**Sidney Island Ecological Restoration Project:**

**Eradication invasive fallow deer from Sidney Island to facilitate forest recovery**

**Background:**

BC’s Gulf Islands are important for biodiversity conservation in Canada. In the southern Gulf Islands, the Coastal Douglas-fir biogeoclimatic zone is home to the highest plant diversity and overwintering bird diversity in BC, including many unique plants and animals that do not occur elsewhere in Canada. Many of the plants and animals in this region also have significant cultural importance to local Indigenous peoples.

At this time, the forested areas in the southern Gulf Islands is are risk due to browse pressure from invasive fallow deer and hyper-abundant native black-tailed deer. This is particularly true on Sidney Island, where decades over-browsing by invasive fallow deer has significantly degraded the island ecosystem, resulting in less diverse bird communities, reduced shrub cover, and decreased plant species richness when compared to other islands in the region. Significant efforts have been made over the last 40 years by Sidney Island residents to reduce the deer population to sustainable numbers. However, these extensive culling efforts in combination with research on the issue has led Parks Canada to conclude that the restoration of Sidney Island’s forest ecosystem is not feasible unless the fallow deer population is removed entirely.

To this end, Parks Canada has sponsored a collaborative, cross-jurisdictional initiative to eradicate fallow deer across the whole of Sidney Island for the purpose of promoting long-term forest recovery. Project partners include: Parks Canada, the Province of BC, Island Trust Conservancy, Sallas Forest Strata (Sidney Island residents), W̱SÁNEĆ Leadership Council, Pauquachin First Nation, and Cowichan Tribes.

The primary objective of this project is to facilitate long-term recovery of the natural environment by eliminating a significant threat (intense over-browsing by fallow deer). Additional objectives include:

* Facilitating the recovery of culturally important species and practices;
* Facilitating use and enjoyment of the Island, within the Park Reserve; and,
* Strengthening the relationship of the project partners to Sidney Island.

**Activities:**

The following eradication activities are being proposed and assessed by the project team:

* Aerial herding/hunting of fallow deer (dispatching firearms from a helicopter)
* Canine herding/hunting within fenced zones (setting up temporary fenced zones across the island and sequentially clearing each zone with a specialised canine hunting team, moving from the southern tip to the northern tip of the island)
* Bait stations (baiting select sites with sterile grains for the purpose of attracting deer to a location where they can be easily dispatched)
* Drop netting (baiting select sites and rigging an overhead net, which will be manually dropped from a distance for the purpose of trapping deer dispatching)
* Spotlighting / Forward-looking infrared (hunting at night with the use of bright lights and/or FLIR rifles to dispatch nocturnal deer)
* Shoreline hunting (dispatching firearms from a boat, targeting foraging deer along the shoreline, potentially at night)
* Sentinel deer (capturing, sterilising, and releasing select deer for the purpose of located other deer on island)
* Carcass management (harvesting and disposing of deer remains)
* Operational logistics (accommodating personnel facilities on site, transportation to/from dispatch sites, transporting to/from Sidney Island, storing equipment, etc.)
* Post-eradication (potential short-term and long-term impacts after fallow deer are removed from the ecosystem)

**Timing:**

Trials are tentatively planned for January and February 2022.

Full eradication activities are planned for September 2022 – May 2023.