

2025 Canada Goose Population Survey Report

Regional Canada Goose Management Strategy

Capital Regional District | Environmental Protection



CRD

Making a difference...together

Prepared by:

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Photo by Samantha Hammond

1.0 Acknowledgements

The Capital Regional District (CRD) conducts its business within the territories of many First Nations, including but not limited to BOKEĆEN (Pauquachin), MÁLEXEŁ (Malahat), Paaʔčiidʔatx (Pacheedaht), Pune'łaxutth' (Penelekut), Sc'ianew (Beecher Bay), Songhees, SṠÁUTW (Tsawout), T'Sou-ke, WJOŁEŁP (Tsartlip), WŚIKEM (Tseycum), and xʷsepsəm (Esquimalt), all of whom have a long-standing relationship with the land and waters from time immemorial that continues to this day.

The CRD would like to recognize the hard work and dedication of the numerous groups who made this year's Canada goose population surveys in the capital region possible. These groups are as follows:

- CRD staff and outreach team
- Malahat Nation
- Agile Drone Services
- Rocky Point Bird Observatory
- Galiano Island Conservancy
- Mayne Island Conservancy
- Saturna Island Marine Research and Education Society
- Pender Island Conservancy
- District of Saanich parks staff
- City of Victoria parks staff
- Town of Sidney staff
- Swan Lake Christmas Hill Sanctuary
- Numerous golf courses
- Individuals such as Bette Longland, Dave Aylard, Graeme Garvin, the Michells family, Kate Pheonix and Jim Reisin for allowing us onto their properties to use drone technology.

The CRD would also like to recognize the hard work and dedication of groups who contributed to Canada goose (CAGO) population surveys in the past including the Peninsula Area and Agricultural Commission (PAAC), Guardians of our Salish Estuaries (GooSE), Ministry of Agriculture and Rocky Point Bird Observatory (RPBO).



Figure 1. Photo from the CRD boat during moult survey (photo by Samantha Hammond)



Figure 2. Photo of drone provided by Agile drones during winter survey (photo by Samantha Hammond)

2.0 Introduction

Historically, Canada geese (CAGO) found on Vancouver Island were occasional migratory visitors over the autumn and winter months and were very rarely seen nesting. In the 1960's and 70's a CAGO introduction program was implemented by the Canadian Wildlife Service, BC Fish and Wildlife Branch and various other organizations to increase wildlife viewing and hunting opportunities in the capital region. The introduced geese were young birds from various subspecies of Canada geese who were unable to learn migrating behaviour patterns from their parents. Eventually these geese interbred, creating a hybrid population of non-migratory resident geese which are not native to the region [1][2].

According to Christmas Bird Count data, the current Vancouver Island CAGO population ranges from 16,000-21,000 with an estimated 9,000-11,000 birds overwintering in the capital region [3]. The exponential growth of the regional CAGO population is degrading coastal ecosystems and waterways by over-grazing, trampling vegetation, soil erosion and the spread of invasive species. These areas include endangered Garry Oak ecosystems, near-shore islands in ecological reserves, and estuaries that are critical habitats for young salmon [4][5][6]. Increased public health concerns have risen from public and private recreational sites including parks, sports fields, swimming beaches, golf courses and farmlands. These concerns are due to high densities of fecal matter, degradation and contamination of water sources, territorial goose conflicts and spread of disease [7]. Significant economic impacts have occurred with local farmers experiencing financial losses from CAGO damaging crops through grazing and soil erosion, increasing maintenance costs, and contaminating crops and water with their droppings. Poultry farms are also at risk of exposure of Highly Pathogenic Avian Influenza from CAGO [8]. These impacts have resulted in increased pressure on local governments to take coordinated action.

In 2012, the CRD partnered with municipalities and other stakeholders to develop a Regional Canada Goose Management Strategy (RCGMS) to provide guidance for controlling the adverse impacts that the population of non-migratory, resident CAGO have in the capital region [2]. These management tools include population monitoring, preventing feeding, habitat modification, hazing, egg addling, hunting, harvesting and public outreach. Since its development, numerous actions have been undertaken with hazing strategies becoming the most popular. Unfortunately, without a coordinated approach, geese and their associated impacts have moved into new areas, expanding the nesting and overwintering populations.

In February 2023, the CRD Board approved the Canada Goose Management Service Establishment Bylaw No. 1, 2022 (Bylaw No. 4522) that aims to reduce the impact of the rapidly growing CAGO population in the region. This bylaw was adopted after receiving elector assent through a regional alternative approval process. The RCGMS includes:

- monitoring, mapping and reporting on CAGO populations and their impacts.
- coordinating and establishing collaborative partnerships with municipalities, First Nations, large landowners, Peninsula and Area Agricultural Commission, other government agencies and stewardship groups to implement the CRD's RCGMS.
- development and implementation of a communications strategy and public education program to support the management of CAGO populations.
- collaborating with other Vancouver Island regional districts, local governments and First Nations to reduce CAGO populations through the Vancouver Island Canada Goose Management Working Group.

Population surveys are an important component of the RCGMS and are utilized to inform regional decisions and show the effectiveness of applied management techniques. Winter CAGO populations are counted during the annual Christmas Bird Count (CBC) and portions of the CRD were surveyed in 2019 and 2020. Hot spot surveys in the region have been completed since 2021, and in 2024 a complete regional moult survey that included all municipalities and electoral districts was conducted (See Appendix A). In the winter, non-migratory resident Canada geese move around the region and spend more time grazing on farmlands, estuaries, parks and recreational fields. These geese can act as an attractant, bringing more migrant subspecies into these areas, increasing their impact and inflating the population. In late June and July, CAGO moult their flight feathers and congregate with their young of the year near bodies of water. At this time, they are unable to fly and will stay in their chosen area for long periods, presenting a unique opportunity to conduct an accurate population count that includes young-of-the-year amounts with little chance of overlapping results. A collaborative approach that includes partnership with CRD staff, local First Nations and local stewardship groups allowed us to conduct a coordinated winter and moult survey of CAGO across the capital region. This report outlines the methods and results of the 2025 Regional Canada Goose Winter and Moulting Surveys.

3.0 Methods

3.1 Collaboration and Training

The capital region covers 1,502.24 km² and consists of 13 municipalities and electoral districts which includes the Southern Gulf Islands. Numerous groups across the capital region were asked to participate in the survey:

- **First Nations:** A request was sent out to all local First Nation groups within the capital region requesting a partnership that included the use of their boat, boat operator and a staff member. Malahat Nation agreed to participate with two members of their nation and a boat. Songhees and Tsawout Nation have expressed an interest in participating in future years.
- **Stewardship groups:** Groups from all over the capital region were contracted to participate in the survey. These groups included Rocky Point Bird Observatory, Galiano Island Conservancy, Mayne Island Conservancy, Pender Island Conservancy, Saturna Island Marine Research and Education Society, Castilleja Conservation Society and Friends of Victoria Harbour Migratory Bird Sanctuary.
- **Large landowners and managers:** Staff from areas with large numbers of CAGO were contacted and asked to count geese in their areas. Participants included CRD Parks, Saanich Parks, City of Victoria, Township of Sidney, Horticulture Centre of the Pacific, Swan Lake Christmas Hill Sanctuary, Royal Colwood Golf Club, Highland Pacific Golf, Olympic View Golf, Victoria Golf Club and Mount Douglas Golf Course.
- **Training:** A survey guide was developed and distributed to all participants of the winter and moult surveys to ensure all participants in the surveys followed the same data collection protocols, learned how to use the Geographic Information System (GIS) survey tool called GooseWatch, and knew how to identify adult and juvenile CAGO.
- **Testing:** Participants were encouraged to test out GooseWatch in the field prior to the survey dates.

3.2 Data Collection

To ensure reliability of the CAGO survey results, the following measures were implemented to achieve high accuracy in the population counts:

- All participants received survey guides to ensure consistency in collecting data and identifying and counting CAGO. Most of the 2025 participants also participated in 2024 and attended a 30 minute training session.

- Equipment: Binoculars, cell phone or tablet, FULCRUM app, camera and printed data sheets (See Appendix B).
- The FULCRUM app or GooseWatch tool were used to track GPS locations, population counts, photos and additional data while in the field. The data was entered on a phone or iPad and was also written on a hard paper copy (Appendix B). Data collected on GooseWatch was later entered into FULCRUM by CRD staff.
- During the moult survey, adult and juvenile CAGO population numbers were counted by two surveyors and compared for accuracy. One person entered the data, the other wrote a hard copy. Pictures were taken at each site that could be used to confirm numbers after.
- Photographs were taken during both winter and moult surveys. These images were reviewed later to verify and cross-check the initial counts.

3.3 Winter Survey

CAGO are capable of flying during the winter. The agricultural lands, parklands and shorelines of the capital region were separated into zones and assigned to each participant prior to the survey. Surveys were completed using land-based counts and aerial drone counts from February 3-5, 2025.

- The survey was originally split between two mornings and participants were asked to complete surveys between 8 am and 12 pm.
- Urban centres, forests and steep rocky shorelines were omitted from the survey.
- The suitable areas were divided into sections and assigned by date to reduce the chances of CAGO moving between areas and resulting in overlapping results (Table 1).
- Non-migratory and migratory subspecies of Canada geese were included in the total number of overwintering geese observed during the survey.
- Many participants were unable to complete the survey on February 4 due to a snowstorm so an additional day was included on February 5 to allow more time for surveyors to complete their sections.

Table 1. Locations and groups by winter survey date (large landowners counted CAGO during survey dates but are not included below)

2025 Date	Survey Zones	Method	Groups Participating
February 3	Salt Spring Island, Pender Island, Mayne Island, North Saanich, Sidney, Central Saanich, Saanich, Oak Bay	Drone and land surveys	CRD staff, Rocky Point Bird Observatory (RPBO), Township of Sidney, Saanich Parks, Mayne Island Conservancy, Pender Island Conservancy, Department of National Defense (DND), Jacques Sirois
February 4	Sooke, Victoria	Land surveys	CRD staff, RPBO
February 5	Esquimalt, View Royal, Metchosin, Colwood, Juan de Fuca Electoral Area	Drone and land surveys	CRD staff, RPBO, City of Victoria Parks, View Royal Parks, Swan Lake Nature House

3.4 Moulting Survey

The shorelines of the capital region were separated into zones and assigned to each boat prior to the survey. The shorelines, lakes and other areas not covered by boat or drone were separated into zones and assigned to land groups.

- Canada geese congregate in large open areas that have access to sufficient food and water; protected shorelines are favoured where geese can move in and out of the water with ease. The topography of the region was reviewed and areas with a high probability of moulting CAGO were chosen for the survey.
- The suitable areas were sectioned by dates to reduce the chances of CAGO moving between areas and resulting in overlapping results (Table 2).
- Urban centres, forests and steep rocky shorelines were omitted from the survey.
- Moulting hot spots are identified in three categories: location of concern, hot spot and critically high (Table 3).

Table 2. Locations and groups by moulting survey date (large landowners counted CAGO during survey dates but are not included below)

2025 Date	Survey Zones	Method	Groups Participating
June 23	Port Renfrew – Juan de Fuca Electoral Area, Saanich parks and lakes, Langford, Highlands	Land surveys	CRD staff, RPBO, Municipal staff
June 24	Salt Spring Island, Saturna Island, Sidney, North Saanich, Prevost Island, Tumbo Island, Anniversary Island	Land and boat surveys	CRD staff, Malahat Nation, RPBO, Municipal staff, Parks Canada, Saturna Island Marine and Education Society
June 25	Galiano Island, Mayne Island, Pender Island, Beecher Bay to Sooke, West Coast from Saanich Inlet to Swartz Bay, Piers Island, Moresby Island, Portland Island	Land and boat surveys	CRD staff, Malahat Nation, RPBO, Galiano Conservancy, Pender Island Conservancy, Mayne Island Conservancy
June 26	Central Saanich, Saanich, private farmlands, Oak Bay and Islets, Victoria, Gorge Waterway, View Royal	Drone, land and boat surveys	CRD staff, RPBO, Jacques Sirois and Matt Fairbarns, Municipal staff
June 27	Colwood, Esquimalt, Metchosin, Esquimalt Harbour	Land and boat surveys	CRD staff, Parks Canada, RPBO

Table 3. Table describing each hot spot classification used to describe areas with significant concentrations of moulting geese

Hot Spot Classification	Threshold	Management Recommendation
Location of Concern	> 150	Population management should be considered when resources permit to prevent further escalation and mitigate local impacts
Hot Spot	> 350	Targeted management efforts recommended to reduce population impacts. Concentrations may extend along a shoreline or bay.
Critically High	> 1,000	Urgent intervention is required to prevent long-term ecological, recreational, economic or public health impacts.

4.0 Results

4.1 Winter Survey

The 2025 Regional Canada Goose Winter Survey was completed during the week of February 3-5, 2025 and spanned all 13 municipalities and electoral districts in the capital region. Surveys were not conducted on some of the Southern Gulf Islands including Saturna Island, Galiano Island and various smaller islands such as Sidney and James Island. The data collected on Galiano Island was obtained from a landowner's observation on the GooseWatch survey tool. Heavy snow accumulation on February 3 and 4 prevented numerous participants from getting out to conduct CAGO surveys. As a result of this, Esquimalt and Salt Spring Island surveys were incomplete. A total of 208 locations were surveyed successfully including an estimated 1,645 hectares of farmland surveyed by drone (Figure 3).

A total of 9,166 CAGO were recorded during the winter survey conducted in the CRD (Figure 4). This represents an approximate 35% increase compared to the 2024 regional moult survey, which estimated a population of 6,669 geese. In Saanich, 1,800 overwintering geese were identified as the migratory Dusky goose (*Branta canadensis occidentalis*), a subspecies of the Canada goose [9]. The largest concentrations of overwintering geese were discovered in Saanich, Central Saanich, North Saanich and Metchosin (Table 4). The Gulf Islands showed smaller concentrations of overwintering geese with Pender and Galiano Islands containing the majority (Table 5). With some regions missing sufficient survey data, it is likely that not all geese were accounted for. The actual population is estimated to be higher than the reported amount.

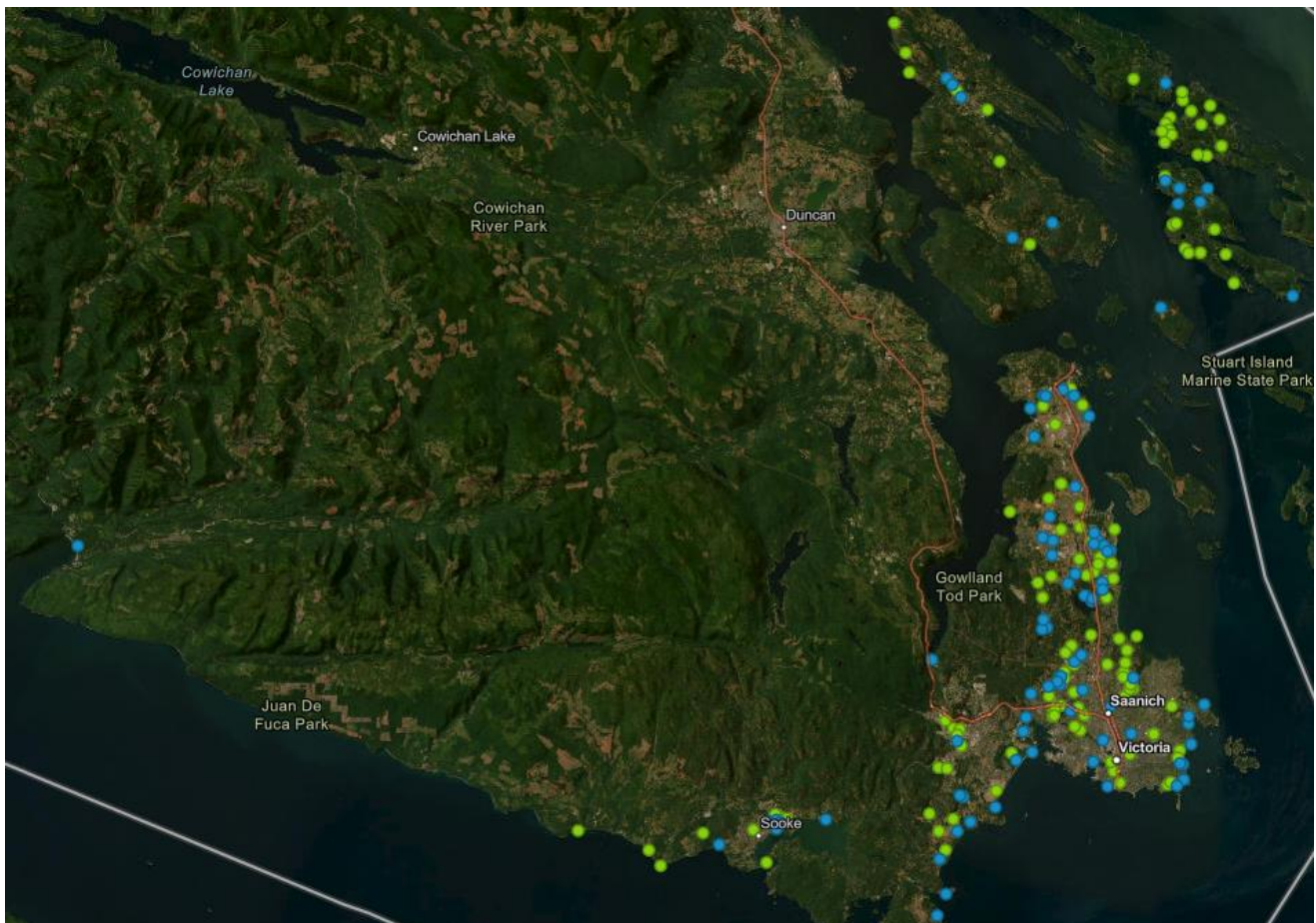


Figure 1. Data points collected in the FULCRUM app during the 2025 Regional Canada Goose Moulting Survey. Green dots represent sites with no geese and blue dots represent sites with geese.

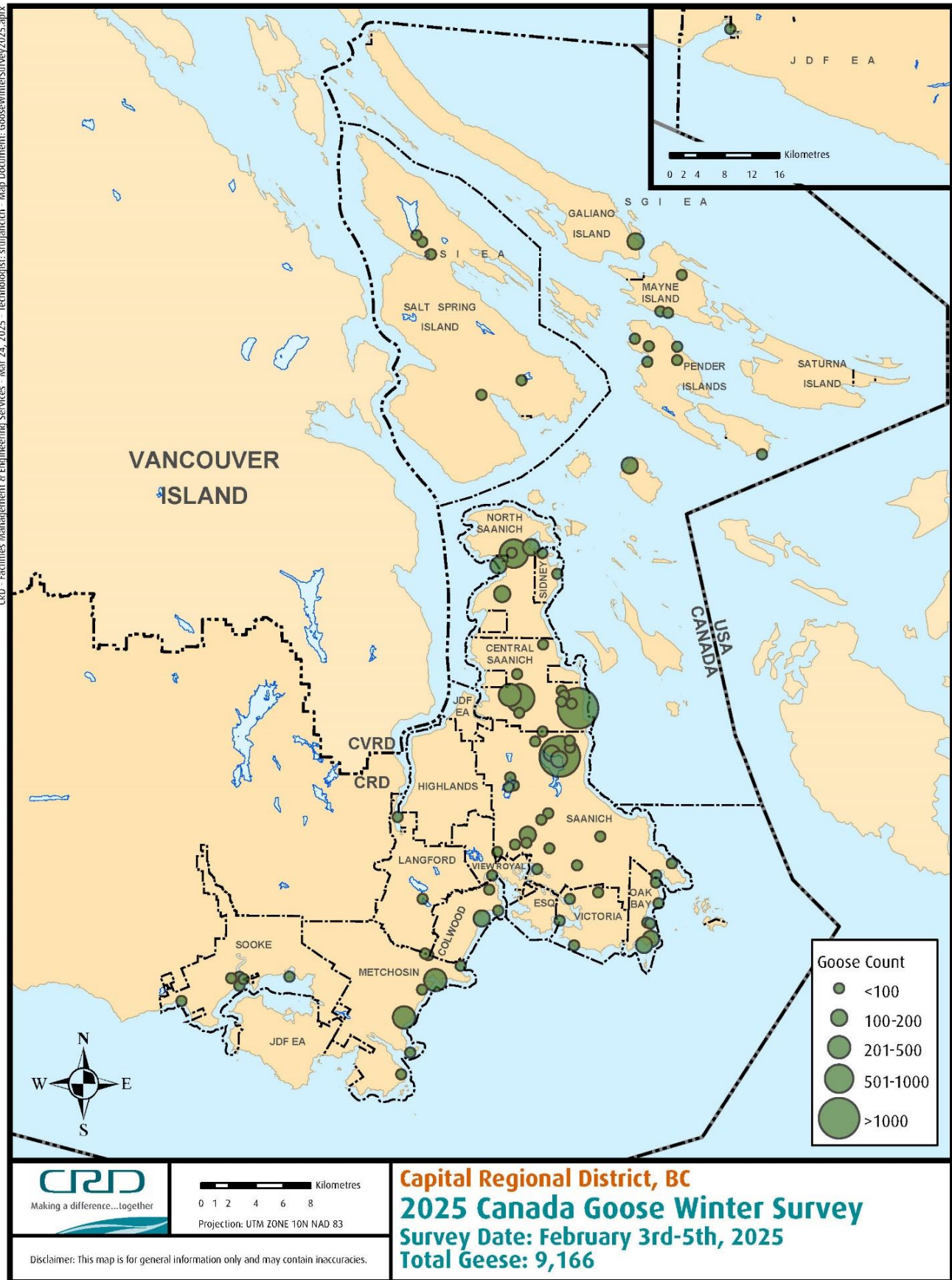


Figure 2. Results of the 2025 Regional Canada Goose Winter Survey. Western portion of Juan de Fuca Electoral Area shown in upper corner of map.

Table 4. Population totals of CAGO for the municipalities and electoral districts included in the 2025 Regional Canada Goose Winter Survey

Region	Total Geese
Central Saanich	2,524
Colwood	282
Esquimalt	1
Gulf Islands	639
Juan de Fuca Electoral Area	8
Langford	105
Metchosin	678
North Saanich	1,060
Oak Bay	472
Saanich	*2,804
Sidney	137
Sooke	253
Victoria	157
View Royal	46
Total	9,166

**1,800 of these identified as the Dusky goose subspecies (*Branta canadensis occidentalis*)*

Table 5. Population totals of CAGO for each of the Gulf Islands included in the 2025 Regional Canada Goose Winter Survey

Gulf Island	Total Geese
Galiano Island	200
Mayne Island	19
Moresby Island	111
Pender Island	186
Salt Spring Island	123
Total	639

4.2 Moulting Survey

The 2025 Regional Canada Goose Moulting Survey was successfully completed by all participants during the week of June 23-27, 2025 and covered all 13 municipalities and electoral districts in the CRD. A total of 380 locations were surveyed, including over 600 km of shoreline. Of these locations, 168 sites were found to have geese and 212 recorded no geese (Figure 5). On June 25, high winds and large ocean swells off the coast of North Saanich prompted the Malahat Nation boat captain to terminate the boat survey of the smaller Gulf Islands prematurely. As a result, CAGO surveys for Sidney, James and Darcy Islands were not completed.

A total of 4,580 adult and 1,155 juvenile CAGO were counted during the survey bringing the total to 5,953 (Figure 6). This shows an overall reduction of 11% compared to the 2024 Regional Canada Goose Moulting Survey results of 6,669 geese. The largest concentrations of moulting CAGO were recorded in Saanich, Sooke, Oak Bay and the Gulf Islands (Table 6). On the Gulf Islands, the largest populations were found along the shorelines of Salt Spring Island and Pender Island (Table 7). In Colwood, a hot spot from previous years, the population dropped from 598 in 2024 to 130 in 2025 (Figure 7). This is likely due to the harvest led by First Nations that occurred in the area in 2024. Juvenile numbers were recorded during the survey, and 1,155 juveniles were counted in total, representing 19.4% of the total population. The largest numbers of juveniles were discovered in Oak Bay, Saanich, Victoria and the Gulf Islands. Although the survey was

extensive, some of the smaller Gulf Islands were missed and it is probable that not all CAGO in the capital region were recorded; the actual population may be higher.

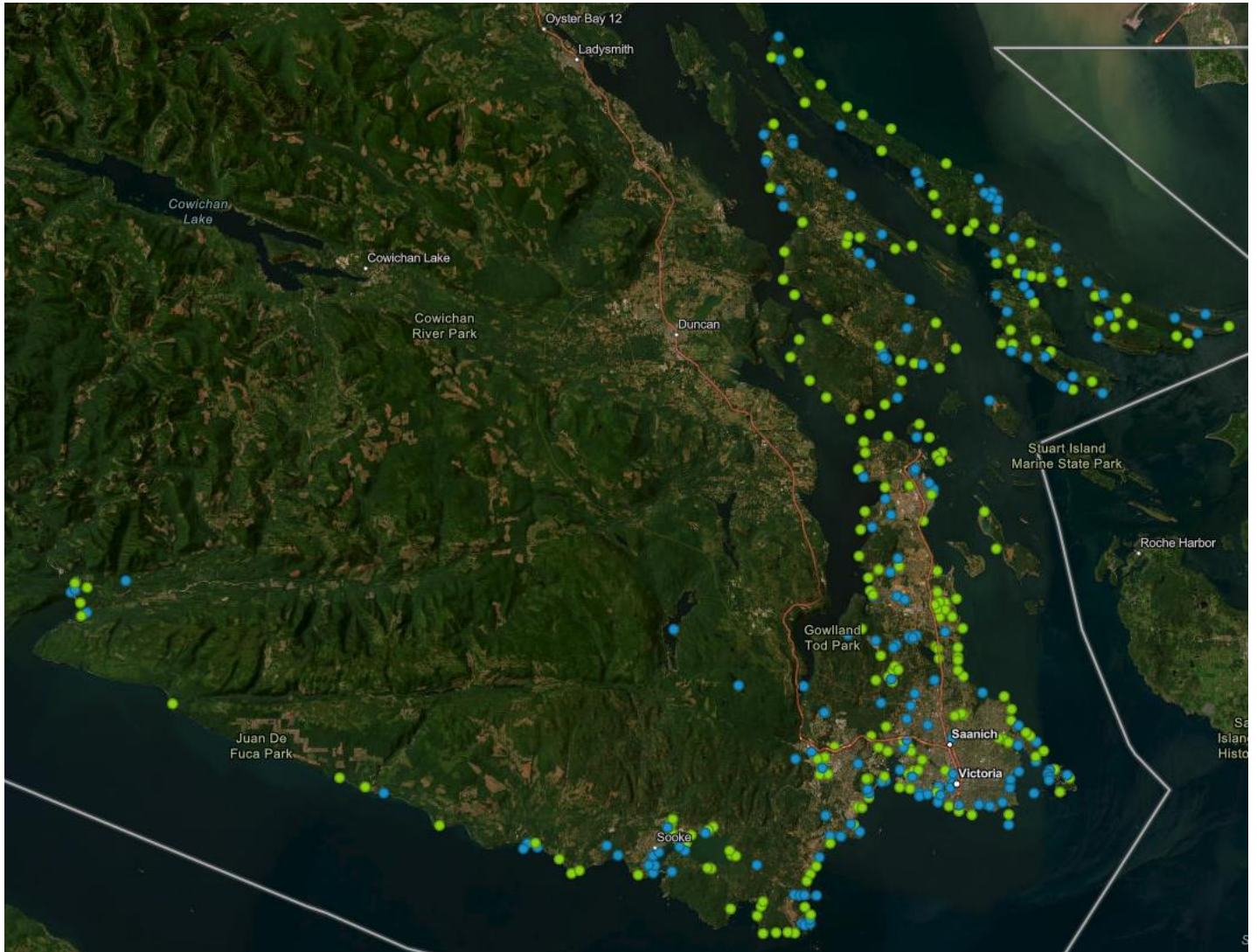


Figure 3. Data points collected in the FULCRUM app during the 2025 Regional Canada Goose Winter Survey. Green dots represent sites with no geese and blue dots represent sites with geese

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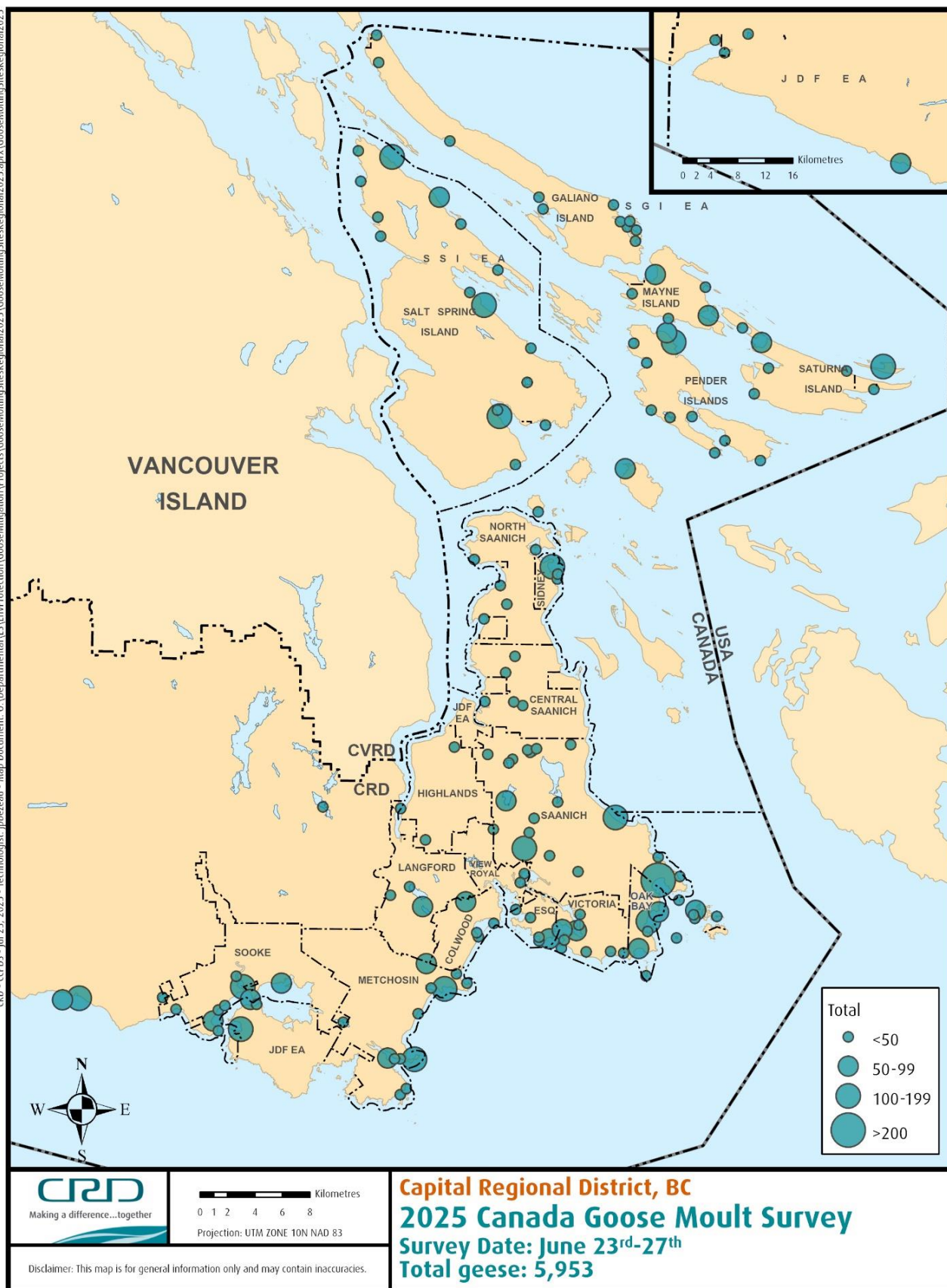


Figure 4. Results of the 2025 Regional Canada Goose Molt Survey. Western portion of Juan de Fuca Electoral Area shown in upper corner of map

Table 6. Population totals of CAGO for the municipalities and electoral districts included in the 2025 Regional Canada Goose Moulting Survey

Region	Adult	Juvenile	Total
Central Saanich	59	43	102
Colwood	104	26	130
Esquimalt	167	65	232
Gulf Islands	1,531	225	1,756
Highlands	20	12	32
Juan de Fuca Electoral Area	356	35	416
Langford	135	35	170
Metchosin	453	47	500
North Saanich	80	31	111
Oak Bay	430	329	759
Saanich	297	116	606
Sidney	198	10	208
Sooke	628	79	707
Victoria	112	102	214
View Royal	10	0	10
Totals	4,580	1,155	5,933

Table 7. Population totals of CAGO for each of the Gulf Islands included in the 2025 Regional Canada Goose Moulting Survey

Gulf Island	Adult	Juvenile	Total
Galiano Island	167	26	193
Mayne Island	164	41	205
Moresby Island	59	25	84
Pender Island	312	35	347
Piers Island	15	0	15
Salt Spring Island	580	78	658
Samuel Island	10	0	10
Saturna Island	101	20	121
Tumbo Island	123	0	123
Totals	1,531	225	1,756

Moulting Canada Geese Observed in Each Municipality and Electoral District from 2021-2025

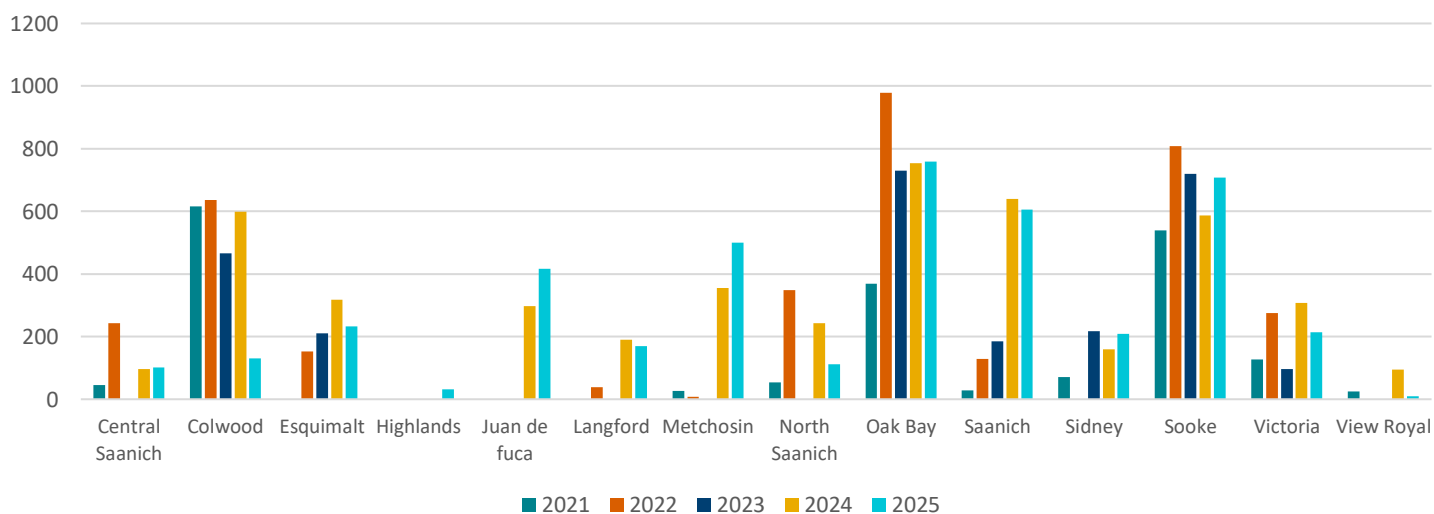


Figure 5. Bar graph comparing the total number of moulting geese observed in each municipality and electoral district of the CRD except for the Gulf Islands. Population data from 2017-2023 obtained from Guardians of Our Salish Estuaries (GooSE) reports to the CRD.

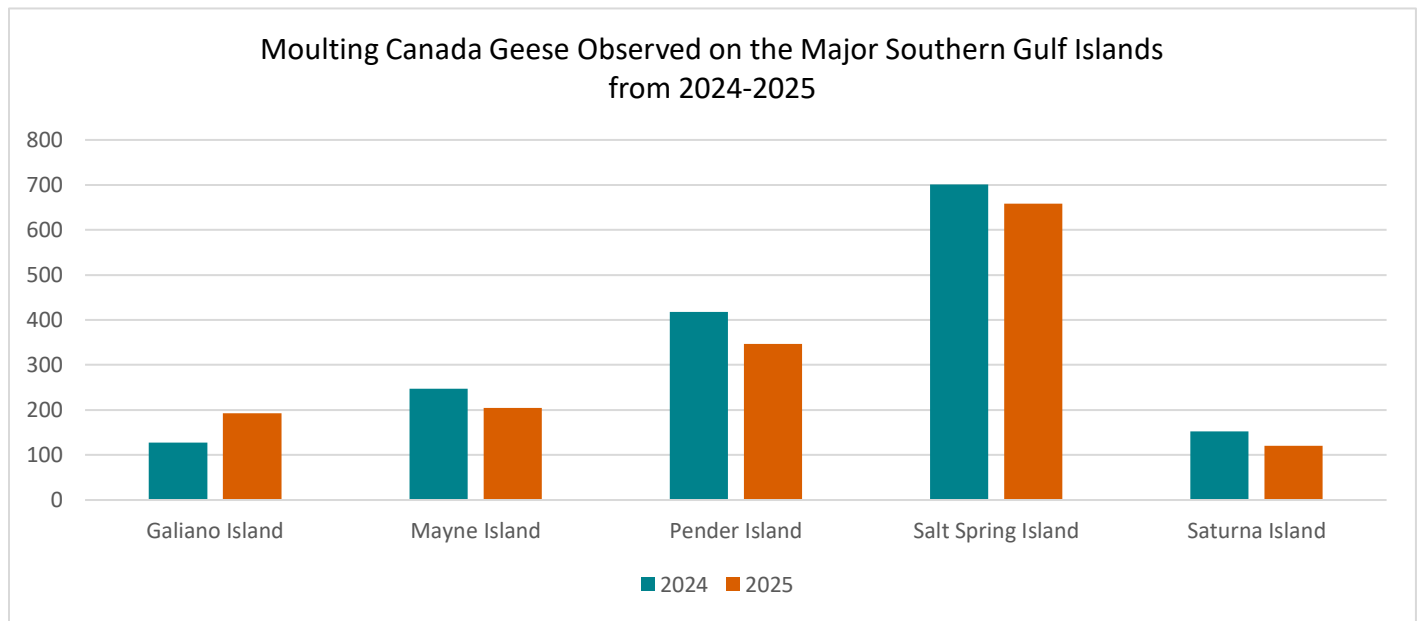


Figure 6. Bar graph comparing the total number of moulting geese observed in each of the major Southern Gulf Islands, during the 2024 and 2025 moult survey

5.0 Discussion

Past population surveys of overwintering Canada geese have been conducted as part of the Christmas Bird Count (CBC), a citizen science project hosted by Birds Canada in partnership with the National Audubon Society. This year they counted a total of 6,119 Canada geese in the capital region. However, a population survey specific to Canada geese spanning the entire CRD had not been completed until now. In 2020, Guardians of Our Salish Estuaries (GooSE) conducted a winter CAGO survey in partnership with RPBO from Sooke to Sidney, where a total of 3,431 geese were counted [10]. The results from the 2025 Regional Canada Goose Winter Survey indicate that the overwintering population is higher than anticipated, with a total of 9,166 geese. This is a 35% increase from the 2024 Regional Canada Goose Moulting population survey of 6,669 (See Appendix A). The winter population is likely even higher as population surveys on Salt Spring Island, Esquimalt and Saturna Island were incomplete due to poor weather.

The 2025 Regional Canada Goose Winter Survey identified critically high concentrations (populations over 1,000 individuals) of overwintering geese in Saanich, Central Saanich and North Saanich with an additional large population in Metchosin. During the winter months, CAGO congregate in agricultural fields causing significant impacts to the farming community and posing risks to the food security on southern Vancouver Island. Our resident CAGO may serve as ecological beacons, attracting other migratory species of geese contributing to an overall increase in the regional population. Among the overwintering individuals, approximately 1,800 Dusky Canada geese (*Branta canadensis occidentalis*), a subspecies of Canada goose was identified, representing 20% of the total wintering population. This subspecies population was identified by a member of the local birding community who observed the population roosting overnight on Elk Lake. Other goose species that are often observed in the winter months, but were not recorded during this survey, include the Cackling goose (*Branta hutchinsii*), Snow goose (*Anser caerulescens*) and the Greater white fronted goose (*Anser albifrons*). As a result of the snowstorm, geese were absent from many expected locations. However, where geese were present, they were observed in high concentrations. The snow cover enhanced visibility, making it easier to detect geese using aerial drone surveys (see photo in Appendix C).

This year's 2025 Regional Canada Goose Moulting Survey confirmed previously identified hot spots from past surveys, including new ones identified in 2024. The shorelines of Sooke Harbour, Oak Bay and Victoria continue to have the highest concentrations of moulting geese. The municipality of Saanich has multiple locations of concern, with over 49% of the geese found in Saanich discovered on local farmlands. A similar phenomenon was found in Central Saanich, where 100% of the moulting population was discovered on agricultural lands. These populations were mostly found in smaller congregated groups around ponds or other wetland areas on private property. The shorelines of Sidney, Metchosin and the Juan de Fuca Electoral Area contain locations of concern around Muir Creek, William Head, Pedder Bay and Roberts Bay where the local population are now over 150 individuals. Future management efforts should be expanded to include these locations, particularly around Roberts Bay and Muir Creek where no known egg addling or harvest with First Nations are known to occur. Colwood's CAGO population was concentrated in the Esquimalt Lagoon and had been classified as a hot spot, however the local population has been reduced by 79% over the past year. This is an encouraging result of the harvest with First Nations that occurred in the past year, however ongoing monitoring should remain in the area to ensure the population numbers do not rebound.

The 2025 Regional Canada Goose Moulting Survey included juvenile recruitment surveys which count the number of juvenile geese that have been recruited into the local population of CAGO. The largest populations of juvenile CAGO were counted in Oak Bay, Saanich, Victoria and the Gulf Islands, and represent 19.4% of the population. This indicates that more work needs to be done, and the egg addling program should be expanded in these areas to effectively reduce the number of geese recruited into the population in 2026. Unfortunately, some areas on private properties in Saanich have known CAGO nesting but have denied access to CRD technicians for the regional addling program. Additional high concentrations of juveniles were seen in Cadboro Bay, the end of Bowker Avenue on the beach and on the Songhees Walkway. More investigation needs to be done to discover where these geese are nesting. While it is expected that some nests and eggs will be missed every year, the program strives for a lower recruitment rate to ensure the long-term success of mitigation efforts to reduce the overall population.

The previous Regional Canada Goose Moulting Survey conducted in 2024 showed a moulting population of approximately 6,669 geese. The 2025 Regional Canada Goose Moulting Survey indicates a population of 5,953 resident CAGO which is 11% less than the previous year's estimate. The 2024 and 2025 moulting surveys involved comparable levels of sampling effort, with each survey conducted by a similar number of participants and duration. However, weather related cancellations in 2025 resulted in approximately 70km less shoreline coverage. The observed reduction can also be attributed to the combined results of numerous mitigation efforts. Over the past five years, egg addling efforts have prevented 4,282 CAGO from entering the resident population. In 2024, 465 geese were harvested by First Nations and approximately 240 were hunted with permits from ECCC-CWS or during open hunting season [11]. After the 2025 Regional Canada Goose Moulting Survey concluded, an additional 738 geese were harvested by local First Nations. Despite the pressure applied by reduction techniques, the overall resident CAGO population remains high but appears to have stabilized.

Based on the observed 11% decline between the 2024 and 2025 moulting surveys, it would take up to 16 years to reach the RCGMS target population of 1,000 geese if current mitigation efforts are maintained (Figure 9). To achieve a population goal of 1,000 geese in the next 10 years, the program should aim for an annual decline of 17%, to achieve the goal in five years, the rate would need to be 30% (Figure 7).

Additional resources should be allocated to increase the population decline to 17% to ensure population targets are met by 2035. This can be achieved by funding 2-3 annual First Nations harvests with a goal of removing 12-15% of the adult population. The regional egg adding program should be expanded into new areas to reduce the annual recruitment rate from approximately 20% to under 10% which is required to limit further population growth. The egg adding window is short, and additional personnel will be needed to cover more area and increase nest management visits. Greater educational outreach focused on crop protection and landowner rights may further support increased hunting opportunities and regional engagement. To achieve a population decline of 30% significant resources and coordination between First Nations, contractors, landowners, governments would be required. In addition to reducing the annual recruitment rate to under 10% another 30% of the adult population would need to be removed through harvests with First Nations, hunting and crop protection. In 2025, that would equate to 1,800 birds. It is unclear if a harvest of this size would be possible and alternative methods such as traditional fishing methods and hunting would need to be funded and researched.

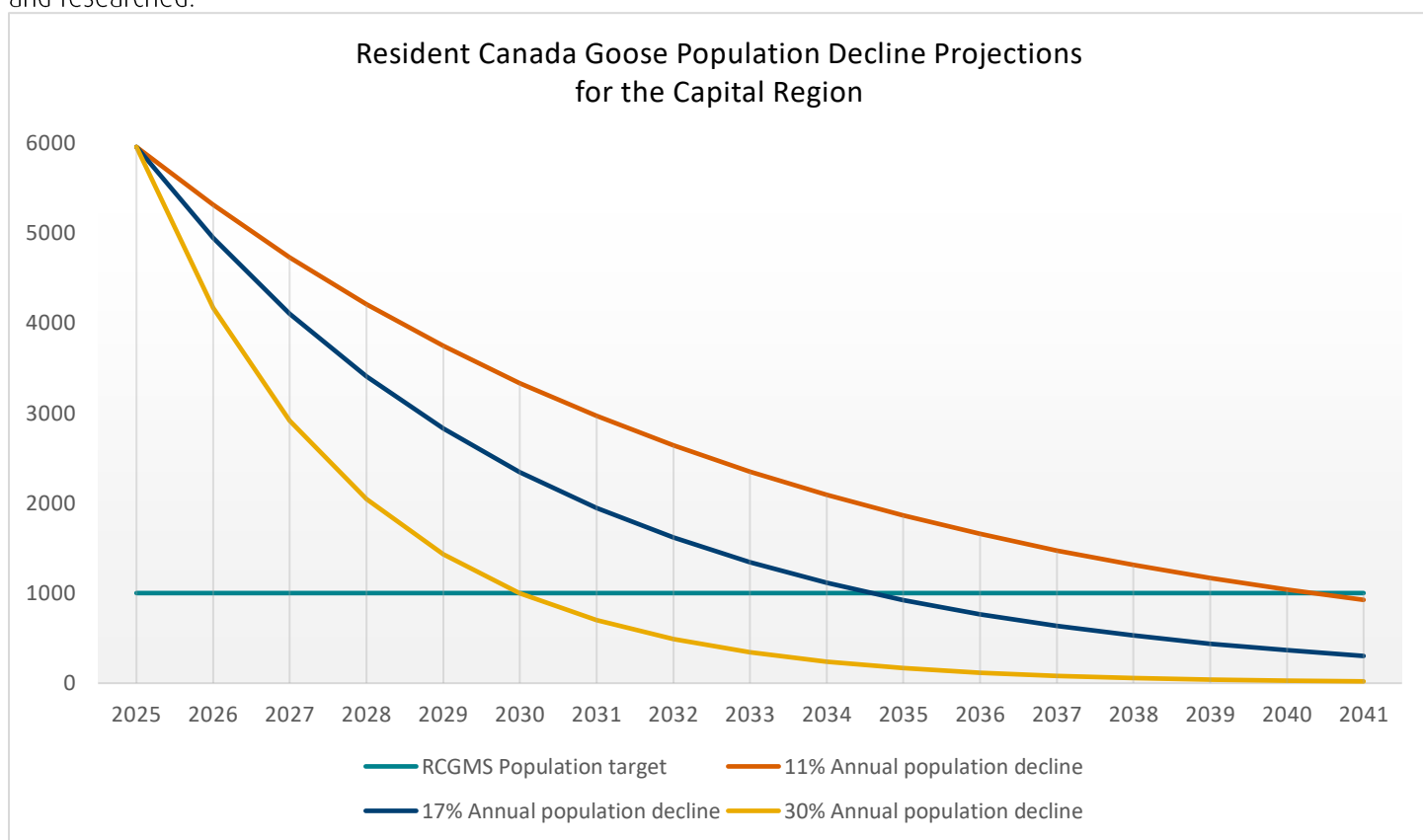


Figure 7. Graph showing possible Canada goose population trends based on annual decline rates of 11%, 17% and 30% annual decline. Initial rate of 11% decline is derived from observed changes between the 2024 and 2025 Regional Canada Goose Moulting Surveys. These projections do not account for other population dynamics or ecological factors.

6.0 Recommendations

6.1 Population Survey

- Conduct an annual Regional Canada Goose Moulting Survey in the capital region when resources allow.
- Conduct winter surveys to determine the population estimate of overwintering CAGO in the capital region. At minimum, a winter survey that occurs every two years is essential.

- Explore funding opportunities to create a banding program required to study the movements of CAGO throughout the capital region and other jurisdictions.
- Encourage other regions across Vancouver Island to create a banding program, to study movement across Vancouver Island to better apply management strategies.
- Create a communications strategy to promote the use of the GooseWatch and other survey tools, including areas beyond the agricultural community.

6.2 Promote Collaboration

- Continue to develop working relationships with other groups to collaborate on future population surveys.
- Grow relationships with First Nations guardians programs to perform marine surveys and reduce reliance on a CRD boat.
- Work directly with the farming community to gather information on CAGO population numbers, impacts, crop types and movements.
- Develop working relationships with landowners, First Nations, municipal staff, provincial staff, organizations and local governments.

6.3 Increase Mitigation Efforts

- Enable increased mitigation efforts (two harvests/year) for increased reduction techniques to be applied in the capital region. This is necessary to achieve the target population and to reduce the significant economic, environmental and human health-related impacts.
- Explore additional avenues of funding for CAGO mitigation efforts.
- Explore additional opportunities for collaboration between municipalities, electoral districts and outside jurisdictions.

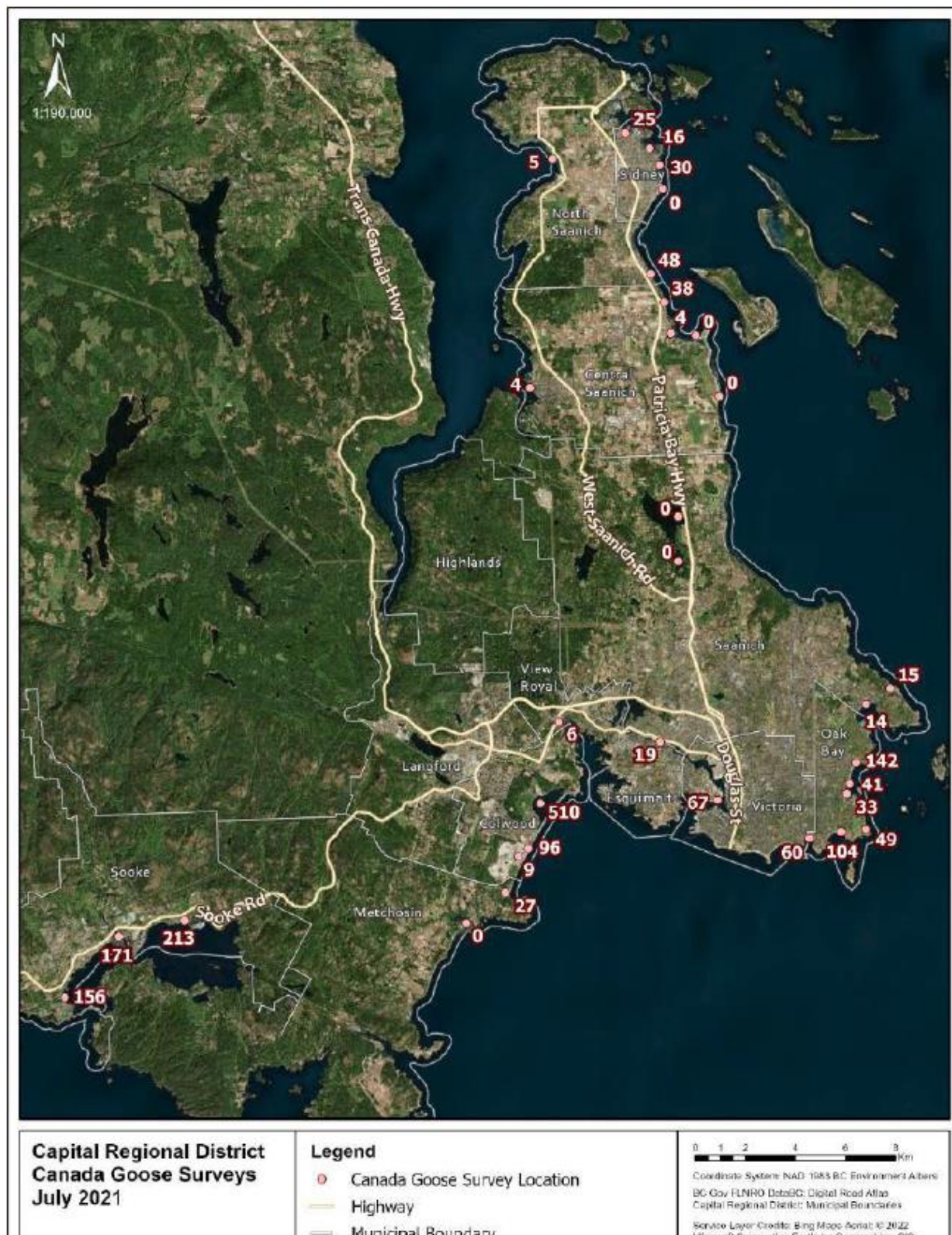
7.0 Conclusion

The 2025 Regional Canada Goose Winter and Moulting Surveys were successfully completed with participation from over 17 groups including First Nations, stewardship groups, municipalities and large landowners. The data collected have established baseline CAGO populations that will play a crucial role in shaping future CAGO management decisions in the capital region. Understanding seasonal movements, abundance, and locations helps identify problem areas and improve the effectiveness of management programs, increasing their chances of success. Despite extensive efforts to reduce the overall population, the population surveys have showed an overwintering population estimated around 9,166 and a moulting population of 5,953. A moulting survey should occur each year and a winter survey a minimum of every two years to ensure problem areas are being addressed and effective management is occurring across the region. To achieve long-term, meaningful outcomes, it will be essential to allocate additional resources, strengthen collaborative efforts, and implement more robust reduction strategies. Prioritizing these actions will ensure measurable progress and the long-term success of the Regional Canada Goose Management Strategy.

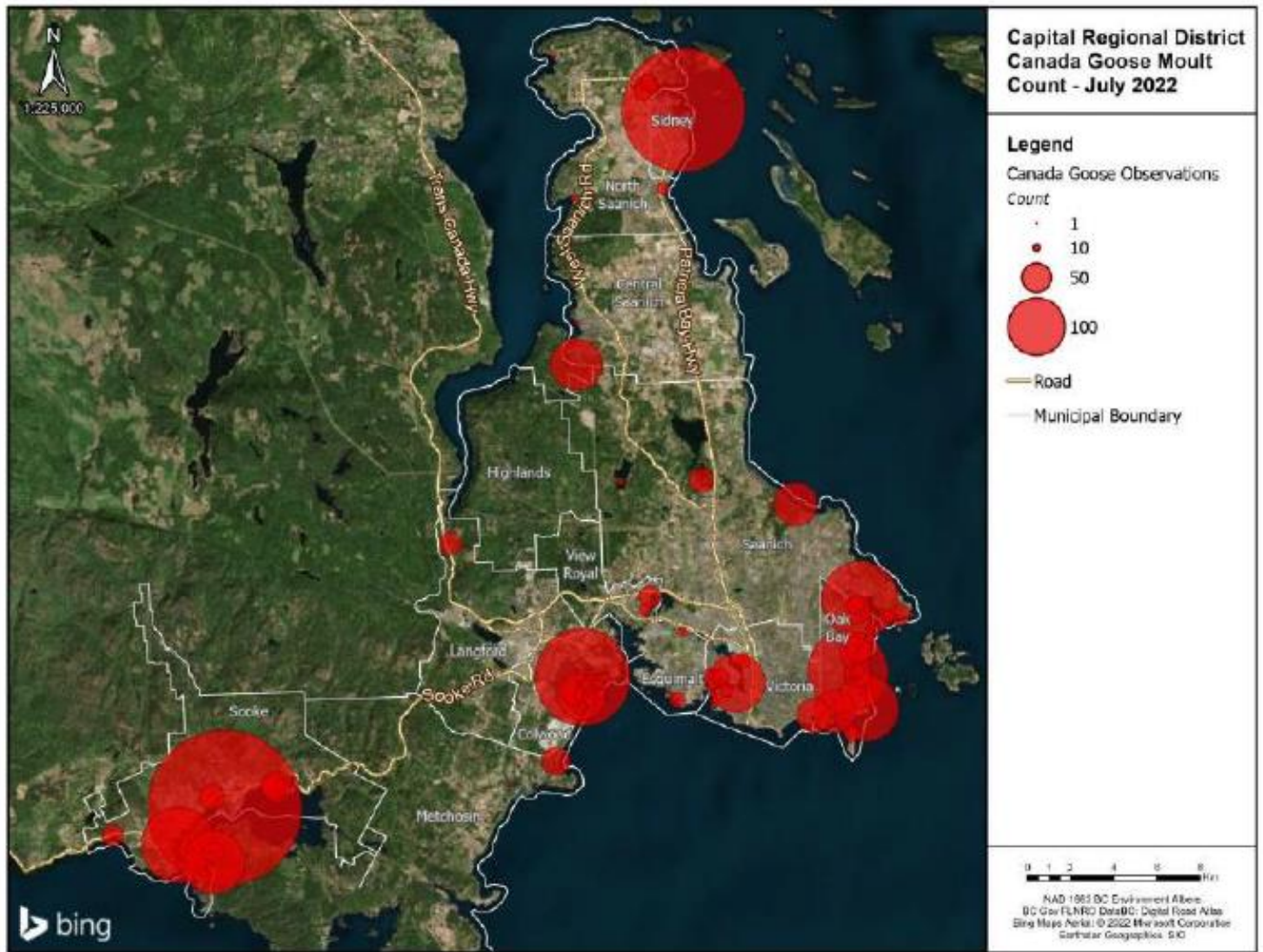
8.0 References

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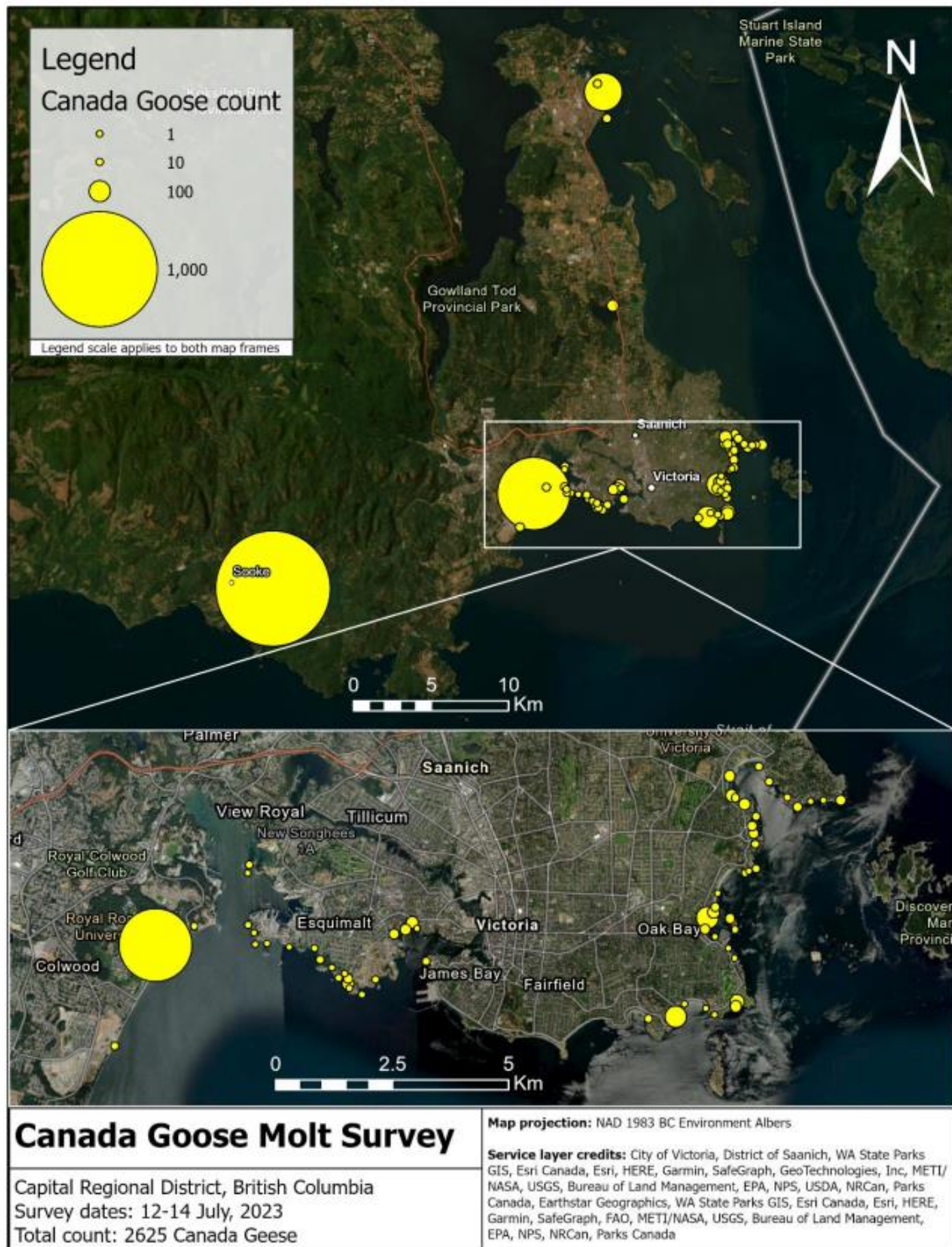
Appendix A - Data from Past Canada Goose Moulting Surveys in the Capital Region



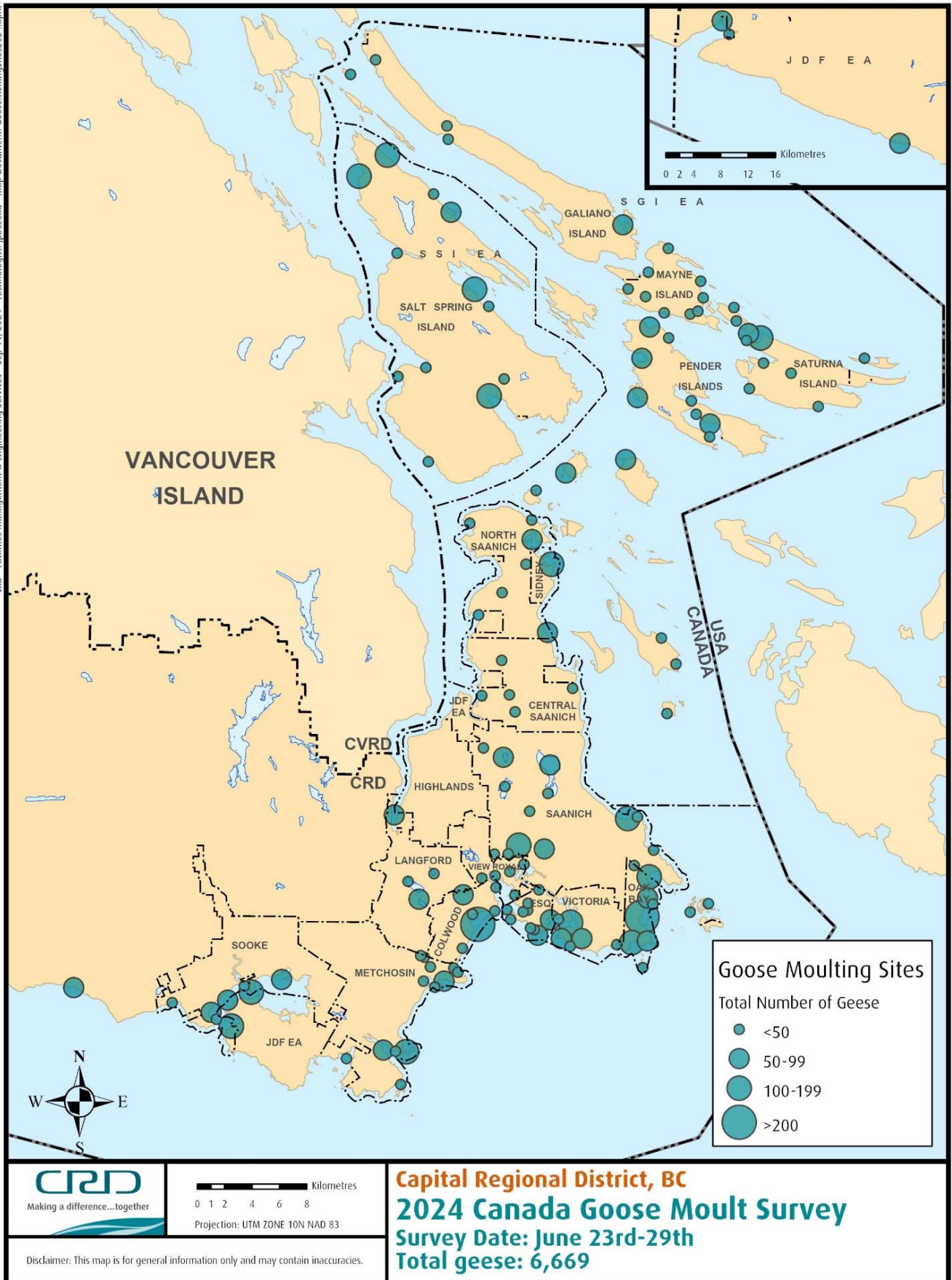
Map 1. 2021 CRD CAGO Moulting Survey completed by GooSE. CAGO population totals and survey locations are white numbers outlined in red



Map 2. 2022 CRD CAGO Moulting Survey completed by Goose



Map 3. Map showing the results of the 2023 CRD CAGO moult survey completed by GooSE



Map 4. Results of the 2024 Regional Canada Goose Moulting Survey. Western portion of Juan de Fuca Electoral Area shown in upper corner of map.

Appendix B - Hard Copy Data Sheets

Canada Goose Winter Survey Datasheet

CRD 2025

(mandatory information in bold)

Date	Author(s)
Weather	

Time	Location (Lat/Long or Description)	Total Geese	Other goose species* / #s	Notes

*Only if known, other species may include Cackling, Dusky, or Greater white-fronted

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Canada Goose Moults Survey Datasheet

CRD 2025

(mandatory information in bold)

Date	Author(s)
Weather/Tide Info	

Time	Location* (Lat/Long or Description)	Total Geese	Adults	Juveniles	Notes

*Preference for Latitude/Longitude Coordinates

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Appendix C - Sample Photo Taken from Drone Survey (February 5, 2025)



Photo 1. Photo taken on February 5, 2025 with DJI M300 RTK drone from Agile Drone Services. Photo shows Canada geese in field.