

## British Columbia Coast BirdWatch

The Newsletter of the BC Coastal  
Waterbird and Beached Bird Surveys

### Fraser River Estuary Important Bird Area eBird Count

Graham Sorenson, BC Projects Coordinator

On November 18, 2018, 35 experienced birders conducted a thorough count of the Fraser River Estuary Important Bird Area (IBA). The count followed an established eBird IBA Count Protocol, which uses eBird Canada's tools and platform to submit birding checklists within the IBA. By using the observation protocol "IBA Canada (protocol)" on each eBird checklist, eBird Canada assumes that all checklists on that day avoid duplication of counts, so can be summed together. This data is then automatically exported to Bird Studies Canada and the IBA Canada website at regular intervals.

During the Fraser River Estuary IBA count, a total of 121 species and 282,402 individuals were documented across 124 birding checklists. We counted globally significant numbers of American Wigeon, Dunlin, and Iceland Gull (Thayer's) (Table 1). We also counted a significant number of the nationally listed *fannini* subspecies of Great Blue Heron (Table 1). The threshold values for all of these species represent 1% of the population found globally (nationally for the Great Blue Heron). IBA Canada Criteria also consider any single species count of over 20,000 individuals to be significant. Notable counts of other species were 28,536 Snow Geese, 33,991 Mallards, and 20,858 Northern

#### ALSO IN THIS ISSUE:

- Coastal Waterbird Survey 2017-18 Summary
- Beached Bird Survey 2017 Summary
- Murre and Alcid Die-off in Alaska
- Fraser River Estuary IBA and Ramsar Convention
- Pulse of Shorebird Migration
- Migratory Shorebird Project

Pintails. As these counts all surpassed 20,000 individuals, they are considered important thresholds within the IBA criteria. A high diversity of raptors (12 raptors and Northern Shrike) were also counted, highlighting the importance of the Fraser River Estuary for wintering raptors. Several rare and uncommon species were also found on the count day, including a Northern Goshawk and a Ruff, and sightings of a Barn Owl.

This IBA is 754 square kilometres, so this count was a test of the planning and number of surveyors required to count such a large area thoroughly. We managed to cover about half of the entire IBA area, just enough to follow the 50% coverage guideline of the eBird IBA Canada Protocol. However, because we targeted high diversity and number areas, we estimate we counted closer to 90% of these high concentration areas. The largest gaps in our survey coverage were due to access permissions (private and farm land, primarily) and access feasibility (Burns Bog Ecological Conservancy Area and marine surveys by boat). Future efforts would

## Fraser River Estuary IBA eBird Count (continued)

focus on having more surveyors out in boats in the marine and river sections of the IBA.

British Columbia has a large number of Important Bird Areas, especially along our coasts, but also in several important interior areas. These can be easily explored at

[www.ibacanada.ca/mapviewer.jsp](http://www.ibacanada.ca/mapviewer.jsp). The IBA Canada eBird Protocol is designed to allow any interested surveyors/birders to do these sorts of coordinated counts in their local IBA. If you are interested in learning more or coordinating a count at your local IBA, refer to [www.ibacanada.ca/documents/eBird\\_IBA\\_protocol.pdf](http://www.ibacanada.ca/documents/eBird_IBA_protocol.pdf), or contact our office and we can help get you started.

Table 1: Species counted during IBA count (some species not included). Bolded species and counts surpassed the IBA thresholds.

Species Name	Species Count	Significant Population
Snow Goose	<b>28,536</b>	75,600 (Global)
Brant	312	5,637 (Global)
Trumpeter Swan	280	340 (Global)
Tundra Swan	14	
<b>American Wigeon</b>	<b>52,388</b>	22,300 (Global)
Mallard	<b>33,991</b>	190,000 (Global)
Northern Pintail	<b>20,858</b>	53,500 (Global)
Horned Grebe	89	6,200 (Global)
Red-necked Grebe	12	2,400 (Global)
Western Grebe	107	1,300 (Global)
Black-bellied Plover	359	6,920 (Global)
<b>Dunlin</b>	<b>63,844</b>	55,500 (Global)
Western Sandpiper	3	35,000 (Global)
Mew Gull	699	31,000 (Global)
<b>Iceland Gull (Thayer's)</b>	<b>121</b>	100 (Global for subspecies)
Glaucous-winged Gull	4,840	5,700 (Global)
<b>Great Blue Heron (fannini)</b>	<b>337</b>	45 (National for subspecies)
Northern Harrier	90	
Bald Eagle	191	
Red-tailed Hawk	60	
Rough-legged Hawk	9	
Barn Owl	1	
Great Horned Owl	2	
Short-eared Owl	7	
American Kestrel	1	
Merlin	5	
Peregrine Falcon	8	
Northern Shrike	14	



American Wigeon, Reifel Bird Sanctuary, G. Sorenson



IBA Survey, Brunswick Point, K. Hick

## BC Coastal Waterbird Survey Summary 2017-2018

During the 2017-2018 Coastal Waterbird Survey season, 1,293 surveys were conducted and documented 105 waterbird species! Counts were conducted at 198 sites across BC, totalling 15,449 records, and an impressive 24,197 volunteer hours. The largest count of a single species was 32,420 American Wigeon in Delta near

Roberts Bank. Some bird highlights from the season include a Black-legged Kittiwake in Sooke Harbour, Victoria in November 2017, a Wandering Tattler near Gibsons on the Sunshine Coast, and a Parasitic Jaeger on Malcolm Island, both in September 2017.

We would like to extend a huge thank you to the many volunteers that participated in the survey this past

## BCCWS Summary 2017-2018 (continued)

season. We are always trying to expand our coverage of BC's coasts with this survey. If know of anyone that may be interested in becoming a volunteer, please contact Graham at [BCvolunteer@birdscanada.org](mailto:BCvolunteer@birdscanada.org). Please let us know if we can make participation in this survey more

### British Columbia Beach Bird Survey 2017 Summary

In 2017, 818 Beached Bird Surveys were conducted on 88 beach sites by 150 volunteers. This totaled close to 720 km of beach surveyed by volunteers! Amazingly, 85 carcasses were found in 2017, exactly the same number as in 2016! Glaucous-winged Gulls were the most commonly encountered species this year, with 31 detections. Thirteen unidentified gulls and one California Gull were also encountered. Very few alcids were found this year, with only Common Murre (3), Marbled Murrelet (1), and Pigeon Guillemot (1) detected. All three cormorant species were found: Double-crested (3), Brandt's (2), and Pelagic (2). Small numbers of dabbling ducks (American Wigeon (2), Green-winged Teal (1), and Mallard (1)) and diving ducks (White-winged Scoter (3), Bufflehead (2), and Surf Scoter (2)) were also found. Other interesting species detected included Brant (2), Black Turnstone (1), Bald Eagle (1), Trumpeter Swan (1), and Western Grebe (1).

During the fall of 2018, there was a small wreck event caused by entrapment in local fishing equipment near Tsawwassen, BC. Many individuals were found in this event outside of the Beached Bird Survey week. Local volunteers helped count beached birds, primarily



Common Murre, Fred Gingall Park, M. Sirton

enjoyable!

The updated hotspot maps that we previously wrote about can now be accessed at: <https://www.bsc-eoc.org/volunteer/bccws/bccwsmaps.jsp>. Please explore these amazing maps produced by BCCWS volunteer data!

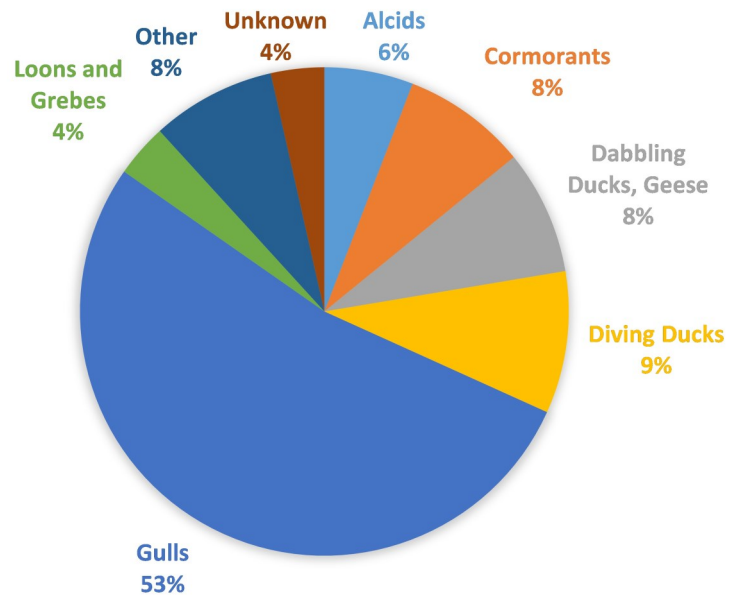


Figure 1 Carcasses found during the 2017 Beached Bird Survey.

Common Murre, with a few cormorants, one loon, and a Rhinoceros Auklet. Our Beached Bird Survey volunteers continue to be very important at detecting and monitoring these types of events.

A huge thank you to all of our volunteers for another year of surveying, and a big welcome to new volunteers! Please remember to submit a data form each month you survey, even if you do not find birds, as this zero data is very important. Also, please send photos of found carcasses by email. As always, if you know of anyone interested in joining this survey, please ask them to contact us at [BCvolunteer@birdscanada.org](mailto:BCvolunteer@birdscanada.org).



Marbled Murrelet, Songhees Point, D. Chambers

## Murre and Alcid Die-off in Alaska

Graham Sorenson

During the summers of 2016-2018, hundreds of seabirds washed up on the Alaskan coast. An event like this in a single summer is not a new phenomenon, and healthy seabird colonies of millions of birds can bounce back after a bad summer. However, three years in a row of massive die-offs of seabirds and poor reproductive success can start to have impacts on seabird populations.

Warmer summer water temperatures and less ice during the winters are evidence of large-scale changes in the northern climate. A North Pacific Ocean warm water “blob” has likely been influencing regional water temperatures. Most Arctic fish and other prey species are found in colder waters, so these events push seabirds’ prey sources too far from their breeding colonies for them to find food for themselves or their offspring, with severe population consequences.

Die-off events like this have happened along BC’s coast, such as the large Cassin’s Auklet die-off in 2014-15 that occurred from BC to California. Volunteers and

## Fraser River Estuary IBA and Ramsar Convention

James Casey and Pete Davidson

Coastal wetlands in British Columbia are often subject to many pressures. There is no better example than the Fraser River Estuary Important Bird and Biodiversity Area (IBA) and indeed many IBAs around the world. Recent research published in the journal Nature on the global distribution and trajectory of tidal flats showed that 16% of the world’s tidal flats were lost to a suite of human pressures between 1984 and 2016. Bird Studies Canada (BSC) and others have been working at an international policy level for a number of years to secure government commitments to care for coastal wetlands and the bird populations they support. In October 2018, this effort took BSC’s Pete Davidson to Dubai, as part of the BirdLife International delegation to the 13th Conference of Parties to the Ramsar Convention.

researchers spend time monitoring the coasts for beached birds from California to Alaska, and this effort continues to be important in detecting these events early to help understand the causes.

Mock, Jillian. 2018. In Alaska, Starving Seabirds and Empty Colonies Signal a Broken Ecosystem. Audubon. <https://www.audubon.org/news/in-alaska-starving-seabirds-and-empty-colonies-signal-broken-ecosystem>. Published September 11, 2018.

National Park Service. 2018. Seabird Die-Offs. Alaska Nature and Science. <https://www.nps.gov/subjects/aknatureandscience/commonmurrewreck.htm>. Published December 5, 2018.



Common Murres, Triangle Island, D. Bradley

Ramsar’s mission is to enable “the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world”, so is an obvious place to seek commitments to conserving coastal wetlands. BSC attended the Conference of Parties to fulfil two objectives: 1) to profile why the Fraser Delta is an IBA in Danger and a Ramsar Site under threat; and 2) to support BirdLife International’s input on the resolutions that are important for birds, in particular, the resolution on the conservation of coastal wetlands and establishment of a “global coastal forum” to implement the resolution.

Bird Studies Canada was able to profile the Fraser Delta at two “side-events” attended by well over 100 country delegates and observers. No concrete commitments were made but efforts continue to nudge the Canadian government towards a collaborative governance

## Fraser IBA and Ramsar (continued)

framework for the Fraser Delta.

On the last day of the conference the resolution on coastal wetlands was passed. The coastal wetlands resolution is important because it encourages the countries that have signed on to the Ramsar Convention, including Canada, to take a number of actions to conserve intertidal wetlands and adapt to climate change. Article 44 is of particular importance to British Columbia because it encourages countries “to ensure that intertidal Ramsar Site boundaries include the entire ecosystem of importance to migratory waterbirds and other dependent species”. The omission of parts of Robert’s Bank from the Fraser estuary Ramsar Site is a glaring example of failing to incorporate the entire ecosystem of importance to migratory birds. The loss of coastal wetlands is an issue all across the BC coast. This new resolution provides wording to those engaged in the conservation of intertidal habitat in BC

## Pulse of Shorebird Migration (A Thesis by Dr. David Hope)

Graham Sorenson

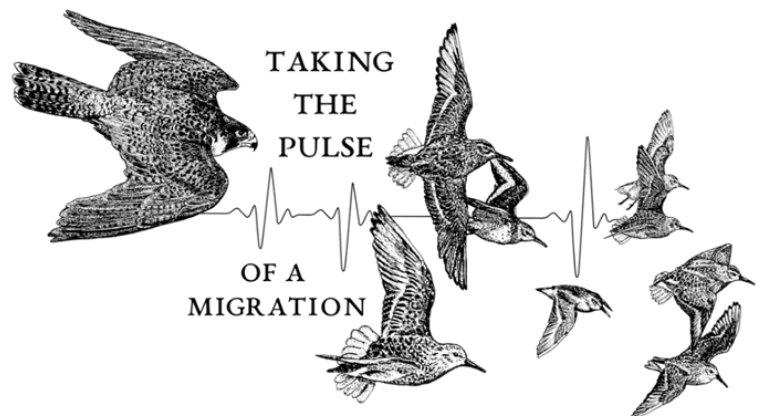
Dr. David Hope recently defended his PhD thesis on the migration of Western Sandpipers at Simon Fraser University. Using survey data from many Citizen Science volunteers, most from Bird Studies Canada’s network of volunteers in BC, David was able to get simultaneous counts of Western Sandpipers (WESA) across coastal BC. These simultaneous surveys and behavioural observations allowed conclusions to be drawn about site usage and important site characteristics, as well as timing of migration based on different factors. Migration counts were conducted in both July (southward migrating adult WESA) and August (southward migrating juvenile WESA). Counts of Peregrine Falcons were also conducted during the surveys. Peregrines are the primary predator of migrating shorebirds, and results indicate that they are influencing the timing and behaviour of migrating Western Sandpiper.

and elsewhere with an international imperative for our governments to act on conserving these wetlands.

Conserving migratory bird habitat is challenging work that requires efforts at multiple scales. This is beyond the capacity of any one organization and so collaboration is needed to build a chain of knowledge and action from the local beach to international conference tables and back again. The adoption of the resolution on coastal wetlands is an example of how these linkages can work with direct ties from the knowledge gained from projects such as the Coastal Waterbird Survey, through the IBA Caretaker Program, and on to engagement with Birdlife International in international policy development. As a link in this growing network, each of you can help identify opportunities to advance the conservation of coastal wetlands. If you think we should be connected with someone working for the conservation of coastal wetlands or if there is someone that you would like to be introduced to please reach out and let us know.

The survey data was used to generate simulated models of WESA counts and stopover location. The models found that the timing of Peregrine Falcon migration produced the most accurate simulated count data. Peregrine Falcon timing is closely related to snow melt time in their breeding grounds, so WESA may be timing their southward migration based on cues about snowmelt in their breeding grounds.

You can learn more about the project by visiting [www.sfu.ca/~dhope/](http://www.sfu.ca/~dhope/).



Artwork by Marinda Out

## Migratory Shorebird Project

In late January, Dr. Matt Reiter from Point Blue Conservation Science traveled to Ladner, BC to present to Environment and Climate Change Canada staff the progress made on the Migratory Shorebird Project. The MSP has been running for 8 years and engages over 50 partners across North and South America. The BC Coastal Waterbird Survey data

is a key contribution from Canada. The project uses the data collected to evaluate impacts of habitat loss, pollution, and climate change to shorebirds at different scales from the local site to the entire flyway. In enhancing our understanding of the threats to shorebirds, the MSP is essential to tracking the success of the Pacific Americas Shorebird Conservation Strategy and thereby helping us adjust our conservation efforts.

## Photos From 2018



Tsawwassen Training Workshop, G. Sorenson



Victoria Training Workshop, G. Sorenson



CBC for Kids in Tsawwassen, M. Sirton



Margaret Atwood with BSC Staff, C. Artuso

A special thanks to **White Rock Sea Tours** for the use of their boat during the Fraser Estuary IBA Count!

Bird Studies Canada's Beached Bird and Coastal Waterbird Surveys are supported by:

This project was undertaken with the financial support of:  
Ce projet a été réalisé avec l'appui financier de :



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Climate Change Canada

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