

SUBJECT: Eagle Watch Report for North Pender Local Trust Committee
Re: Islands Trust File #NP-3030-20

TO: North Pender Island Local Trust Committee

FROM: Dave Manning, Eagle Watch Coordinator
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DATE: August 20, 2012

HISTORY: The project began in October, 2005, when I began locating Bald Eagle nest tree sites on Pender Island. Since then I've expanded the search to include Osprey, Peregrine Falcon, and Great Blue Herons, as the nests of these 4 birds are protected year round by the *BC Wildlife Act*. I also encourage nest searches and tree protection for all other raptors and woodpeckers. By the end of the 2010 breeding season, I had expanded the project to approximately 60 Southern Gulf Islands, all of which fall within the Trust area. In 2011 and 2012 I focused primarily on North and South Pender Islands with minor consideration of other islands in the Trust area.

On January 31, 2008, the North Pender Island Local Trust Committee approved its current OCP Bylaw No. 171. In this OCP the LTC designated 5.2.8 – Development Permit Area Seven-Raptor Nests. Schedule O-Development Permit Area Seven (Raptor and Heron Nests) indicates the general location of nests within this DPA.

BALD EAGLES: These birds, found in North America only, are a familiar sight around the islands. Along with Orcas, they may be the most popular wildlife species within our Gulf Island region. For the most part, Bald Eagles are year round residents on our southern islands. Eagle pairs mate for life and establish themselves in a particular territory. Their large nests are usually constructed in veteran Douglas Fir trees near the ocean and are used year after year. A buffer zone of perch trees and other vegetation near their nests is important to these birds. They feed mostly on fish, but also eat water birds and carrion. It takes 4-6 years to reach adulthood and develop the white head and tail. Their populations are stable in our Gulf Island region and their BC status is: Yellow Listed, Not At Risk.

OSPREYS: Ospreys are migrants, returning to the Gulf Islands in early April to breed, then going south again, mostly to Central and South America, for the winter. They usually nest at the top of large snag Douglas Fir trees. Their populations are stable worldwide. There are many fewer nesting pairs in the Gulf Islands than there are Bald Eagles. Their BC Status is also: Yellow Listed, Not At Risk.

PEREGRINE FALCONS: Peregrine Falcons are year round residents in the Gulf Islands. They tend to nest in remote high cliff areas near the ocean. All three subspecies in BC are considered to be Provincially and Nationally At Risk. The subspecies found on our Southern Gulf Islands, *Falco peregrines anatum*, is the most at risk and has the BC Status: Red Listed (Endangered).

GREAT BLUE HERONS: These birds are year round residents in our area. They prefer to nest in colonies but will also nest alone. I have discovered no nesting attempts during the past 4 breeding seasons on North Pender Island. The coastal sub-species, *Ardea herodias fannini*, has the BC Status: Blue Listed (Of Special Concern).

BC WILDLIFE ACT: The nest trees of Bald Eagles, Ospreys, Peregrine Falcons, and Great Blue Herons are protected by the *BC Wildlife Act*. This year round protection of the nests does not apply to the habitat surrounding the nest site.

NORTH PENDER ISLAND DEVELOPMENT PERMIT AREA SEVEN-RAPTOR NESTS: Local governments have the authority to regulate development within their jurisdiction. The North Pender Local Trust Committee, on January 31, 2008, adopted the North Pender Island Official Community Plan Bylaw No. 171. DPA Seven created a protective buffer area around Raptor and Great Blue Heron nest trees. The specific allowances within each DPA vary according to each situation. Generally, in the case of Eagle nest trees, human construction activities can occur 30-50 meters from the base of the nest tree and only during the non-breeding season between August 16 and January 14. Since the adoption of this DPA in 2008, nest tree monitors have been observing more carefully human and bird activities around these nest sites.

DPA NEST OBSERVATIONS: Close to 30 Raptor and Great Blue Heron nests fall within DPA Seven on North Pender. Islands Trust has not contracted anyone to monitor these nests for possible DPA infractions. It has fallen to the volunteer observations of me and other monitors to report any suspected violations to the Islands Trust Bylaw Department. Following is a list of known incidents that have occurred near some nests:

- Before the Raptor DPA was adopted on North Pender, a clear-cut occurred right up to a tree with an Eagle nest in it. The nest had been used for several years prior to the clear-cut. The Eagles abandoned the nest. I later discovered where they built a new nest.
- Another pair of Eagles abandoned their only nest 2 years before the DPA for nests was adopted on North Pender, the reason being, I suspect, that 2 new houses were being built on a ridge above and within about 100 meters of the nest. This Eagle pair ended up building a new nest in their roost (overnight) tree within their same territory.
- In Magic Lake Estates subdivision, with one-half acre lots, a house was being constructed very near a long time Bald Eagle nest ... but the owner was building the house in compliance with the Raptor DPA. However, a local resident living on a next door lot, one day noticed the sound of very loud construction machinery at the construction site during the breeding season. Despite speaking to a hired construction worker who was operating the machinery, the noise continued. The neighbor contacted me and we both phoned the Islands Trust Bylaw Department. A bylaw officer just happened to be on North Pender for a Trust Council meeting that very day. The officer went to the site and arranged a resolution. For whatever reason, the owner of the property had failed to make it clear to the construction workers what the regulations were with regard to this nearby nest. The Eagle pair at this nest were incubating eggs, but the nest failed that season. I cannot say whether this nest failed due to these construction activities since I do not know when the nest actually failed.
- Two volunteer monitors of a Bald Eagle nest noticed construction machinery too close to the nest. They contacted an IT Bylaw Officer who stopped the disturbance.
- A property owner, that has an Eagle nest on an adjacent piece of Crown land, did some levelling on their property during the non-breeding season, no doubt due to the DPA. Nothing further has been done on that private property for the past few years.
- A landowner was burning brush too close to an Eagle nest and was stopped. This same landowner, with 2 nests on his property, was required to do construction of a boathouse during the non-breeding season; otherwise, he may have proceeded with the construction during the breeding season.
- A landowner with a nest within about 80 meters of his home, asked me when would be an appropriate time to burn a brush pile, as he was concerned about disturbing nesting activity.
- Landowners with a nest down a slope below their home, which could be looked into, were concerned, not only about their own activities near the nest, but also about the construction of a house on a lot next to them. The construction site was just outside the DPA nest zone. Although the house building occurred during at least 2 breeding seasons, the Eagle parents were successful in producing young both seasons. This Eagle pair did not have a backup nest so had the choice of continuing to use this nest or try to find a suitable tree to build another nest. Perhaps these Eagles had become accustomed to humans looking down into their nest for the 2 years prior to the new house building next door. These landowners, whose property the nest is on, curtail using their stairway down to the ocean throughout each breeding season, since the stairs would take them too close to the nest tree.
- Another couple, who have 2 bald eagle nests within about 80 meters of their home, are always considerate of the birds during breeding season, perhaps aided by my regular contacts with these people, and my obvious enthusiasm. They do not want to negatively impact "their neighboring Eagle friends."
- Even before the nest DPA came into effect, landowners discovered an Osprey nest and 3 Great Blue Heron nests on their property. They immediately respected the birds and their nests. More than once these mainly off-island folks have asked me about the nesting dates of these birds so that they would not disturb them during nesting season. This is an example of residents that needed no legal laws to encourage proper behavior near nest sites.
- On South Pender I know of one landowner, anticipating possible nest DPAs coming there, who clear-cut up to an Eagle nest tree. No construction activity has occurred since during the last 3-4 years. This suggests the owner's desire to "beat" a possible nest DPA on South Pender. Eagles have not used this nest since the clear-cut.
- Again on South Pender (where there is no Raptor DPA), I know a cottage and garden that were constructed within 30 meters of an Eagle nest tree. This nest had a long history of repeated use, and the Eagle pair had no backup nest. They remained faithful to their only nest, and the nest has continued to be active each breeding season since.
- Another landowner on South Pender, not friendly towards Islands Trust, denied permission to the Islands Trust mapper to map an Eagle nest on their large acreage. In such instances, I have found that many landowners are not aware of what DPAs are or the legalities around them. I call it the "fear factor." They simply want nothing to override their freedom to do what they please on their property. Some say they appreciate Eagles, for example, as long as the Eagles do not interfere with them doing whatever they choose on their land. One fellow told me the Eagles can find somewhere else to live. This attitude is a good argument for protecting legally, in the form of DPAs and parks, as

much of the land base as possible on our sensitive island ecosystem, since there are many individuals who do not have a deep appreciation or understanding of the natural environment and will always develop it to the limit allowed.

These are a few examples of how the Raptor DPA and human activities have impacted, directly or indirectly, nesting birds. For the most part, landowners I've talked to are appreciative of, or at least obedient to, the DPA idea.

SUMMARY OF OTHER OBSERVATIONS AND INFORMATION:

- The *BC Wildlife Act* protects for life the nest trees of Bald Eagles, Ospreys, Peregrine Falcons, and Great Blue Herons. It does not protect the surrounding environment.
- The North Pender Raptor DPA does protect a buffer area around nest trees.
- Bald Eagles, Ospreys, and Peregrine Falcons are very faithful to their territories/nests. Some Bald Eagles and Ospreys are known to have more than 1 nest in their territories. Great Blue Herons tend to move about, building new nests in new territories, sometimes individual nests, sometimes in small groupings of 2-5 nests, and often in large colonies of more than 50 nests.
- All Bald Eagle and Osprey nests on North Pender are in older Douglas fir trees.
- North Pender forests are mainly second-growth stands, with a few remnant old-growth trees, many of which are decaying. Fewer potential nest trees remain each year.
- At least 8 Bald Eagle nests have collapsed in the past 7 years on North Pender, although some of the trees themselves partially remain.
- Not just any old big tree will serve as a Bald Eagle nest tree. Branch configuration must be such that it will support a large nest that is added to each year, and allow the birds a view out to see intruders and prey.
- Bald Eagle pairs do not necessarily nest each breeding season, for whatever reasons. For example, 2 pairs of Eagles on North Pender did not lay eggs this past 2012 season.
- One Eagle pair has 3 nests, a territory with 1 nest on North Pender, and a territory with 2 nests on Mayne Island. Another Eagle pair stopped nesting on North Pender in 2008, then built a nest on Mayne, where they have been nesting each year since. One day they may return to nest on North Pender again.
- Most Gulf Island Bald Eagles leave the islands in late summer in search of salmon, returning in October.
- I know an elderly lady with a Bald Eagle nest very near her home. During one breeding season she had great difficulty sleeping when an Eaglet in the nest began screaming for food at dawn every morning for a few weeks. This situation had a disturbing effect on her health.
- One North Pender monitor took a photograph of an Eagle pulling a dead fawn up over the lip and into a nest.
- In the 1990's, according to local North Pender residents I spoke with and a newspaper article I read, a Bald Eagle nest tree was secretly cut down at its base and felled into the ocean, because it was not wanted/appreciated by the landowner. I know of no other such incident in my 7 years of monitoring.
- Of the 23 Bald Eagle nests on North Pender, 19 are on private land and 4 are located on public park land.
- Although some nests are on park land, private properties bordering these nest trees may be within the Raptor DPA.
- Ospreys usually nest on top of snags although I know of one nest at the very top of a live tree, built into live branches.
- The 4 primary birds monitored in the Eagle Watch program seem to be disturbed when something new or noisy occurs in their environment.
- Landowners talk to other landowners, especially regarding DPAs. Wide opinions exist about this issue.
- At least 70 monitors on North Pender have participated in monitoring nests during the lifetime of this project.
- Funding sources for Eagle Watch (2005-2012) include: North Pender Local Trust Committee, South Pender Local Trust Committee, Saturna Local Trust Committee, Pender Island Conservancy Association, Pender Island Field Naturalists, Pender Lions Club, Pender Island Kayak, Pender Island Trust Protection Society, Capital Regional District, Wildlife Tree Stewardship Program, Public Conservation Assistance Fund, The Baillie Fund, and private donors.
- Pender Island Conservancy Association (PICA) has supported Eagle Watch by providing me, as Coordinator, a small stipend for my time for the past 4 years, and through sponsoring grant applications to cover basic monitoring expenses. I will not be receiving a stipend from PICA in 2013 for the Eagle Watch program.
- I have been the only person coordinating the monitoring of nests in the Southern Gulf Islands Trust area. Gabriola Island to the north is the only other Trust island I know of that has a regular nest monitoring program.

CONCLUSIONS AND RECOMMENDATIONS

- The North Pender Island Raptor DPA seems to be serving well. As the attached nest chart indicates, active Bald Eagle nests have remained stable each year along with chick productivity. Since the Raptor DPA was adopted, North Pender Eagle nests have produced 38 chicks (over the past 5 years); that is 7.6 chicks per year and about a 70% nest success overall during the same period. We do not know how many of the North Pender Eaglets survived their first year, nor do we know how many of them did, or will become, breeding adults (takes 4-5 years). It looks good for the Bald Eagles of North Pender at this time.
- On some of the occasions noted in the previous section, SUMMARY OF OTHER OBSERVATIONS AND INFORMATION, a bylaw officer was involved in seeing that the bylaw was being followed regarding nests. On other occasions, I and others, aware of the Raptor DPA, were instrumental in educating necessary parties about requirements for these nests. Generally speaking, the simple fact that the North Pender Local Trust Committee has established a DPA for raptors and Great Blue Heron nest sites, is filtering out to the public, especially to those landowners whose properties are affected by such.
- The future of North Pender Eagles will have a lot to do with the availability of suitable nest trees. Potential veteran nest trees are dying or often removed by landowners seeking better views or for safety reasons. It would be prudent to encourage protection of these remaining old trees as future nest trees, especially those near the shoreline, along lakes and ponds, and on bluffs.
- Perch trees near the nest are needed for adult birds in order to watch their nests and the chicks in them, to look out for intruders entering their territories, and for Eaglets to fly to during their first flights.
- Like humans, birds need a suitable habitat with food, water, clean air, and shelter for themselves and to raise families in order to continue their species. Bald Eagles, other raptors, and Great Blue Herons can often habituate themselves to living in close proximity to people if these basic needs are met.
- North Pender appears to be at capacity as far as nesting territories for Bald Eagles are concerned. The 16 breeding territories have held steady for the past few years. They seem to be finding enough food for themselves and their new chicks so far. Although their favorite food is fish, they are successful scavengers and will eat just about anything.
- I've found there is a general appreciation among the public for Bald Eagles, other raptors, and Great Blue Herons and their nests, not only on North Pender, but also on all other islands in the Trust area. Bald Eagles and Orcas continue to be of primary interest for local residents and visitors to our islands.
- I would advise the North Pender Local Trust Committee to contract someone to coordinate the monitoring of all nests within Development Permit Area Seven during the breeding season (Jan. 15 – Aug. 15) in order to ensure that the bylaw is being honored and to report any suspected infractions to the Islands Trust Bylaw department. This coordinator would also check for any fallen nests and any newly built nests, which nests could eventually be added to the OCP as an amendment.
- For the most part, over the last 7 years, the Bald Eagle and Osprey population on North Pender seems to be firm. The only Peregrine Falcon nest I know of has been doing well. I've noted no nesting Great Blue Herons during the past 4 seasons. From other observations, the Red-tailed Hawk is regularly seen although I know of no nests; there have been declines for the Northern Saw-whet Owl, Western Screech-Owl, and possibly Great Horned Owl, while the Barred Owl numbers have been increasing (unfortunately, they prey on our Saw-whet and Screech Owls).
- Other Local Trust Committees should consider implementing Raptor Development Permit Areas on their islands.

Feel free to contact me with any questions or comments regarding this report and the Eagle Watch project generally.

For the birds!

NORTH PENDER ISLAND – BALD EAGLE NEST SUMMARY, 2006-2012

	2006	2007	DPA YEAR 2008	2009	2010	2011	2012
Occupied Territories	16	16	16	16	16	16	16
Active Nests	9	12	9	12	10	10	13
Inactive Nests	4	2	6	3	5	5	2
Successful Nest Attempts	5	5	7	7	5	7	7
Failed Nest Attempts	4	7	2	5	5	3	6
Eaglets Fledged	7	5	8	9	6	7	8

The Raptor DPA was in effect beginning with the 2008 breeding season.

During this last breeding season (2012), 13 Bald Eagle pairs laid eggs, the most I've known in the past 8 years of monitoring. Seven of these nests were successful with one nest having twins. The only 2 successful nests on South Pender both produced twins.

There were 2 successful known Osprey nests on North Pender, one producing 3 chicks, the other 2. I suspect there may be other unfound Osprey nests on North Pender, as Ospreys have been seen in areas where nests have not been located.

The only known Peregrine Falcon nest on North Pender produced at least 2 chicks.

No active Great Blue Heron nests have been discovered on North Pender during the last 4 breeding seasons (2009-2012). This does not necessarily mean there were none.