

# **BIRDS ASSOCIATED WITH A LOG-BOOM SITE IN THEODOSIA INLET, BRITISH COLUMBIA, 2003-2007**

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## ***Abstract***

An annotated list is presented for 83 species of birds observed in the immediate vicinity of a protected log-boom site in Theodosia Inlet, British Columbia, during 383 days between October 2003 and October 2007.

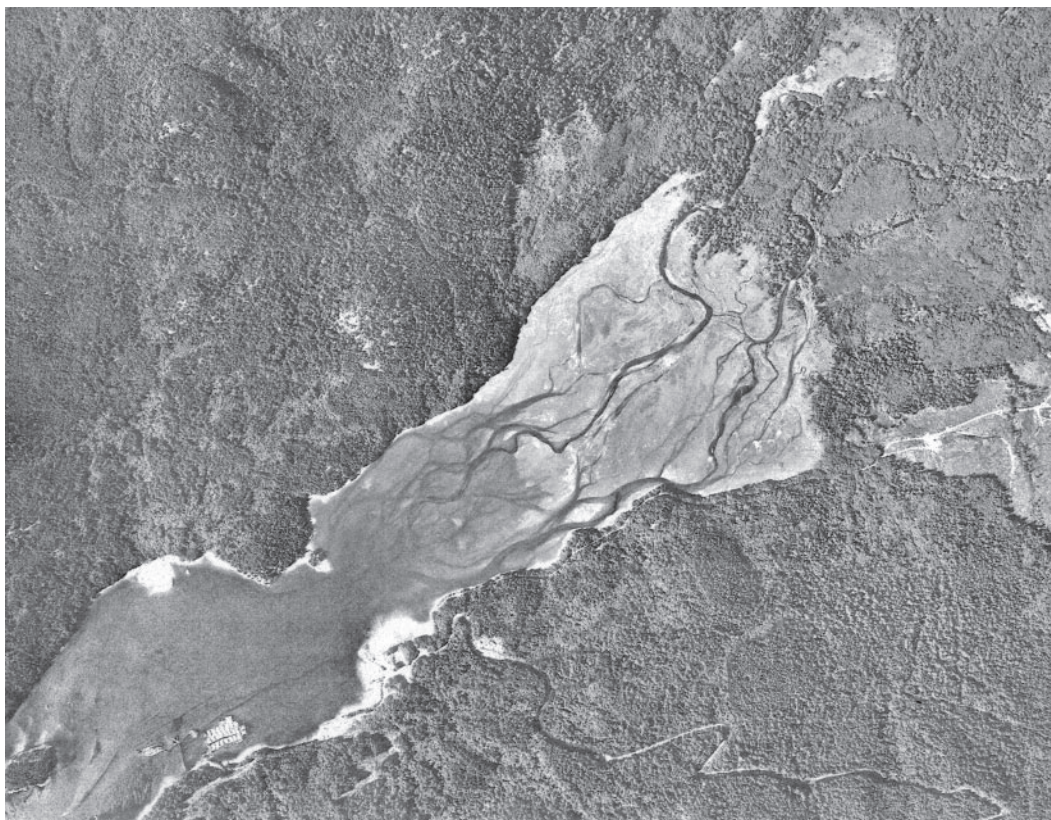
Use of the small and isolated site by nonpasserine and passerine species for feeding, roosting, and breeding is presented.

## ***Introduction***

The bird fauna of long inlets and channels inundating the mainland coast of British Columbia is poorly known (see Campbell et al. 1990a, 1990b, 1997, 2001). Access is usually only by boat, float plane, or helicopter and most visits are related to industrial activities such as logging, mining, and fishing. While sightseeing, sea kayaking, and hiking are popular events in some waterways, few people have recorded observations of wildlife. In this paper, I present an annotated list of 83 species of birds observed incidentally during work shifts throughout the year in Theodosia Inlet between 2003 and 2007. Notes are included on the annual status, seasonal chronology, breeding status, behaviour, and numbers of birds counted in the vicinity of a log-boom site and the immediate shoreline (Figure 1).

## ***Previous Ornithological Work***

Until recently, Theodosia Inlet has remained unexplored ornithologically. Most of the early records of birds are anecdotal in nature resulting from brief trips and communications between loggers, fishermen, boaters, hikers, and occasionally birdwatchers. It has been a secluded destination for exploration. Much of the scattered and infrequent information was passed on to Clyde H. Burton, a keen naturalist who lived in Powell River. Fortunately, Clyde recorded some



**Figure 1.** Aerial view of the Theodosia River estuary and the study site with log-booms (lower left) in Theodosia Inlet, BC.

of the more noteworthy sightings and passed them on for use in *The Birds of British Columbia* (see Campbell et al. 1990a, 1990b, 1997, 2001).

In the 1980s, interest developed in assessing the importance of the numerous, bays, harbours, inlets, fiords, and channels along the British Columbia coast for water birds, primarily waterfowl. Most of the surveys were completed by aircraft although some winter surveys were carried out by boat on the north coast in the late 1970s (Martin 1980). Theodosia Inlet, for the first time, was included in some of those monthly flights that were carried out by provincial and federal governments. For example, in 1981 three Buffleheads were present on 19 September and by

12 November 107 birds were using Okeover and Theodosia Inlets for staging and feeding (Campbell et al. 1990a). All of these surveys included more open waters and did not concentrate on log-boom sites.

Bird records still trickled in during the 1980s but in 1991 research on Marbled Murrelets (*Brachyramphus marmoratus*) was started in Desolation Sound, including Theodosia Inlet, by the Centre for Wildlife Ecology at Simon Fraser University in Burnaby, BC. Intensive research continued on the murrelets for the next decade resulting in many papers on the population dynamics and marine and forest habitat requirements for this threatened species (see Mahon et al. 1992, Kaiser et al. 1995, Derocher et al. 1996,

Beauchamp et al. 1999, Hull 1999, Vanderkist et al. 1999, Bradley et al. 2002, Lougheed et al. 2002, Cam et al. 2003, Parker et al. 2003).

The university research was mainly carried out during the breeding season and focused on Marbled Murrelets although some incidental records of other birds were recorded. My observations appear to be the only contribution for bird life throughout the year for a small portion of Theodosia Inlet from a log-boom site.

### Study Area

Theodosia Inlet, a fairly large part of Desolation Sound, is situated 28 km northeast of Powell River on British Columbia's Sunshine Coast. The study area at the log-boom site (at the east end of Theodosia Inlet), is relatively isolated requiring a 15 km boat trip from Okeover Arm Park through a narrow and shallow channel at the mouth of the inlet (Figure 2). A mud-sand-gravel tidal flat and estuary occurs where the Theodosia River drains into the head of the inlet. The marine area is about 2.0 km<sup>2</sup> in size. The log-booms are composed of second-growth Douglas-fir (*Pseudotsuga menziesii*) (40%), western hemlock (*Tsuga heterophylla*) (40%), western redcedar (*Thuja plicata*) (15%), red alder (*Alnus rubra*) and bigleaf maple (*Acer macrophyllum*) (5%).

The study area has moderate recreational and commercial values. The latter includes wild oyster and clam harvesting and aquaculture, a commercial dive fishery, and two log storage and handling tenures on the south side of the inlet (Figure 3). There is a large kelp bed (8.4 ha) at the mouth of Theodosia Inlet that is often used for recreational diving.

In the early 1900s, the Theodosia River supported magnificent salmon returns that were estimated at 100,000 Pink Salmon (*Oncorhynchus gorbuscha*), 50,000 Chum Salmon (*O. keta*), and 10,000 Coho Salmon (*O. kisutch*). In 1956 a dam was constructed on the river which diverted 80% of its flow into Powell Lake in order to generate hydroelectric power for the Powell River Pulp Mill. Today, First Nations, government, industry, and environmental groups are working towards restoring the river. In the meantime, a much smaller run of Steelhead Trout (*O. mykiss*) occurs from January to May, Cuthroat Trout (*O. clarki*) from January to July, and Coho Salmon in



**Figure 2.** The study area is a relatively isolated site in Theodosia Inlet, BC and can only be reached through a narrow passage. 28 September 2007 (Ivar Nygaard-Petersen).

September to October.

The climate is mild year round with abundant precipitation during the winter months followed by relatively dry summers. Watersheds surrounding the inlet have been logged and presently vegetation in the upland areas consists of a mixture of second-growth stands of Douglas-fir, western hemlock, and western redcedar. The main deciduous trees are red alder and bigleaf maple.



**Figure 3.** The study area includes two small log storage and handling sites on the south side of Theodosia Inlet about 1 km from the mouth of Theodosia River, BC. 28 September 2007 (Ivar Nygaard-Petersen).

### Observation period

From October 2003 through October 2007 I was working as a boom-man on the log-boom site west of where the Theodosia River enters Theodosia Inlet. The area is 1 km from the actual estuary where there was no doubt more bird activity. My work schedule varied greatly between years (Table 1). All of the observations were made during a normal work day in the immediate vicinity of the log-boom site. In total, I made 383 daily visits to the area (Table 1). Over the 28-month period the total number of observation days per month ranged from one (February and September) to 63 days (May).

### Terminology

The definitions for a species' status (*e.g.*, frequency of occurrence and relative abundance) generally follows Campbell et al. (1990a). I have modified numbers to better represent a smaller regional area. The categories are:

#### Seasons

Spring - March, April, and May  
Summer - June, July, and August  
Autumn - September, October, and November  
Winter - December, January, and February

#### Seasonal Status

Resident  
Migrant – Spring (arrival) and Autumn (departure that could include late summer)  
Transient  
Summer and Winter Visitant  
Vagrant

### Regular occurrence (reported annually)

*Abundant*: seen most days in appropriate habitat; >50 birds per day  
*Very common*: seen most days in appropriate habitat, 10-50 birds per day  
*Common*: seen most days in appropriate habitat, 3-10 birds per day  
*Uncommon*: seen most days in appropriate habitat, 1-3 birds per day  
*Rare*: not expected every day; absent some years

### Irregular occurrence (not reported annually)

*Very rare*: >6 records, but infrequent occurrence  
*Casual*: 2 to 6 records all time  
*Accidental*: only 1 record

### Annotated Species List

#### Greater White-fronted Goose

*Anser albifrons*

**Status:** Accidental in winter.

**Occurrence:** A single bird was resting at the log-boom site from 0800 to 1145 hrs on 14 December 2004.

#### Canada Goose

*Branta canadensis*

**Status:** Rare to very common. Breeds.

**Occurrence:** Flocks of up to 20 birds forage on small patches of sedge meadows in the nonbreeding seasons but are erratic in appearance. Family groups present in May and June (*e.g.*, 30 May 2006 - adults with four recently hatched goslings) and probably

**Table 1.** Total observation days, by month, for birds recorded in Theodosia Inlet, BC, 2003-2007.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>2003</b>										20	9	1	<b>30</b>
<b>2004</b>				15	22	20	20	12	14	13	21	18	<b>155</b>
<b>2005</b>	16	14	21	21	16			1					<b>89</b>
<b>2006</b>			7	17	22	19	13	19					<b>97</b>
<b>2007</b>					3	3			1	5			<b>12</b>
<b>Total</b>	<b>16</b>	<b>14</b>	<b>28</b>	<b>53</b>	<b>63</b>	<b>42</b>	<b>33</b>	<b>32</b>	<b>15</b>	<b>38</b>	<b>30</b>	<b>19</b>	<b>383</b>



breed on the estuary.

Recorded from 31 January to 15 November.

### Trumpeter Swan

*Cygnus buccinator*

**Status:** Casual.

**Occurrence:** Four adults seen flying northwest on 9 March 2004 and five adults flying southeast on 10 November 2004. Small numbers frequently winter on nearby Cranberry Lake (Figure 4).



**Figure 4.** Trumpeter Swans seen flying over the study area on Theodosia Inlet likely originate from small numbers that regularly winter on nearby Cranberry Lake, BC. 22 January 2001 (R. Wayne Campbell).

### American Wigeon

*Anas americana*

**Status:** Accidental.

**Occurrence:** Two males and two females were feeding near the log-boom site on 20 January 2005.

### Mallard

*Anas platyrhynchos*

**Status:** Casual.

**Occurrence:** Feeding birds were seen on 21 April 2005 (male and female) and on three occasions in 2004 (e.g., 20 September - six adults, 18 October - one male and two females, 15 December - four males and four females).

Recorded from 21 April to 15 December.

### Northern Shoveler

*Anas clypeata*

**Status:** Casual in autumn.

**Occurrence:** Three females were feeding near the log-booms from 12 to 19 October 2007.

### Ring-necked Duck

*Aythya collaris*

**Status:** Accidental.

**Occurrence:** A single bird was diving and feeding in open water about 10 m from shore on 16 February 2005.

### Harlequin Duck

*Histrionicus histrionicus*

**Status:** Accidental.

**Occurrence:** Two birds were resting on rocks in the narrows at the entrance to Theodosia Inlet on 24 October 2003.

### Surf Scoter

*Melanitta perspicillata*

**Status:** Rare.

**Occurrence:** Up to 17 birds may feed in the area but their presence is irregular between years.

Recorded from 28 December to 19 April.

### White-winged Scoter

*Melanitta fusca*

**Status:** Accidental.

**Occurrence:** Five males and five females were feeding together on 13 April 2006.

### Black Scoter

*Melanitta nigra*

**Status:** Casual in spring.

**Occurrence:** A flock of 10 birds was seen on 11 May 2004 and in 2005 eight birds were first seen on 8 April and by 15 April the number had dwindled to four birds.

### Bufflehead

*Bucephala albeola*

**Status:** Uncommon from late autumn to mid-spring.

**Occurrence:** Usually three or fewer birds regularly feed in the inlet each year.

Recorded from 11 November to 13 April.

### **Common Goldeneye**

*Bucephala clangula*

**Status:** Very common from mid-autumn to mid-spring.

**Occurrence:** Feeding numbers build up to a peak of 30 to 40 birds in December and January. Courting activities occur in late January (Figure 5).

Recorded from 15 October to 15 April.



**Figure 5.** Small flocks of Common Goldeneye spend the winter in the Theodosia Inlet study area feeding and resting and in January courting activities are at a peak. Victoria, BC. 1 April 1997 (R. Wayne Campbell).

### **Barrow's Goldeneye**

*Bucephala islandica*

**Status:** Common.

**Occurrence:** Often found in small groups of three to ten birds feeding and resting. Courting activities occur throughout January.

Recorded from 26 October to 31 January.

### **Hooded Merganser**

*Lophodytes cucullatus*

**Status:** Uncommon in winter, common in spring.

**Occurrence:** This species is recorded annually, but infrequently, from late autumn and to late spring. Maximum numbers were five males and two females resting and feeding on 11 May 2006.

Recorded from 4 November to 23 May.

### **Common Merganser**

*Mergus merganser*

**Status:** Common resident. Breeds.

**Occurrence:** This large bird is most noticeable from March to May when salmon fry are plentiful and again in August and September during salmon spawning. Females with broods are regularly encountered from late June throughout August.

Recorded from 1 January to 31 December.

### **Red-throated Loon**

*Gavia stellata*

**Status:** Accidental.

**Occurrence:** An adult was watched feeding on 23 September 2007. This species was recently reported nesting on nearby Powell Lake (Burton 2006).

### **Common Loon**

*Gavia immer*

**Status:** Rare to uncommon from mid-autumn to early spring.

**Occurrence:** Not seen in seven months of a year and when present cannot be expected to be seen daily. Most sightings are of lone adult feeding in March and April and again in July and August. Small numbers breed on nearby larger lakes.

Recorded on 27 October and from 18 March to 29 April and 5 July to 11 August.

### **Horned Grebe**

*Podiceps auritus*

**Status:** Accidental.

**Occurrence:** A single bird was feeding on 29 December 2004.

### **Red-necked Grebe**

*Podiceps grisegena*

**Status:** Casual.

**Occurrence:** A single bird, in adult plumage, was feeding on 6 and 12 April 2006.

### **Double-crested Cormorant**

*Phalacrocorax auritus*

**Status:** Common to very common in autumn, uncommon in winter.

**Occurrence:** Up to 15 birds, both adult and immature, may be present each year roosting on pilings (Figure 6), log-booms, and other structures during late October and early November. Numbers begin to decrease in December and by late March only one to

six birds are roosting. The species feeds in the inlet around the log-boom site and also roosts on logs.

Recorded from 18 October to 24 March.



**Figure 6.** Each winter small numbers of adult and immature Double-crested Cormorants feed and roost in Theodosia Inlet, BC. Sidney, BC. 8 November 1997 (R. Wayne Campbell).

### **Great Blue Heron**

*Ardea herodias*

**Status:** Uncommon.

**Occurrence:** From one to three birds may be present daily hunting or perching on log-booms. No herons were seen from January to March suggesting that birds may have dispersed to nesting colonies to establish territories.

On 20 April 2007 a Bald Eagle captured a Great Blue Heron in the air and tussled with it to a log-boom where it was killed and eaten (Nygaard-Petersen 2007).

Recorded from April to 21 December.

### **Turkey Vulture**

*Cathartes aura*

**Status:** Rare.

**Occurrence:** Occasionally soaring birds are seen overhead. On 10 August 2006 two adults were sitting on a log bundle in a log-boom watching a Bald Eagle eat its prey.

This species, although being seen more frequently in the Powell River area, is far more common in southern regions of the Sunshine Coast, especially in the vicinity of Sechelt and Ruby Lake (Campbell et al. 2005).

Recorded from 24 April to 10 August.

### **Osprey**

*Pandion haliaetus*

**Status:** Casual.

**Occurrence:** Three sightings, a single bird was flying over the inlet and estuary on 1 May and 7 June 2007 and another on 20 September 2004.

### **Bald Eagle**

*Haliaeetus leucocephalus*

**Status:** Common resident.

**Occurrence:** Although present year-round, peak numbers occur in October when Chum Salmon are spawning in the Theodosia River. Two large movements of eagles were noted passing over Theodosia Inlet in a southeasterly direction on 18 October 2004 (57 birds) and 28 October 2003 (43 birds). Both of these incidents involved eagles riding thermals and the passage lasted an hour or so.

### **Northern Harrier**

*Circus cyaneus*

**Status:** Casual.

**Occurrence:** Single birds were seen on 16 May 2006 and 21 October 2004 hunting over 2 to 3 year-old logging slashes.

### **Northern Goshawk**

*Accipiter gentilis*

**Status:** Accidental.

**Occurrence:** A single bird was seen in the riparian area of the log-boom site on 22 November 2004.

### Red-tailed Hawk

*Buteo jamaicensis*

**Status:** Rare.

**Occurrence:** In 2004, a single bird was observed hunting over the two-year old logging slash on 14 and 25 June. On 18 October 2004, eight birds flew over the inlet in a southeasterly direction during a half hour at midday.

Recorded from 18 October to 14 June.

### Golden Eagle

*Aquila chrysaetos*

**Status:** Casual.

**Occurrence:** Three records of single birds flying over the inlet: 30 May 2006, 21 September 2004 and 20 October 2004.

### American Kestrel

*Falco sparverius*

**Status:** Casual.

**Occurrence:** An adult landed on top of a log bundle in a log-boom near the beach on 18 April 2006 and an adult was seen in shrubby area of logging slash on 21 October 2004.

### Merlin

*Falco columbarius*

**Status:** Accidental.

**Occurrence:** A single “Black” Merlin (*F. c. suckleyi*) was seen on 9 August 2006.

### Killdeer

*Charadrius vociferus*

**Status:** Uncommon resident. Breeds.

**Occurrence:** Small numbers (Figure 7) can be seen most days throughout the year with highest numbers (e.g., 12 on 9 August 2006) occurring in spring and summer.

### Black Oystercatcher

*Haematopus bachmani*

**Status:** Casual.

**Occurrence:** Three records of two birds in 2006 on 25 April, 3 May, and 10 August.



**Figure 7.** The Killdeer is one of the few species that is present in the Theodosia Inlet study area throughout the year. Esquimalt Lagoon, BC. 14 November 1997 (R. Wayne Campbell).

### Greater Yellowlegs

*Tringa melanoleuca*

**Status:** Casual.

**Occurrence:** Two records 2006; one bird on 2 August and two birds on 6 August, both resting on boomsticks.

### Solitary Sandpiper

*Tringa solitaria*

**Status:** Rare spring migrant.

**Occurrence:** Single birds are infrequently seen foraging, or resting, on log-booms, during the latter half of May.

Recorded from 16 to 24 May.

### Spotted Sandpiper

*Actitis macularia*

**Status:** Uncommon summer visitant. Breeds.

**Occurrence:** One or two birds can usually be seen throughout the summer feeding on nearby beaches or occasionally foraging and resting on log-booms.

Recorded from 5 May to 16 August.

### Ruddy Turnstone

*Arenaria interpres*

**Status:** Accidental.

**Occurrence:** A single bird was feeding on log-booms with eight Black Turnstones on 12 November 2003.

### Black Turnstone

*Arenaria melanocephala*

**Status:** Very common autumn and winter visitant.



**Occurrence:** This species (Figure 8) rests and actively feeds on log-booms during its time in the inlet. Largest flocks were 48 on 14 November 2003 and 88 on 24 September 2004.

Recorded from 31 August to 29 April.



**Figure 8.** The Black Turnstone is one of the few species of shorebirds that regularly utilizes log-booms along the British Columbia coast for roosting and feeding. Victoria, BC. 31 October 2003 (R. Wayne Campbell).

### Western Sandpiper

*Calidris mauri*

**Status:** Casual.

**Occurrence:** In 2004, flocks of 51 birds were seen on 8 November and 56 birds on 29 December resting on the log-booms among Black Turnstones.

### Least Sandpiper

*Calidris minutilla*

**Status:** Common late summer and early autumn migrant.

**Occurrence:** This species feeds on mudflats on the nearby estuary and flies regularly to log-booms where it rests, and occasionally feeds. The peak movement occurs in August and September.

Recorded from 26 November to 29 April.

### Long-billed Dowitcher

*Limnodromus scolopaceus*

**Status:** Accidental.

**Occurrence:** Fourteen birds were feeding on nearby mudflats on 11 October 2007.

### Wilson's Snipe

*Gallinago delicata*

**Status:** Casual.

**Occurrence:** Single birds were seen in 2004 feeding on the beach on 20 September and 23 November.

### Bonaparte's Gull

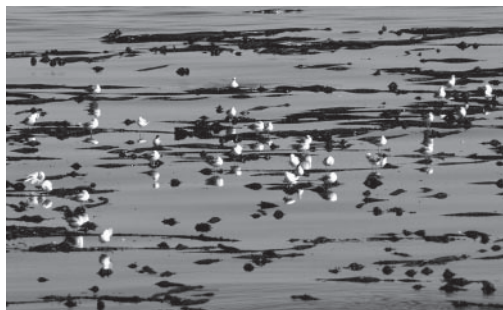
*Larus philidelphia*

**Status:** Abundant migrant and winter visitant.

**Occurrence:** This species (Figure 9) frequently feeds off the estuary and roosts and preens in significant numbers on log-booms throughout the day. Their occurrence is irregular and probably depends on the availability of food. Largest numbers were recorded in 2004 on 15 November (278 birds) and 16 November (221 birds). The largest group in spring was 15 to 53 birds on the log-booms during the latter half of April 2006.

On 13 December 2004 a significant passage of 461 birds was counted flying overhead from northwest to southeast between 1145 and 1245 hrs.

Recorded from 21 July to 25 May.



**Figure 9.** During migration and in winter, Bonaparte's Gulls in British Columbia use a variety of sites to rest and significant numbers can be found on log-booms along the coast, where they frequently roost for the evening. Victoria, BC. 9 September 1995 (R. Wayne Campbell).

### Mew Gull

*Larus canus*

**Status:** Rare resident; abundant migrant and winter visitant.

**Occurrence:** This is the most common species in

Theodosia Inlet in the vicinity of the log-boom site. It feeds on the estuary and roosts on log-booms where moulting and preening is a common activity. Peak numbers occur from early October to mid-November each autumn and again in spring throughout April.

Maximum monthly numbers from June 2004 to May 2005 were: June - 41, July - 55, August - 96, September - 350, October - 1,291, November - 1,117, December - 126, January - 23, February - 35, March - 86, April - 741, and May - 108.

Present year-round.

### **Ring-billed Gull**

*Larus delawarensis*

**Status:** Casual.

**Occurrence:** This species associates with other gulls at feeding and roosting sites. Two were seen on 16 July 2004 and a single bird on 24 May 2005.

### **California Gull**

*Larus californicus*

**Status:** Very rare autumn and spring visitant.

**Occurrence:** Small numbers can be found among other feeding and roosting gulls. The maximum recorded was 11 birds on 15 October 2004. There are no winter records.

### **Herring Gull**

*Larus argentatus*

**Status:** Rare autumn and winter visitant.

**Occurrence:** Small numbers (up to 24 birds) can be found among other feeding and roosting gulls. All records are from November and December.

Recorded from 12 November to 1 December.

### **Glaucous-winged Gull**

*Larus glaucescens*

**Status:** Common to seasonally abundant resident.

**Occurrence:** This ubiquitous coastal species (Figure 10) utilizes log-booms throughout the year and forages throughout the inlet. Sub-adults and immatures are present throughout the summer while peak numbers for all age classes start building in September and October with peaks in November when salmon are spawning in the Theodosia River.

Present year-round.



**Figure 10.** The Glaucous-winged Gull is present year-round in Theodosia Inlet but is most abundant when salmon are spawning. Esquimalt Lagoon, BC. 24 August 2005 (R. Wayne Campbell).

### **Pigeon Guillemot**

*Cepphus columba*

**Status:** Casual.

**Occurrence:** One or two adults were seen on three occasions from 18 to 23 June 2004.

### **Marbled Murrelet**

*Brachyramphus marmoratus*

**Status:** Uncommon late spring and summer visitant.

**Occurrence:** One or two birds, in adult plumage, regularly forages in the inlet near the log-boom site each year.

Recorded from 7 April to 8 August.

### **Band-tailed Pigeon**

*Patagioenas fasciata*

**Status:** Casual.

**Occurrence:** Eight birds were feeding on red elderberries (*Sambucus racemosa*) in a nearby clearcut on 18 and 24 July 2006.

### **Rufous Hummingbird**

*Selasphorus rufus*

**Status:** Casual.

**Occurrence:** Single birds were only seen twice on the log-boom site: 25 May 2005 and 27 May 2004.

### **Belted Kingfisher**

*Ceryle alcyon*

**Status:** Uncommon resident.

**Occurrence:** Males defend feeding areas throughout the year while females disperse in late autumn and do not return until early spring. First family groups were noticed on 25 June 2004 and 30 June 2006.

Males are present year-round; females recorded from 2 March to 30 November.

### Red-breasted Sapsucker

*Sphyrapicus ruber*

**Status:** Accidental.

**Occurrence:** A single bird was perched in a small red alder snag at the log-boom site on 25 November 2004.

### Northern Flicker

*Colaptes auratus*

**Status:** Rare late spring and summer visitant.

**Occurrence:** All sightings are of the “Red-shafted” form (*C. a. cafer*) and all records are of individuals flying along the shoreline over riparian habitats.

Recorded from 7 March to 10 August.

### Olive-sided Flycatcher

*Contopus cooperii*

**Status:** Casual.

**Occurrence:** A single bird was seen on three occasions perched in trees in a shore riparian zone from 17 to 25 July 2006.

### Steller’s Jay

*Cyanocitta stelleri*

**Status:** Uncommon from late spring to early autumn.

**Occurrence:** This species occurs irregularly and is usually seen flying as single birds between feeding locations. It has not visited the log-booms.

Recorded from 10 May to 20 September.

### Northwestern Crow

*Corvus caurinus*

**Status:** Common resident.

**Occurrence:** Up to 10 birds forage each day at low tides along beaches and in the estuary (Figure 11). A few birds also feed on the log-booms.

Present year-round.



**Figure 11.** The Northwestern Crow, a year-round resident in Theodosia Inlet, feeds on a wide variety of foods including intertidal crabs. Clover Point, BC. 10 August 2003 (R. Wayne Campbell).

### Common Raven

*Corvus corax*

**Status:** Common resident.

**Occurrence:** Present in small numbers throughout the year. A resident pair visits the log-boom site daily for handouts.

Present year-round.

### Tree Swallow

*Tachycineta bicolor*

**Status:** Accidental.

**Occurrence:** Four birds were foraging over the log-booms on 4 May 2006. Old pilings still standing on the west side of the estuary may attract nesting pairs in the future.

### Violet-green Swallow

*Tachycineta thalassina*

**Status:** Rare spring visitant.

**Occurrence:** From one to five birds can occasionally be seen foraging over the log-booms in May each year.

Recorded from 3 to 29 May.

### Northern Rough-winged Swallow

*Stelgidopteryx serripennis*

**Status:** Common summer visitor. Probably breeds.

**Occurrence:** Arrives in late April and departs during the first half of August. Small numbers, up to nine

birds, forage daily over the estuary, inlet, and log-booms. Flights to inland locations suggest that pairs breed there.

Recorded from 21 April to 19 August.

### **Barn Swallow**

*Hirundo rustica*

**Status:** Common summer visitor. Breeds.

**Occurrence:** Generally arrives during May and leaves the area during August. Arrival and departure dates were 30 May to 3 August (2004), 24 May to 10 August (2005), and 1 May to 25 August (2005). A pair nests each summer under a wooden walkway to the dock. The latest date was a family with two recently fledged young seen on 2 August 2006.

Recorded from 1 May to 25 August.

### **Chestnut-backed Chickadee**

*Poecile rufescens*

**Status:** Rare resident.

**Occurrence:** Small groups of up to seven birds are seen infrequently foraging in mixed riparian shrubs and trees along the shores of the log-boom site.

Recorded from 7 February to 26 November.

### **Winter Wren**

*Troglodytes troglodytes*

**Status:** Casual.

**Occurrence:** Occasionally single birds are seen foraging in nearby riparian habitats in late autumn and early winter.

Recorded from 1 November to 31 December.

### **American Dipper**

*Cinclus mexicanus*

**Status:** Accidental.

**Occurrence:** A single bird was feeding on a log-boom on 20 October 2004.

### **Golden-crowned Kinglet**

*Regulus satrapa*

**Status:** Rare in late autumn to early spring.

**Occurrence:** Up to five birds occur irregularly and are usually seen foraging in the riparian habitats of mixed shrubs and coniferous and deciduous trees.

Recorded from 17 November to 4 March.

### **Ruby-crowned Kinglet**

*Regulus calendula*

**Status:** Accidental.

**Occurrence:** A female was seen foraging in a semi-open beach edge on 28 September 2007.

### **American Robin**

*Turdus migratorius*

**Status:** Common spring and summer visitant.

**Occurrence:** This familiar species forages in a wide variety of habitats including the intertidal zone at low tide and log-booms where insects are eaten.

Recorded from 3 March to 24 September.

### **Varied Thrush**

*Ixoreus naevius*

**Status:** Accidental.

**Occurrence:** A single bird was feeding on the log-booms on 11 November 2004.

### **American Pipit**

*Anthus rubescens*

**Status:** Uncommon spring and autumn migrant.

**Occurrence:** Small flocks forage in open habitats, including log-booms, each spring and autumn. The largest flocks were both recorded in 2006; 23 birds on 26 April and 17 birds on 1 May.

Recorded from 25 April to 11 May, and from 20 September to 19 October.

### **Yellow Warbler**

*Dendroica petechia*

**Status:** Uncommon spring migrant and summer visitant.

**Occurrence:** Frequents mixed shrubby riparian shores. Arrival dates were within 2 days for 3 years: 5 May 2005, 8 May 2006, and 17 May 2004.

Recorded from 5 May to 14 July.

### **Yellow-rumped Warbler**

*Dendroica coronata*

**Status:** Rare spring migrant.

**Occurrence:** Frequents mixed shrubby riparian habitats. All records are of foraging males and of the Audubon's form (*D.c. auduboni*).

Recorded from 3 March to 16 May.

**American Redstart**

*Setophaga ruticilla*

**Status:** Accidental.

**Occurrence:** A male was observed on 30 April 2004 in riparian habitats about 1-km from the log-boom site. This species is considered rare anywhere on the British Columbia coast (Campbell et al. 2001).

**Savannah Sparrow**

*Passerculus sandwichensis*

**Status:** Uncommon spring and autumn migrant.

**Occurrence:** Frequently seen in April and May, and again in September, foraging along upper beaches, open grassy patches, and occasionally on log-booms.

Recorded from 20 April to 14 June, and from 20 and 21 September.

**Fox Sparrow**

*Passerella iliaca*

**Status:** Rare migrant and casual in summer.

**Occurrence:** In 2004, a single bird was regularly seen foraging in riparian understory from 15 June to 21 September. The subspecies was identified as the “Sooty” Fox Sparrow (*P. i. fuliginosa*).

Recorded from 15 June to 21 September.

**Song Sparrow**

*Melospiza melodia*

**Status:** Common resident.

**Occurrence:** This species could be regularly heard singing and seen feeding at the edge of riparian habitats around the log-boom site throughout most of the year. However, the species was not observed in January or February.

Recorded from 1 March to 31 December.

**Lincoln’s Sparrow**

*Melospiza lincolnii*

**Status:** Accidental.

**Occurrence:** A single bird was seen foraging along the beach at the edge of riparian shrubs on 2 May 2006.

**White-crowned Sparrow**

*Zonotrichia leucophrys*

**Status:** Rare spring migrant and summer visitant.

**Occurrence:** One or two birds were heard singing, or seen foraging, in riparian shrubs along the shores each year.

Recorded from 6 April to 9 June.

**Dark-eyed Junco**

*Junco hyemalis*

**Status:** Rare autumn to spring visitant.

**Occurrence:** Small flocks of “Oregon” Dark-eyed Juncos (*J. h. oregonus*) are infrequently seen foraging in riparian shrubs along the shores each year. Maximum flocks were recorded in 2005: 12 birds on 18 March and six birds on 15 April.

Recorded from 20 September to 18 March.

**Black-headed Grosbeak**

*Pheucticus melanocephalus*

**Status:** Accidental.

**Occurrence:** A single bird was observed in shore riparian habitat on 30 July 2004.

**Brown-headed Cowbird**

*Molothrus ater*

**Status:** Casual.

**Occurrence:** Two males were seen on 25 April 2005, a single male on 15 June 2004, and a juvenile on 16 August 2006, all in riparian habitats.

Recorded from 5 April to 16 August.

**Purple Finch**

*Carpodacus purpureus*

**Status:** Accidental.

**Occurrence:** Three males and five females were perched in a western redcedar tree on 28 September 2007.

**Summary**

I recorded 83 species of birds in the immediate vicinity of a small, isolated log storage and handling operation in Theodosia Inlet, BC between October 2003 and October 2007. Observations were made incidentally during work shifts over a period of 383 days.

Log-booms are utilized by 30 species as sites for resting, feeding, and aerial foraging (Table 2). Twenty species use log-booms for resting, loafing, and preening. Of these, gulls (six species) occur in



**Table 2.** List of birds that utilize log-booms for resting, feeding, and aerial foraging in Theodosia Inlet, BC, 2003-2007.

Species	Behaviour		
	Resting <sup>1</sup>	Feeding <sup>2,4</sup>	Foraging <sup>3</sup>
Canada Goose	X		
Mallard	X		
Common Merganser	X		
Double-crested Cormorant	X		
Great Blue Heron	X	X	
Bald Eagle	X		
American Kestrel	X		
Killdeer	X	X	
Spotted Sandpiper	X	X	
Black Turnstone	X	X	
Western Sandpiper	X		
Bonaparte's Gull	X		
Mew Gull	X		
Ring-billed Gull	X		
California Gull	X		
Herring Gull	X		
Glaucous-winged Gull	X		
Rufous Hummingbird			X
Belted Kingfisher	X	X	
Northwestern Crow	X	X	
Common Raven	X	X	
Tree Swallow			X
Violet-green Swallow			X
Northern Rough-winged Swallow			X
Barn Swallow			X
American Dipper		X	
American Robin		X	
Varied Thrush		X	
American Pipit		X	
Savannah Sparrow		X	

<sup>1</sup> Includes resting, loafing, sleeping, and preening activities.

<sup>2</sup> Includes actually feeding on the log-booms as well using them as hunting perches.

<sup>3</sup> Includes aerial-feeding species that prey on flying insects associated with log-booms.

<sup>4</sup> Includes species that hunt prey from perches and pilings on log-booms.

the largest numbers. Ten species actually feed on insects and marine invertebrates on log-booms and another two species (Great Blue Heron and Belted Kingfisher; Figure 12) use logs and pilings as perches to hunt from. Five other species forage low over log-booms to feed on flying insects (Table 2).



**Figure 12.** The Belted Kingfisher hunts prey from wires and pilings associated with log-booms in Theodosia Inlet, BC. Victoria, BC. 26 July 2005 (R. Wayne Campbell).

Log sorting and handling sites provide a temporary habitat for migrating, wintering, and breeding birds, and when collectively considered for the entire British Columbia coast they may be more significant than we realize.

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#### ***About the Author***

Ivar was born in Denmark and came to Canada as a youngster in 1951. He grew up on a small farm in Sooke and when he left public school he worked on the log-boom site at nearby Muir Creek. He moved to Dawson Creek where he worked on bridge construction and maintenance for 10 years before moving to Canal Flats in the East Kootenay region of British Columbia. While there he was encouraged by two good friends, Bill Warkentin and Peter Davidson, to keep notes on wildlife he saw during hikes around Canal Flats and Columbia Lake. He has maintained daily field notes since and now living in Powell River, has provided the province's first year-round information on birds, and other animals, living on the northern Sunshine Coast.