. We are happy to provide them with the benefits of our expertise and experience.

22. How will this program protect us from aggressive deer?

Deer are only "aggressive" to people and/or dogs when they're feeling threatened, especially when protecting fawns. As the immunocontraceptive program progresses there will be fewer fawns for the does to defend. In addition, a sustained public education campaign will help people better understand deer behaviour and how to avoid conflict.

23. How will this program help reduce car-deer collisions?

Our data will help to identify the specific locations where, when and why deer cross roads. In these areas we suggest that roadside vegetation be removed or pruned to increase visibility, parking be restricted, lighting be improved, and warning signs be erected. We hope the Oak Bay municipality will work with us to lower and enforce speed limits along roads where there have been a high number of car-deer collisions. But the greatest reduction in collisions will be achieved through educating drivers about the importance of reducing speed, being alert, and understanding deer travel patterns. In Ontario, a driver education program called “Speeding Will Cost You Deerly” has effectively reduced the number of collisions by 40 per cent.

24. Now that you’ve publicly launched the society, what’s next?

Our first priority is our Deer Plan Oak Bay Campaign to fund the immunocontraceptive component of our project. The fundraising target is \$50,000 by the end of July. A total of more than \$8,500 has been raised to date, plus in-kind donations. This initial funding is allowing UWSS scientists to proceed immediately with acquiring the vaccine and permits, but the remaining funds are needed to obtain other materials and equipment required for the field work. We’re meeting with a variety of scientists, graduate students and wildlife experts. We also hope to start a conversation with Oak Bay Council and the CRD on deer stewardship, moving forward in an ethical, sustainable and humane way.

25. I’d like to donate money. How do I do that?

We invite anyone who believes in the importance of a non-lethal approach to wildlife stewardship to join our campaign, whether through financial support, or the donation of time or logistical support. Please visit our website at deerplanoakbay.ca.