

A DIFFERENT FEATHER
B.C.'s coastal blue herons
don't migrate or mix
with other herons. They
are now considered
a distinct subspecies.

THE HERON *hotel*

Great blue herons are normally a reclusive species. Then there's the flock that's noisily settled into the trees above a busy corner of Stanley Park

Words and Photos by Kerry Banks



Camera in hand, I turn right off Pendrell Avenue and walk up a lane into the south end of Vancouver's Stanley Park. After just a few strides, I hear a cacophony of squawks, screeches and loud rustling emanating from the grove of trees ahead. As I get closer, a great blue heron flaps over my head so close that I can hear its wings whooshing deep and slow. Looking like some prehistoric apparition, the big, gangly bird glides upward in a graceful arc — S-shaped neck tucked into a shaggy, slate-grey body, its long, boney feet pointed downward like a ballerina's — then utters a piercing *frak-frak* call as it descends into the limbs of a maple tree.

As I stare up, other herons perched high in the foliage become visible, along with dozens of large wooden nests. Amazingly, there are herons not just in this maple, but in virtually every one of the two dozen trees in the area, a colony of some 200 birds, the second largest in British Columbia. Such an imposing concentration of herons is remarkable on its own, but considering the incongruous setting, this gathering ranks as nothing short of miraculous. "The Heron Hotel," as locals have dubbed it, stands next to a parking lot and a complex of 17 tennis courts, bordered on one side by a restaurant and on the other by the headquarters of the Vancouver Park Board and a line of highrise apartments. Not only must these birds contend with noise from car alarms, boom-boxes, garbage trucks, tour buses, lawn mowers and hedge trimmers, they are also subject to a sonic onslaught during events at nearby English Bay and Ceperley Park, including public-address systems, music, cheering and exploding fireworks during the city's annual Celebration of Light festival. Yet, despite all this, they somehow manage to coexist with people hitting tennis balls or lawn bowling, having picnics, and playing recreational games of football or soccer on neighbouring fields.

One can't help but wonder why this normally shy and reclusive species, known to be highly sensitive to human disturbance, would choose to mate and breed in one of Canada's most densely populated urban areas. Scientists who have studied the herons have some theories. According to biologist Robert Butler, co-founder and president of the Pacific Wildlife Foundation and author of the 1997 book *The Great Blue Heron*, there is a key difference between city herons and country herons.

As Butler explains, herons in the wild are extremely sensitive to intrusions and will react with alarm to an approaching human at 100 metres. In contrast, city herons will tolerate a lot of human activity near their nests. "Generally speaking, if you have steady, ongoing activity, these herons can deal with it," Butler says. However, unfamiliar intrusions can still bother them. In 2009, when some helium balloons became lodged in one of the nesting trees in Stanley Park, the entire colony reacted with panic. Though the balloons have long since disappeared, that tree remains unoccupied today.

The distinction between urban and wild herons is especially pertinent to B.C.'s coastal population of great blue herons — including those of Stanley Park — which don't migrate and keep their distance from herons that do, an isolation that has resulted in changes in their appearance (darker feathers and shorter legs), to the degree that they are now considered one of five recognized great blue heron subspecies.

Although the range of the Pacific great blue heron (*Ardea herodias fannini*) extends from Washington State to Alaska, some 80 per cent of B.C.'s estimated population of 5,000 lives in and around the Fraser River Delta and the Strait of Georgia, in the same area that 80 per cent of British Columbians call home. With so many people and birds sharing the same space, it's not surprising that it's becoming harder for herons to find undisturbed nesting sites. Since tracking began in the mid-1980s, heron productivity (the number of chicks that survive to leave the nest) has dropped from two per nest to just one. In 2008, productivity sank even lower, to about one chick for every two nests, and the subspecies is now listed as "at risk" in B.C. and listed as "special concern" by the Committee on the Status of Endangered Wildlife in Canada.

The current Stanley Park heronry is thought to be composed of descendants from a colony that has lived in the park since the 1920s. The original colony nested on the northern side of the park at Brockton Point. In the 1960s, the birds moved to the trees near the zoo, overlooking the depressed yellowish polar bears and angry monkeys. In 1994, the zoo was closed, but the herons stayed on and the population grew to 44 nests. Then, in 2000, the heronry disappeared, only to re-materialize at the present site at the

south end of the park in 2001. There were only six nests that season, but the numbers grew each successive year, before suddenly spiking to 176 nests in 2005, the result of a fresh influx of herons from a failed colony in Vancouver's Pacific Spirit Park.

Robyn Worcester, conservation manager with the Stanley Park Ecology Society, speculates that the urbanized site may have been chosen because it is close to several prime feeding grounds and also because it offers the herons a degree of protection from eagles and hawks that normally prey upon their eggs and chicks. "Because of the nearby apartment buildings, the sky above the nests is not so open." And although the herons have suffered predation from bald eagles that nest in the park, scientists have discovered that the relationship between the two species is not entirely one-sided.

Certainly, the incredible revival of bald eagles since the ban on the use of DDT for agricultural purposes 40 years ago has played a role in the declining numbers of great blue herons in B.C. A study done in 1999 by Ross Vennesland, a graduate student at Simon Fraser University at the time, revealed that eagles targeting heron eggs or young were responsible for the abandonment of 12 of 31 colonies (representing up to one-third of the total B.C. population) in the Strait of Georgia, on the Lower Mainland and on Vancouver Island.

However, more recent investigation into the interplay between bald eagles and the herons at B.C.'s largest colony, located south of Vancouver near the Tsawwassen ferry terminal, has shed light on a seemingly paradoxical aspect to their relationship. According to research by SFU graduate student Iain Jones, this colony, which numbers close to 400, relocated from a site just across the U.S. border in Point Roberts in 2004 and intentionally took up residency near a tree inhabited by two nesting bald eagles, a living arrangement that continues today. Jones concluded that these herons have chosen to pay a limited cost to one pair of bald eagles in order to avoid the greater risk of exposing themselves to predation by eagles and hawks at other locations.

This deal with the devil becomes an even more favourable option for herons when eagles have a rich supply of alternative food sources as they do in Tsawwassen. "The heronry may look like a lunch counter for the eagles, but it's still not easy to get their young because the herons will fight

THE DISTINCTION BETWEEN URBAN AND WILD HERONS IS ESPECIALLY PERTINENT TO B.C.'S COASTAL POPULATION OF GREAT BLUE HERON

back," explains Robert Butler. "It's much easier for an eagle to simply pick up a dead fish from the beach."

Butler says this unlikely affiliation between predator and prey "functions something like a Mafia protection ring," and notes that the three largest colonies of Pacific great blue herons in B.C. are all situated close to nesting bald eagle sites. "We tend to think of these birds' behaviours as being hardwired over time, but in this case we are seeing a real adaptation. The herons are demonstrating that they are very sophisticated beings capable of altering their behaviour to cope with changes in their environment."

Initially, the Stanley Park heron colony suffered very little bald eagle predation, but in the last two years the airborne raids have increased in frequency. "Last spring, a pair of bald eagles who have a nest on the other side of Lost Lagoon would come over regularly and help themselves to the eggs. You'd see them sitting there with yolk dripping off their faces," says Maria Morlin, whose 11th floor apartment overlooks the eastern section of the colony. Morlin, who teaches biology at Vancouver Community College, has observed that when the white-headed raptors attack in early spring, all the herons fly off and leave their eggs. But later in the season after the chicks are born, the herons will fight back, pecking and kicking at the intruders. "It usually doesn't have much effect though," she says. "The eagles are absolutely fearless." All told, it is estimated that at least half of the colony's 40 failed nests in 2011 were victimized by eagles.

Although wildlife officials can't do anything about the eagles, they have taken steps to protect the herons from other threats. In 2006, a heronry management plan was developed by the city of Vancouver in co-operation with the Ministry of Environment and the Canadian Wildlife Service, which led to a series of measures being adopted. The gates of the fenced area below the heronry are now secured to reduce human disturbance, while also protecting passersby from falling debris. Metal bands have been

A CITY FOR THE BIRDS

The urban herons of Stanley Park have adapted to life in Vancouver. They are used to human activity but can be spooked by unfamiliar stray objects, such as brightly coloured balloons.





SIDE BY SIDE

Despite initial complaints, neighbours of the Stanley Park heronry have come to appreciate the birds.

“THE NATURE OF HERONS IS THAT THEY DON’T STAY IN ONE PLACE FOREVER. THEY’LL PROBABLY LEAVE AND MOVE ON EVENTUALLY”

attached to the trees to prevent marauding raccoons from reaching the nests. Road work, construction and landscaping have been limited to times outside the nesting season. In addition, the annual Vancouver Sun Run — an event that previously saw 50,000 marathoners pass beneath the nesting site — was re-routed.

As part of the plan, a monitoring program run by the staff of the Stanley Park Ecology Society and a crew of volunteers has also been set up. Monitoring begins in March when the herons undergo a personality transformation from solitary loners to party animals. After arriving at the nesting site, the birds engage in elaborate courtship rituals in which males try to attract mates by fanning their long plumes, bobbing their necks and flouncing their wings. Duets of bill clacking, neck stretching, crest raising and circular flights are performed until a pair bonds and copulates. They then begin constructing or retrofitting an existing nest, with the male collecting twigs, bark and moss, and bringing them to the female, who weaves them into a solid platform able to resist strong winds.

In April, the female lays three to five pale blue eggs, each separated by a few days. The parents take turns incubating the eggs, which hatch in about 27 days. After the young are born, both parents forage for food, usually small fish, but also frogs, crabs, snakes, salamanders and mice. When the adults return to the nest, they regurgitate the food into the hatchlings’ mouths. According to Worcester, the exchange is an unforgettable sight. “The mother will come back and sit on a nearby branch as if she is preparing herself, and then launch herself into the nest. As soon as she does, the young attach themselves to her mouth and start shaking her head. It’s loud and intense, and when it’s over, she’ll fly to another tree and sit there for a while to recover.” The transformation from newly hatched chick to fledged young is a superheated process. In the two months that a young heron is in the nest, it will grow to the size of its parent and become fully feathered, the equivalent of a human reaching adulthood in four years.

Although Worcester and Morlin find the herons to be a delight, not all the locals are so fond of their avian neighbours. Invariably, there are

complaints about the noise, which reaches a raucous crescendo in June and July when the young begin vocalizing, and the smell, which can get quite pungent by the summer. The tennis players also grouse about the splatters that fall from above, as well as the presence of dead baby herons that topple from the nests, dislodged by storms or by bouts of sibling rivalry. In July 2008, the sight of a deceased fledgling, draped over a branch 12 metres above the courts during North America’s largest tennis tournament, the Stanley Park Open, provoked a flurry of demands for its removal. But the park board opted to leave the carcass in place until it fell out, rather than risk spooking the entire colony by climbing up to remove it.

Overall, however, Worcester says people have come to understand this is a threatened species whose nests and eggs are protected by B.C.’s Wildlife Act. To encourage community involvement with the herons, the Stanley Park Ecological Society maintains an information website, conducts guided walks in spring and operates an adopt-a-nest program.

Last year, despite cold, blustery spring weather and persistent eagle attacks, 57 per cent of the heron pairs at Stanley Park successfully produced chicks. Although this survival rate is down dramatically from the highs of 2007 (93 per cent) and 2008 (86 per cent), which produced 250 and 340 fledglings, Robyn Worcester notes that the herons showed great resilience, with many of them producing second and third clutches after losing their eggs to eagles. She is hopeful that 2012 will be a better year for the herons, not only because she is personally attached to them, but because colonies on Vancouver Island and the Sunshine Coast now depend on recruits from the Lower Mainland to fill their ranks. As she notes, “the productivity of our heronry has implications for the viability of the subspecies as a whole.”

Even so, there is no guarantee that the great blues will return for a 13th year. “I’d love to think that they will be here for a long time. But it’s the nature of herons that they don’t stay in one place forever, so they’ll probably leave and move somewhere else,” says Worcester, with a knowing smile. “But if they do, hopefully it will be somewhere else in Stanley Park, so we can continue to keep track of them.” 🐾