Stanley Park Heronry Annual Report - 2025

Overview

In 2025 Stanley Park Ecology (SPE) staff successfully continued monitoring of the Pacific Great Blue Heron (*Ardea herodias fannini*) colony located by the Vancouver Park Board office on Beach Avenue in Stanley Park. SPE personnel noted another year of the herons returning to this colony, with sightings and behaviour consistent with previous years. This year was the 25th consecutive year the Great Blue Herons (GBHE) have returned to this location since 2001. This is a milestone year, as 25 years is a significant amount of time for a heron colony of this size to remain in one place. The larger a heron colony is, the more likely it is to stay in place for many years. The Stanley Park Colony is a medium-sized colony, having around 100 nests. This report provides details regarding the colony, key metrics, and observations related to colony heath, productivity and other important considerations.

Figure 1. Fledged heron at Lost Lagoon on 16 July 2025 (Photo: Frank Lin)

This year marked the third year of using the updated survey methods adopted by SPE in 2023. To minimize sampling bias and improve accuracy in heron productivity estimations, SPE shifted from exclusively rooftop surveys that focused on a sample of heron nests, to both rooftop and ground surveys. This change allowed SPE staff to monitor the entire colony, measure key metrics without the need to make sampling estimations, and make

more confident management recommendations to the Vancouver Park Board. After three years we can now make effective year-to-year comparisons between 2023, 2024, and 2025. Pre-2023 data are not as easily comparable with data from 2023 and after. By updating our methods to be more in line with those used in surveys of other colonies in the Lower Mainland (e.g. Jones et al. 2013), our data can be used to compare the Stanley Park colony to other nearby colonies. Our findings in 2023 suggested that the heron population at the colony is smaller than previously estimated, but that the colony remains stable. In 2025, our findings suggest the heron colony was marginally more productive this year than in 2023 or 2024, and that the colony size again remains stable.

Background

This report presents key metrics for the heron colony (the "heronry") located near the Vancouver Park Board office. An area map of the nesting trees can be found in **Appendix 1**.

Pacific Great Blue Herons (*Ardea herodias fannini*) are protected under the *Migratory Birds Convention Act*, the BC *Wildlife Act*, and are designated as a blue-listed species (BC Ministry of Environment). With nearly 60% of BC's Pacific GBHE population found in and around the Lower Mainland (BC Conservation Status Report, 2022), the productivity of this heronry has important conservation implications for the viability of the subspecies.

SPE has been actively involved in the monitoring and conservation of the GBHE colony within Stanley Park since 2002. Our findings contribute to regional efforts to study and conserve GBHE populations. Nest productivity and nest success are proxies for the suitability of the Stanley Park heronry's current location. Because herons are sensitive to disturbance in their immediate nesting area and feeding grounds within a 3 to 5 km radius (VPB, 2006), results from our monitoring may reflect changes in the quality of the local habitat. Sharp drops and sustained negative trends in productivity or nest success may precede colony abandonment.

Monitoring Program

Methods

As previously mentioned, this year marked the third year employing our updated survey and analysis methods. Our current method design was informed by GBHE survey protocols written for the Heron Working Group and similar organisations (Vennesland, 2006). Changes

in our survey protocol in 2023 were intended to bring our protocol closer in line with that recommended by the Heron Working Group for the *fannini* subspecies (Vennesland & Norman, 2006), while still considering situational factors unique to our colony.

Staff surveyors completed a pre-season nest count on 6 March 2025. Staff and volunteer surveyors then completed eleven (11) surveys of the colony from March – August as herons arrived, raised their young, and fledged. In the last week of August 2025, a walkthrough of the colony and surrounding area was completed, yielding no further observations of breeding activity, confirming the end of the breeding season. The 2025 breeding season ended significantly later than the 2024 breeding season, which was confirmed ended by July 29, 2024. This was due to a late-start nesting pair in May.

At each survey, staff took a vantage point on the roof of 2055 Pendrell St. in the West End, overlooking the colony. From this vantage, surveyors record the number of adult herons, eggs (if visible), and chicks in nests on trees C, D, E, Q, and R (see Appendix 1). Surveyors use a map of the colony to identify nests, and binoculars to determine the number of individuals in the nest. Afterward, surveyors return to ground level and survey trees AA, AC, X, Y, and Z (plus one nest in tree E, not visible from the rooftop). The nests in these trees are identified with binoculars, a clinometer, and a map of the colony.

Method Updates

Before 2023, SPE's survey methods for the heronry involved conducting surveys to assess the nests in trees adjacent to Park Lane, then extrapolating this sample to the whole colony. As the years progressed, this sample became less representative of the colony. SPE determined it was therefore necessary to change how these surveys were conducted. In 2023, SPE began surveying the entire colony through both rooftop and ground surveys.

Another change made in 2023 relates to defining how we assess when a juvenile has fledged. We are now following the criteria in the Heron Working Group Survey Protocol, which recommends chicks observed at the age of 4 – 6 weeks be counted as likely fledged if their nests become later obscured by foliage during the survey. We continue to count juveniles who remain visible throughout the survey and fledge between 8 – 10 weeks as expected.

Figure 2. Herons with newly hatched chicks on 02 May 2025 (Photos: Frank Lin)

Based on the first two seasons of the new methodology, SPE has also made additional minor updates in 2025 to improve the ease and consistency of sampling. While the trees in the heronry were bare of leaves, SPE staff mapped the existing nests in the colony from the ground. In accordance with Vennesland (2006), the new map identifies nests with absolute metrics (bearing) rather than relative to one another. This precludes confusion when new nests are built, and when old nests fall or are picked apart to build new nests. This mapping was done with the use of a handheld clinometer, a tool designed for calculating the height of trees using angles. Angles were measured from the horizontal to each nest surveyed from the ground, which are now included on survey data sheets to help with distinguishing between nests in close proximity. These nests are now easy to tell apart using this tool.

These changes in methods mean that results from 2023 onward may not be directly comparable to historic data. However, they are now more comparable than before with those of other heron colonies in the Lower Mainland that also use the Heron Working Group protocols.

Figure 3. A heron chick branching and practicing flapping beside its siblings in their nest, 13 June 2025 (Photo: Frank Lin)

Results

Timeline

Last year, the herons were observed to have arrived on 8 March 2024, with nest building and breeding behaviour being observed on 15 March 2024. This year a volunteer first observed herons at the colony site on 27 February 2025. Nesting and breeding behaviour was observed at our first survey, on 6 March 2025. Staff at that survey observed a male heron bringing a stick to his mate, who weaved it into their nest. The first recorded observations of eggs at the colony occurred on 21 March 2025. Eggs were observed at the colony as late as 13 June 2025.

Branching behaviour was recorded for the first time on 13 June 2025. Branching can be described as when juvenile herons move from their nest to nearby branches and practice hopping and gliding to strengthen their wings. The first fledges likely began in mid-June 2025

with the first confirmed fledges on 26 June 2025. These dates are summarized in **Table 1** and a timeline of colony milestones is shown in **Figure 4**. While Pacific GBHE chicks usually fledge approximately 60 days (or 8 – 9 weeks) after hatching (VPB, 2006), some fledglings in this colony have been found to leave later than average, at 10 – 12 weeks of age. Many young herons were observed hunting for fish at Lost Lagoon after fledging. Please refer to **Appendix 3** for additional details on nesting behaviour.

Table 1. A summary of colony milestone dates during 2025 and 2024. Most milestones were reached earlier in 2025 than in 2024, but the breeding season ended later in 2025 than in 2024.

Milestone	2025 Date of milestone	2024 Date of milestone
Colony arrival	27 February	8 March
Begin nesting activity	6 March	15 March
First recorded eggs	21 March	28 March
Last eggs observed	13 June	20 June
First branching observed	13 June	20 June
First confirmed fledges	26 June	5 July
Colony confirmed empty	29 August	29 July

This year, the breeding season both began earlier and ended later than it did in 2024. Because of late arrivals at the colony in May and June, the colony was occupied for over 24 weeks in 2025, compared to 20 weeks in 2024.

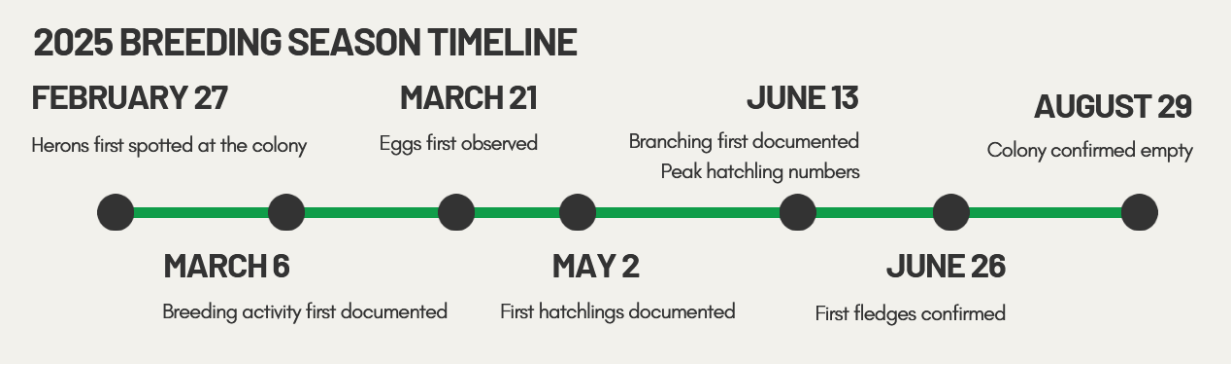

Figure 4. A timeline of colony milestones in 2025.

Figure 5. Juvenile heron peering down from its nest, 01 August 2025 (Photo: Frank Lin)

Colony Counts

Provided below is a summary of the 2025 colony statistics (**Table 2**). Pre-season nest counts are taken prior to herons arriving at the colony to determine how many pre-existing nests remain at the heronry. Maximum nest numbers are taken from the survey week with the highest numbers of observations for each category. Other definitions pertaining to population and nesting metrics can be found in **Appendix 4**.

Table 2. A summary of colony breeding statistics for 2025, compared with 2024. In 2025, the rate of nest success was lower, but the number of total fledges was higher.

Year	**2025**	**2024**
Maximum observed nests	97	95
Observed active nests	81	77
Successful nests	38	40
Confirmed fledges	70	68
Nest success rate	45%	55%
Colony productivity	0.86	0.93
Fledglings per successful nest	1.84	1.70

Changes in the numbers of nests, adult herons, eggs, and juvenile herons throughout the 2025 breeding season are shown in **Figure 6**. The total number of nests (including vacant nests) stayed relatively constant throughout the season, with a high of 97 on 13 June 2025 and a low of 85 on 15 April 2025. The number of adults present at the colony peaked at 96 on 21 March 2025 and declined thereafter, reaching zero at the final survey on 1 August 2025. Eggs were first spotted on 21 March 2025 with a peak of 20 visible eggs on both 15 April and 02 May 2025. Note that most eggs at a breeding colony are not visible. Most are covered by the parents incubating, but some may be seen briefly when the parent stands to change position, turn the eggs, or switch places with its mate. The first hatchlings were documented on 02 May 2025, and the number of juveniles peaked at 97 on 13 June 2025.

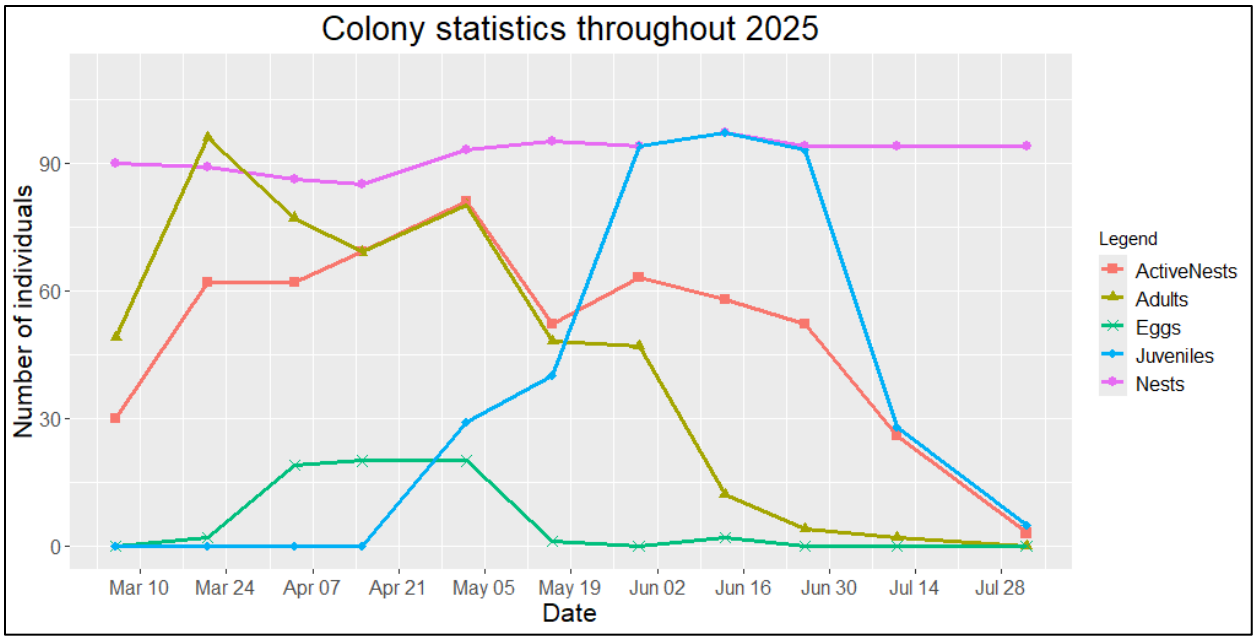

Figure 6. The numbers of active nests, total nests, adult herons, eggs, and juvenile herons observed at the Stanley Park heronry over the 2025 breeding season.

The number of juvenile herons we estimated fledged at the colony in 2025 is 70 herons across 38 successful nests. Of these juveniles, 39 were determined "fledged," and 29 were determined "likely fledged" according to the decision tree based on recommendations outlined by the Heron Working Group by Vennesland (2006). Thirty-eight nests were successful out of 81 active nests, making the nest success (proportion of nesting attempts that resulted in at least one juvenile fledging) 45%. The average number of fledglings per nesting attempt was 0.86, with the average number of fledglings per successful nesting attempt being 1.84. These numbers vary slightly from 2024, when the total number of confirmed fledges was lower (68) but as the number of nests was also lower (77), the nest success rate was higher at 55%, and fledglings per nest was higher at 0.93. Fledglings per successful nest were lower last year however, at 1.70.

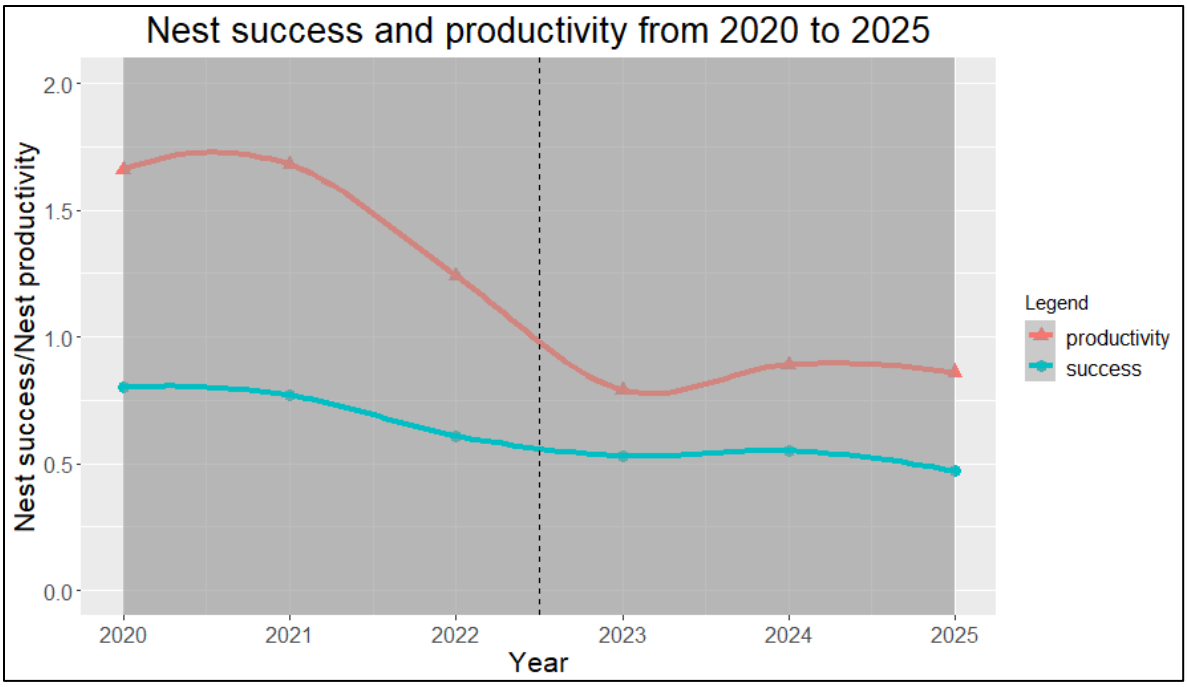

Figure 7. Nest success and colony productivity at the Stanley Park heronry from 2020-2025. Survey methods were updated for 2023; the dashed black line indicates when the change in methods was implemented.

Analysis

Trends

In a review of nesting success and productivity, Vennesland & Norman (2006) found that the metrics for our region regarding the *fannini* subspecies of heron ranged from 1.70 – 1.80 fledges per successful nest between 2002 and 2004. As noted by the BC Conservation Data Centre (BCCDC 2022) in their 2022 update on the *fannini* subspecies, population level trends are currently uncertain, though nest productivity may be declining.

The nest productivity for the Stanley Park colony during the 2025 season was 1.84 fledges per successful nest (**Table 2**). In light of downward trends in nest productivity region wide since 2008 (BCCDC, 2022), it is not unexpected for nest productivity numbers to decline. In 2024, the fledges per successful nest at the Stanley Park heronry were 1.70. The new survey methods employed starting in 2023 suggested that there are fewer herons on site than previously estimated, and the addition of ground surveys may capture more empty nests than the previous methods. Pre-2023 estimates of nest success (the proportion of active nests that successfully fledged one or more young) may have been artificially inflated by

sampling bias. This may be reflected in the calculated fledges per active nest for 2023, 2024, and 2025 being lower than previous years. However, the calculated 1.84 fledges per successful nest for 2025 are above the regional average of 1.70-1.80 (Vennesland & Norman 2006). Please refer to **Appendix 4** for an outline of all results from this year's monitoring and details on how they were obtained.

Environmental Factors

Numerous environmental factors can influence the productivity, nesting success and other key metrics related to the heron colony within Stanley Park. Shifting environmental factors may influence overall colony health; therefore, SPES tracks these qualitative factors to better understand their impacts on the herons throughout the nesting season.

Raccoon Predator Guards

In 2010, SPE installed bands of metal flashing near the base of the nesting trees to block raccoons (*Procyon lotor*) from climbing up to prey on the heron eggs. The flashing continues to be effective; no raccoon attacks have been reported since the flashing was installed. SPE continues to periodically remove and re-affix flashing where necessary, especially as herons shift to nesting in new trees. In 2024, SPES reattached flashing to Tree E, as the clasps holding it in place had corroded. In 2025, no issues with the flashing were observed by SPE.

Eagle Predation

Bald Eagles prey on herons and are one considerable factor influencing productivity of heron colonies. Both species' ranges overlap in coastal and riparian habitats, and both also overlap in their breeding season timing. The presence of eagles can affect the choice of location for heronries as well as fledgling success due to eagle predation on heron eggs and chicks (BC CDC, 2022). Some emerging research indicates that the recovery of eagle populations may be influencing heron nesting behaviour (Jones et al., 2013).

There were two (2) active eagle nests recorded in 2025, producing one (1) eagle fledgling (SPE, 2025). When eagles fly over the colony, all adult herons flush from their nests. This leaves any eggs or small chicks in the nests vulnerable not only to eagles themselves, but to crows (*Corvus brachyrhynchos*) as well.

Eagle predation on the colony was anecdotally lower in 2025 than in previous years. Residents in the West End near the colony, including SPE volunteers, reported hearing no

“eagle raids” on the colony until May. Eagle raids are identifiable by adult herons flushing from their nests and squawking in alarm. The reaction is quite loud given the large number of herons making their alarm call, and residents stated they were confident none had occurred in the first two months of the breeding season. However, this is anecdotal evidence and cannot be definitively verified.

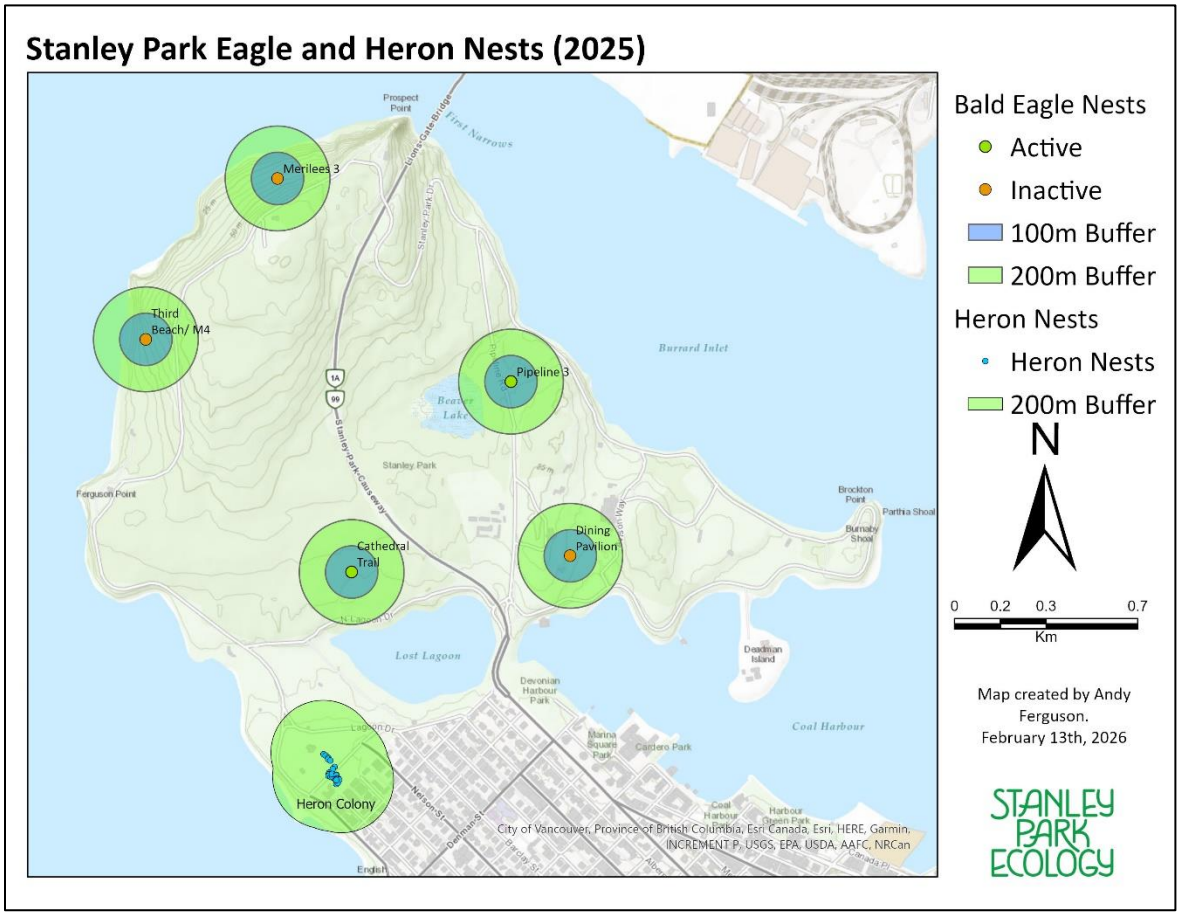

Figure 8. Eagle nest and heronry locations in Stanley Park (2025).

‘Predator protection’ is a phenomenon observed in nature where a prey species will choose to live near their own predator when that predator is a territorial animal that will defend its territory from other predators (Jones et al., 2013). This phenomenon has been observed in several species, including various birds. Jones et al., (2013) also examined the relationship between eagle populations and heron colonies in the Fraser Delta to understand if the rapid recovery of eagle populations affected heron reproduction and colony dynamics. They

found evidence that many of the largest and most successful colonies in the region were not only within 200 meters of a territorial eagle nest, but that some herons had shifted their nests to be within range of an already present eagle nest. The researchers hypothesized that herons in the Fraser Delta may be adapting to higher numbers of eagles for a survival benefit. Their data supported this hypothesis, as while resident eagles did prey on herons and heron chicks, overall colony productivity was higher when colonies were within 200 m of an eagle nest, compared to colonies located further away from eagle nests.

This potential trend in heron nesting strategies in response to eagle resurgence in the Pacific Northwest is notable in the context of Stanley Park. While none of the Bald Eagle nests currently surveyed by SPES are within 200 m of the Stanley Park heronry (see **Figure 8**), SPE has observed eagle flyovers and direct predation at the heron colony. The interaction between herons and eagles is a potential subject to monitor in future years to gain a better understanding of how the Stanley Park heron colony may be adapting to eagle presence.

Surrounding Areas

This year marked the fourth Celebration of Light fireworks at English Bay since the two-year closure during the COVID-19 pandemic. The event occurred on 19, 23, and 26 July 2025. SPE proactively monitored the status of the colony to determine if the herons would fledge before the event.

In 2025, SPE survey personnel observed 28 juveniles and two adult herons at our survey on 11 July 2025, one week before the first night of fireworks.

One nest that started nesting late was not ready to fledge by the first night of fireworks in 2025, as the chicks in that nest were at most five weeks old. It is possible the fireworks disturbed the two juveniles in that nest, however they went on to successfully fledge in August after reaching 10 weeks of age.

Discussion

Public Outreach

The Vancouver Park Board (VPB, 2006) identified public education and interpretive programming as an integral component of the heronry's conservation management. SPE, in coordination with the VPB, has worked to bolster public outreach in relation to the heron colony, raising awareness of this important species, while highlighting key educational aspects around colony management.

The Vancouver Park Board Heron Cam was active from March until late August, despite some downtime due to a technical issue. This interactive web tool allows viewers to control the camera for short periods by scrolling through different pre-defined views and directs them to SPE's email service for questions about the herons.

SPE also continued with its successful 'The Herons Are Here' education series. This series consisted of three in-person tours of the rookery on 30 April, 21 May, and 11 June 2025, called 'The Herons are Here: Colony Tour'. A public program about newly fledged herons titled 'Herons of Lost Lagoon' was delivered on 20 August. One (1) online webinar for the public called 'The Herons are Here: Heron Highlights 2025' was completed on 26 November 2025. The webinar discussed the results of this year's breeding season and included stunning photos taken throughout the season by SPE Nature House Educator Frank Lin. This educational series was offered free of charge to Adopt a Heron Nest donors.

Acknowledgements

We would like to thank our volunteers for their efforts in counting Pacific Great Blue Herons through the year—in all kinds of weather and varying conditions. Without their help, our continued heron conservation work would not be possible. SPE would also like to acknowledge the continued efforts of Frank Lin, who contributed observations of heron behaviour as well as high-quality photos throughout the breeding season. We also thank Bruce Mohun for providing regular observations and updates and attending the heron surveys.

SPE also wishes to thank the Vancouver Park Board for their support of the colony through the online Heron Cam and the promotional efforts of their Communications team. Their efforts have allowed thousands of people from all over the world to connect with nature and view these magnificent birds.

We are deeply grateful to the **24 Adopt a Heron Nest donors** this 2025 season. These contributions go directly towards monitoring the herons and raising awareness of this blue-listed species. We welcome new adopters throughout the year and invite you to visit our website to learn more!

Lastly, we thank everyone who comes out to the colony to enjoy and learn about these birds.

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Appendices

Appendix 1. Area Map and Nesting Trees

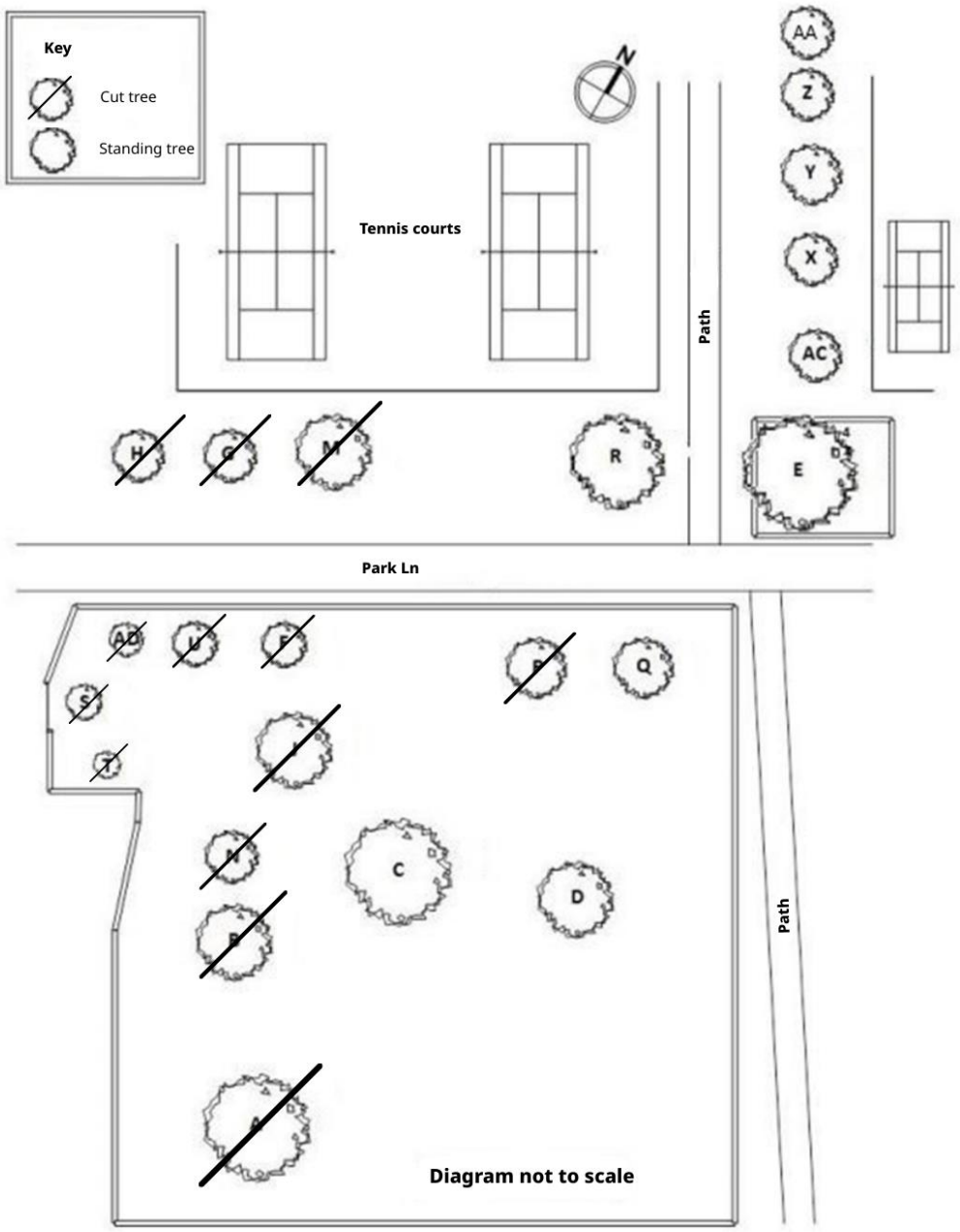

Figure 9. Map of the Stanley Park heron colony layout with nesting trees labelled. To date, all trees south of Beach Ave. other than trees C,D and Q have been cut down. Trees H, G, and M are also cut.

Appendix 2. Survey Methods and Limitations

Please visit our website to learn more about our survey methods and limitations.

Appendix 3. Notable Trees

Tree AA

Tree AA is a small tree north of Tree Z. Herons first built nests in Tree AA in 2023, but did not appear to use them that season. In 2024, herons again built nests in Tree AA but we did not detect any breeding in those nests that season either. In 2025, two nests in Tree AA had breeding attempts. In nest AA1, chicks were detected and determined "likely fledged" at the end of the season after reaching at least 4 weeks of age before becoming hidden from view by foliage. In nest AA2, an adult was observed likely incubating but chicks were not observed before the nest became obscured. Herons building nests in Tree AA is consistent with the trend of the colony expanding into the London Plane trees between the tennis courts.

Appendix 4. Definitions

Measure	**Definition**
Total nests	A total count of all nest structures in the trees, both active and inactive. We used the number recorded on the pre-season ground survey. (*Source: Ground survey)*
Observed Nests	Maximum number of nests observed during a single survey during the season. *(Source: Rooftop and ground surveys)*
Maximum Active nests	Maximum number of nests within the colony occupied by a mating pair during a single survey. Not all active nests successfully produced young. (*Source: Rooftop and ground surveys)*
Successful nests	Number of sample nests that successfully reared young to the fledging stage. (*Source: Survey final analysis)*
Total Fledges	Number of fledglings assumed to have survived the nesting season and flown their nests. *(Source: Survey final analysis)*

Measure	Definition
Nest Success	Percentage of nests in sample that successfully produced young. (*Successful nests divided by total nests)*
Nest Productivity/Colony Productivity	Measure of fledges compared to number of nests with observed breeding activity. *(Fledges observed divided by maximum active nests)*