Mammals of the Boundary Bay Watershed

including the adjacent waters of the Georgia Strait

Annotated list compiled by Anne Murray. Annex information for *A Nature Guide to Boundary Bay* Copyright Anne Murray©2009

Species recorded within the last 15 years

North American Opossom

Didelphis virginiana

Introduced; fairly common throughout area

Pacific Water Shrew (Marsh Shrew)

Sorex bendirii bendirii

B.C. Red-listed species. Rare; recorded in Burns Bog, Fergus Creek, Crescent Park

Cinereus Shrew (Masked Shrew or Common Shrew)

Sorex cinereus streatori

Recorded in Burns Bog, Sunnyside Acres, Nicomekl and Serpentine Valleys

Trowbridge's Shrew

Sorex trowbridgii trowbridgii

B.C. Blue-listed species. Recorded from Burns Bog, Fergus Creek, Anderson Creek, Nicomekl and Serpentine Valleys

Dusky Shrew

Sorex monticolus setosus

Recorded from Burns Bog, Little Campbell Valley, Beach Grove

Rohwer's Shrew

Sorex rohweri

Rare. Burns Bog only location in Canada. Distinguished from Cinereus (Masked) Shrew in 2007 (Rausch et al. 2007)

Vagrant Shrew

Sorex vagrans vagrans

Commonest shrew in old field habitat. Recorded from Westham Island, Boundary Bay, Burns Bog, Green Timbers, Little Campbell Valley.

American Shrew-mole

Neurotrichus gibbsii gibbsii

Recorded from Burns Bog, Green Timbers, Little Campbell Valley, Sunnyside Acres and Nicomekl and Serpentine Vallesy. Not found in western Delta or Alaksen.

Coast Mole

Scapanus orarius schefferi

Common throughout, although not often seen.

California Myotis

Myotis californicus caurinus

Within known range but no definitive sightings.

Long-eared Myotis

Myotis evotis pacificus

WA monitor species. Within known range. Possible North Delta and Langley.

Little Brown Myotis

Myotis lucifugus alascensis

Recorded at Alaksen and probably throughout area.

Long-legged Myotis

Myotis volans longicrus

WA monitor species. Specimens from Fraser Valley in 1940/50. Within known range but not recorded recently.

Yuma Myotis

Myotis yumanensis saturatus

Several hundred in Alaksen maternity colony in 1996; a thousand females in maternity colony at Deas Island.

Hoary Bat Lasiurus cinereus

Within known range and a specimen from Vancouver 1992. Migratory.

Silver-haired Bat

Lasionycteris noctivagans

Last record Reifel Refuge 1988 (MT); likely still occurs in watershed area. Migratory.

Big Brown Bat

Eptesicus fuscus bernadinus

Deas Island, Tsawwassen peninsula, likely all around watershed. Not recorded in literature.

Townsend's Big-eared Bat

Plecotus townsendii

BC Blue-listed; WA candidate species. Occurs in neighbouring Langley

Eastern Cottontail

Sylvilagus floridanus

Throughout area. Eastern Canadian species first seen in BC about 1950.

European Rabbit

Oryctolagus cuniculus

Introduced. Pets are released in parks and industrial estates. Numbers fluctuate.

Southern Red-backed Vole

Clethrionomys gapperi occidentalis

BC Red-listed; Rare: Recorded from Burns Bog pine forest, 1999, only known population of *occidentalis* in BC. Specimens found again during Environmental Assessment for South Fraser Perimeter Road, 2008.

Long-tailed Vole

Microtus longicaudus

Observed in Burns Bog during 1973 studies, not found in 1999 Ecosystem Review survey.

Creeping Vole

Microtus oregoni serpens

Recorded in Burns Bog, Green Timbers, Boundary Bay. Cyclic fluctuations affect populations.

Townsend's Vole

Microtus townsendii

Throughout old field habitats. Very important prey item for raptors.

Muskrat

Ondatra zibethicus

Ditches and fens throughout. They were so common in the 1850s that a bounty was imposed to protect dykes from their diggings.

Mountain Beaver

Aplodontia rufa

Rare; listed species; upper reaches of Little Campbell watershed, near Campbell Valley Park, South Langley, Drayton Harbor watershed.

Beaver (American Beaver)

Castor canadensis

Historically abundant in watershed, but now only moderately common in a few wetland areas (e.g. Ladner Marshes, Reifel Refuge, Alaksen, Burns Bog.

Deer MousePeromyscus maniculatus

Throughout woodland and brush habitat. Less common in old fields. 85% of small mammal captures in Burns Bog in 1999 were this species.

Porcupine Erethizon dorsatum

Probably extirpated from BC part of Boundary Bay watershed; formerly in upland forests of Surrey, Campbell Valley Park. May still be found in Drayton Harbor watershed.

House MouseMus musculus

Introduced. Near human habitation.

Norway Rat

Rattus norvegicus

Introduced. Found especially near water. Less common at ports now that containers are sealed.

Black Rat (Roof Rat)

Rattus rattus

Introduced. Found inside buildings and roofs. Large numbers appeared after a distemper epidemic, which killed raccoons. Black Rats are established in hedgerows in some areas. A nest predator in Burns Bog. The Black Rat is the "plague rat" of Europe.

Northern Flying Squirrel

Glaucomys sabrinus

Recorded in Burns Bog, Green Timbers, Sunnyside Acres, Tynehead Park, Watershed Park, and other upland, forested areas.

Eastern Grey Squirrel

Sciurus carolinensis

Introduced. Throughout watershed area, particularly in suburbs and parks. They spread to study area between 1989 and 1993, from Stanley Park, Vancouver where they were introduced about 1914.

Townsend's Chipmunk

Tamias townsendii

Recorded from Green Timbers, North Delta, Drayton Harbor watershed and Campbell Valley Park.

Douglas' Squirrel

Tamiasciurus douglasii

Recorded from upland coniferous forests, Burns Bog and Drayton Harbor. Has declined as forests cut down, eg. in Tsawwassen, Surrey.

Pacific Jumping Mouse

Zapus trinotatus

Recorded from Burns Bog, Reifel Refuge, Fraser River. Live and dead ones on dykes in late spring may have rafted down the Fraser River on logs and floating vegetation. In Burns Bog nests in creek banks.

Coyote Canis latrans

Recorded throughout the watershed. Became rather numerous in 1990s but in last five years seems less common.

Red Fox Vulpes vulpes

Common before 1980 but has rapidly declined in area, possibly due to Coyote predation. Recorded from Burns Bog, Boundary Bay, Blackie Spit, Little Campbell Valley, Point Roberts, Drayton Harbor.

Bobcat Lynx rufus

Uncommon. Recorded from Little Campbell Valley, Burns Bog, Sunnyside Acres.

Northern River Otter Lontra canadensis

Uncommon. Recorded from Alaksen, Boundary Bay, Westham Island, White Rock, Blackie Spit, Point Roberts (Lily Point), and Drayton Harbor.

Striped Skunk Mephitis mephitis

Fairly common. Recorded from Point Roberts, Drayton Harbor watershed, Nicomekl and Serpentine Valleys, Burns Bog, Green Timbers, North Delta.

Ermine (Short-tailed Weasel)

Mustela erminea fallenda

Likely to be still fairly common in suitable habitat. Recorded from Point Roberts, Boundary Bay, Sunnyside Acres, Burns Bog, Nicomekl and Sunnyside Acres, Little Campbell Valley Park. Not on Westham Island. Six 1970s specimens from Serpentine Valley, several from Ladner in 1940s in Department of Zoology Museum, UBC.

American Mink Mustela vison

Likely to be still fairly common in suitable habitat. Recorded in Alaksen, Reifel Refuge, Boundary Bay, Little Campbell Valley, Drayton Harbor, Ladner Marsh.

Northern Fur Seal Callorhinus ursinus

Rare visitor to Roberts Bank, more than 15 years ago.

Steller Sea Lion Eumetopias jubatus

WA Threatened species. Recorded regularly during winter and spring at Point Roberts (e.g. Feb. 2009) and also from White Rock. Winter colony on islets adjacent to Saturna Island, across the Strait from Boundary Bay.

California Sea Lion Zalophus californianus

Large numbers present at mouth of Fraser River in March and April. Numbers increased during 1980s and 1990s. Recorded from Drayton Harbor, Fraser River, Ocean Park and Point Roberts.

Harbour Seal Phoca vitulina richardsi

The most frequently seen marine mammal in Boundary Bay - Fraser River estuary waters. Several hundred occur, throughout estuary and marine areas. They swim up rivers and haul out at mouth of Serpentine River.

Northern Raccoon Procyon lotor

Found throughout the watershed, even in suburbs. Numbers fluctuate due to distemper epidemics, road kills, etc.

Black Bear Ursus americanus altifrontalis

Historically widespread, now very much reduced. Probably only in Drayton Harbor watershed, and maybe still in Burns Bog. There were considered to be 5 in Burns Bog in 1999, and bears were sometimes seen in the power line right of ways in Surrey.

Killer Whale Orcinus orca

Southern Resident population are US Endangered Species; COSEWIC listed as Endangered. Recorded from Point Roberts, Roberts Bank, Alaksen, Boundary Bay. One dead (J18) Centennial Beach, Tsawwassen in 2000. Transient Killer Whales also come through the bay. A decapitated seal found washed up in January 2009 may have been killed by a transient.

False Killer Whale Pseudorca crassidens

An isolated individual was present between 1992 and 2002 off Roberts Bank, Point Roberts.

Grey Whale Eschrichtius robustus

Occasional spring migrant or summer resident in small numbers. Recorded off White Rock, Ocean Park, Point Roberts and in Fraser River. One dead Boundary Bay, 200?, one at Point Roberts 1999, 4 stranded White Rock, 1984.

Minke Whale Balaenoptera acutorostrata

Rarely seen off Pont Roberts but not uncommon in southern Gulf Islands.

Harbour PorpoisePhocaena phocaena

WA Candidate species. Found in Boundary Bay, Roberts Bank and off Point Roberts. One dead in Point Roberts 1999, several dead in Boundary Bay 1980s - present.

Dall's Porpoise Phocoenoides dalli

Regular in the Strait of Georgia and recorded offshore Boundary Bay, Point Roberts, Roberts Bank.

Mule Deer ssp. Columbian Black-tailed Deer

Odocoileus hemionus columbianus

Uncommon to common in wooded habitats of watershed, depending on degree of development. Common in Burns Bog. Absent entirely from extensively developed areas and declining accordingly.

Moose Alces alces

Accidental: one occurrence in 1991 in Blaine

Mammal species presumed extirpated

Snowshoe Hare (Varying Hare)

Lepus americanus washingtonii

Last records: Tynehead Park 1970s, Burns Bog 1980s, Campbell Valley Park 1988. Not found in Drayton Harbor in 1991 study. Known locally only from Burnaby Lake outside Boundary Bay watershed area.

Western Spotted Skunk

Spilogale putorius

No records in last 15 years. Once common in farmland areas. Recorded from Burns Bog, Little Campbell Valley, Delta fields.

Marten Martes americana

Historically in old growth forest, remains in middens; extirpated by 1890s or earlier.

Wolverine Gulo gulo

Historically in old growth forest, remains in middens; extirpated by 1890s or earlier.

Cougar Felis concolor

Historically common in forests but generally gone by the 1890s. Sightings this century include: Ladner 1920s, Panorama Ridge 1960s, Tynehead 1970s.

Gray Wolf Canis lupus

Extirpated by 1900.

Elk ssp. Roosevelt Elk Cervus elaphus roosevelti

Extirpated by 1900, probably due to hunting.

Humpback Whale Megaptera novaeangliae

Historically in the Strait of Georgia around the mouth of the Fraser River and Boundary Bay. Returning to Saturna Is. 2004 onward, Mayne Island 2008, so may be expected to occur once more in study area.

References

Murray, Anne, *The Diversity of Mammals, Reptiles and Amphibians of the Boundary Bay Area*, Discovery Spring 2003, 32 (1)

Rausch, R. L., J. E. Feagin, and V. R. Rausch. 2007. *Sorex rohweri sp. nov. (Mammalia, Soricidae) from northwestern North America*. Mammalian Biology, 72 (2):93-105.

A full source list is in Murray 2003 as referenced above. See also Bibliography for *A Nature Guide to Boundary Bay* in **www.natureguidesbc.com.**