Decline in waterbird populations around Stanley Park (1980's to present)

By Michael Price

Starting in the early 1990s there seemed to be a decline in the outer Burrard Inlet seabirds of both passage and winter-resident populations. I was on the Burrard Inlet Environmental Action Program's quarterly bird surveys in Burrard Inlet for several years in the first half of the 1990s. My survey area was the outer harbour from the False Creek entrance and First Narrows to Point Grey and Point Atkinson, and I watched the by-then five or six marbled murrelets *Brachyramphus marmoratus* decline to none over five years. Compare that to a January observation I made in the early 1980s under ideal optical conditions of 55 *pairs* of murrelets in the same area. A possible cause of the rapid decline was the disappearance of old-growth forests in the Greater Vancouver watershed in which the murrelets were known to nest. So I (and others) have, mostly independently, noticed the change in status of many species from common and abundant to uncommon and rare. Omitting uncommon and rare annually-occurring species such as the yellow-billed loon *Gavia adamsii* and Franklin's gull *Larus pipixcan*, these are the species which, until the 1990s decline, were commonplace both in the Stanley Park littoral and the outer Burrard Inlet as passage migrants and/or winter residents.

I created a list of the species which had changed most dramatically, with the idea that I might be able to see if there were any common factors. The loons, grebes, some of the waterfowl, the alcids, the small gulls and terns and the jaegers which kleptoparasitise on them are all dependent on small fish, so a change in the Burrard Inlet and English Bay fish populations would affect all these species. There are likely a number of other causes; logging of forest breeding habitat, pollution caused by the freighters moored in the outer harbor, change in ocean water temperatures, increased human use of the outer inlet--i.e. kayakers and power boats etc. The only two species which have seen any kind of increase are the pelagic cormorant *Phalacrocorax pelagicus* and, to a lesser extent, double-crested cormorant *P. auritus* which now are often the only non-larids to be seen offshore from the Park in any numbers on any given day whatever the season. Many days now, they are the *only* non-larids to be seen; otherwise the waters are empty.

I can't account for the change in shorebird presence along the west side of Stanley Park. Migrant and winter resident sanderling and dunlin used to be very common and regular on Second and Third Beaches and Ferguson Point, and black turnstone in the rocky areas in between. Western, semi and least sandpipers used to be common and regular on Ferguson Point during the latter part of July and early August when large numbers of juvenile birds are passing through our region. The presence of off-leash dogs likely accounts for some of the evictions but doesn't explain the disappearance of the wintering small *Calidris* sandpipers and the turnstones.

Species	As of the late 1980's	2009
Common Loon (*Gavia immer)*	Fairly common migrant and winter resident	Uncommon to rare
Pacific Loon (*G. pacifica)*	Uncommon migrant and winter resident	Rare
Red-throated Loon (*G. stellata*)	Common migrant and winter resident	Rare
Horned Grebe (*Podiceps auritus)*	Common migrant and winter resident	Uncommon
Red-necked Grebe (*P. grisegena)*	Uncommon migrant and winter resident	Rare
Western Grebe (*Aechmophorus occidentalis)*	Very abundant migrant and winter resident	Uncommon to rare
Brandt's Cormorant (*Phalacrocorax penicillatus)*	Common offshore and winter resident	Rare
Ruddy Duck (Oxyura jamaicensis)	Uncommon migrant and winter resident	Rare
Greater Scaup (Aythya marila)	Common migrant and winter resident	Uncommon
Lesser Scaup (A. affinis)	Very common migrant and winter resident	Uncommon
Black Scoter (Melanitta nigra)	Locally common migrant and winter resident	Rare
White-winged Scoter (M. fusca)	Fairly common migrant and winter resident	Rare
Surf Scoter (M. perspicillata)	Very abundant migrant and winter resident	Locally common to uncommon
Long-tailed Duck (Clangula hyemalis)	Fairly common migrant, uncommon winter resident	Rare migrant, winter
Barrow's Goldeneye (Bucephala islandica)	Abundant migrant and winter resident	Locally common
Bufflehead (B. albeola)	Common migrant and winter resident	fairly common migrant, uncommon winter
Red-breasted Merganser (Mergus serrator)	Very common migrant and winter resident	fairly common migrant, uncommon winter
Black Turnstone (Arenaria melanocephala)	Common winter resident	Uncommon to rare winter
Dunlin (Calidris alpina)	Fairly common winter resident	Uncommon to rare
Sanderling (C. alba)	Very common migrant and winter resident	Uncommon to rare, winter
Semipalmated Sandpiper (C. pusilla)	Uncommon Juvenile migrant	No recent sightings
Western Sandpiper (C. mauri)	Common Juvenile migrant	No recent sightings
Least Sandpiper (C. minutilla)	Common Juvenile migrant	No recent sightings
Parasitic Jaeger (*Stercorarius parasiticus)*	Uncommon autumn migrant	No recent sightings
Bonaparte's Gull (*Chroicocephalus philadelphia)*	Very common migrant	Uncommon to rare
Common Tern (*Sterna hirundo)*	Very common to abundant migrant	Rare
Caspian Tern (*Hydoprogne caspia)*	Very common migrant, summer	Uncommon
Common Murre (Uria aalge)	Uncommon winter	No recent sightings
Pigeon Guillemot (Cepphus columba)	Fairly common summer	Uncommon summer
Marbled Murrelet (Brachyrhamphus marmoratus)	Common winter, fairly common summer	Rare
Rhinoceros Auklet (Cerorhinca monocerata)	Rare summer, autumn	No recent sightings