

Marshnotes[®]



**BRITISH COLUMBIA WATERFOWL SOCIETY
SUMMER 2010**

BRITISH COLUMBIA WATERFOWL SOCIETY

Managers of The George C. Reifel Migratory Bird Sanctuary since 1963

~ *dedicated to the study and conservation of migratory waterfowl* ~

Marshnotes:

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Produced at Minerva House

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5191 Robertson Road,
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V4K 3N2

Telephone: 604 946 6980
Facsimile: 604 946 6982

Website: <http://www.reifelbirdsantuary.com>

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DEADLINE FOR THE NEXT ISSUE OF MARSHNOTES

October 4th 2010

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Kathleen Fry

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Gift Shop Manager: Varri Raffan
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Habitat Maintenance: Claire de la Salle
Grounds Maintenance: Larry Kane

Hours of operation:	Sanctuary Gate:	9.00 a.m. - 4.00 p.m. (all year round)
	Gift Shop:	9.00 a.m. - Noon 1.00 p.m. - 4.00 p.m.
Admission:	Members:	Free
	Non-members:	Adults: \$5.00 Children (2-14 years) and Seniors (60+): \$2.50
School group tours:	Adults: \$2.50	Children (2-14 years) and Seniors (60+): \$1.50

The Sanctuary is wheelchair accessible

School group tours by arrangement

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About Our Covers

Front Cover: Sandhill Crane and colt at the Sanctuary © Kathleen Fry

Back Cover: Willet © Jim Martin

The Sanctuary

Into the bird sanctuary midday,
midweek, midsummer where
the alders shape themselves into oaks
and the lanes are contoured
to the eye of *Homo sapiens*, and
suffice as work areas for towhees
and dragon flies. The breeze blows

continuous melancholy, blows
through the notes of the song sparrow,
through the croaks of the sandhill cranes.
My lips rest on the epidermis
of a ginger cookie. I walk along the lane,
a gallery membered by numerous spirits
some seen and only poorly understood.

© Dan Paquette

Dan Paquette works and volunteers on projects studying and restoring native plant habitat in central and western Washington. He holds advanced degrees in Media, Sociology and Librarianship from Mankato State University and the University of Washington. Both his prose and poetic works have appeared in publications of the Washington Native Plant Society and the University of Washington Arboretum Bulletin.

Varri's Quick Quiz

- A young Sandhill Crane is called a?
Favourite seed of chickadees?
Provincial bird of British Columbia?
One of two types of blackberry found at the Sanctuary?
When ducks moult they are in plumage?
Type of fish spotted in the sloughs at the Sanctuary?
Lobe-toed waterbird?
A mix of salt and fresh water?
Small owl seen at the Sanctuary from November to March?
Where do hummingbirds migrate for the winter?
Owl that rests underground?
A group of owls is called a?
Also known as *Chen caerulescens*?
Bird that lays its eggs in other birds nests?
- Answers to Varri's Quick Quiz can be found on page 7

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Snow Goose ecology and management on the Fraser and Skagit River deltas

This article is a summary of the presentation which Dr. W. Sean Boyd gave at the BCWS Annual General Meeting on April 13th 2010.

Background

The population of Snow Geese nesting on Wrangel Island is of international concern. The geese have been 'red-listed' in Russia because they are the only Snow Geese remaining in Asia. In 1976, Russia designated Wrangel Island as a nature preserve, in part to protect the geese. The geese use three different countries during the annual cycle; while the entire population breeds in one main colony on Wrangel Island, they migrate to North America to overwinter in two separate areas, the Fraser (B.C.) and Skagit River (WA) deltas (the northern sub-population) and near Sacramento CA (the southern sub-population). This means that international collaboration is needed to manage the population.

In this article I summarize the population dynamics of the northern contingent on the Fraser and Skagit deltas, concerns associated with the recent increase in abundance, and a proposed harvest strategy to maintain numbers within sustainable limits.

Sub-population dynamics

In the early 1990s a draft management plan set an abundance goal of 120,000 geese for the Wrangel population. Approximately half the birds (or 60,000) were wintering on the Fraser-Skagit wintering area at that time. This abundance level has been exceeded almost every winter since 2000 (see Figure 1).

The Fraser-Skagit sub-population is largely a closed one; that is, once California-bound birds have moved through by late fall, there is no immigration into or emigration out of the deltas. The Fraser geese move to the Skagit for 1-2 months in mid-winter and then back again to the Fraser prior to spring migration (see Figure 2). This pattern of movement between the deltas has been consistent from 1987-88 to the present, although an increasing number of geese have been overwintering on the Fraser in recent years. Unfortunately, there is no stable, consistent period when the Fraser flock can be monitored and managed separately from the larger sub-population.

The Fraser-Skagit sub-population has been growing at about 2% per year over the last 20 years. If this rate continues, the number of geese could potentially increase to >300,000 by 2030. This is not an unlikely scenario given the dramatic increases in other Arctic goose populations in North America in recent years. For example, the Greater Snow Goose population on the Atlantic coast has grown from only 25,000 birds in the mid-1960s to well over one million birds, and the mid-continent population of Lesser Snow Geese has increased from a few million individuals to well over ten million.

The number of goslings (or grey birds) in the population is largely driven by weather conditions on Wrangel Island. Over the last 30 years, temperatures have increased by about 2°C and precipitation has decreased by about 80%. These improved conditions have been mostly responsible for the recent increase in the number of geese now wintering on the Fraser

and Skagit deltas. And, as the Arctic warms, this pattern of higher-than-normal recruitment is expected to continue. Even small increases in recruitment can have dramatic effects on abundance. For example, if recruitment had only been 5% higher each year beginning in 1987-88, the sub-population would have reached 325,000 birds or roughly 4 times the current number.

Concerns

The recent increase in abundance has generated several socio-economic concerns, including increased potential for depredation of commercial farm crops, increased potential for collisions with aircraft at Vancouver International Airport, and damage to Richmond school and sports fields. These concerns intensified as goose numbers increased above 60,000.

Another important concern relates to the impact the geese are having on bulrush, their traditional food on the Fraser delta. Figure 3 presents stem density measurements in closed plots (exclosures to prevent geese from feeding on rhizomes, removed in 1992) and open plots from 1988 to the present. Density differences between the closed and open plots up to 1992 show the level of impact the geese can have on the marsh. Data from the open plots in the 1990s, when goose numbers were <60,000, suggest that the system was at a 'stable equilibrium', meaning that goose feeding rates and plant growth rates were in balance. However, as the number of geese increased above 60,000 individuals, plant density began to decline significantly. If this is allowed to continue the ecological contribution of the marsh to the Fraser estuary will become trivial and an important food source will be lost to the geese and other wildlife.

Until the early 1980s, bulrush was the primary, traditional food for Snow Geese on the Fraser delta. Today the geese forage on farm crops during the day but continue to roost on the foreshore at night where they consume bulrush rhizomes. This traditional food may be critical to the geese during periods of extreme weather conditions when farms are frozen/snowed under and thus unavailable. If marsh density is driven to a very low level it will not be able to support the geese in years when extreme weather conditions last for several weeks. This could negatively affect body condition, survival and/or reproduction, and the long-term sustainability of the goose population.

Proposed Harvest Strategy

Upper limit:

As previously noted, when the Fraser-Skagit sub-population was <60,000 birds there were very few socio-economic concerns and the interaction between the geese and bulrush was a balanced one. For these reasons, 60,000 is a reasonable and logical upper goal for the Fraser-Skagit River sub-population under current conditions.

Strategy:

Because the Fraser-Skagit sub-population is closed, recruitment and harvest are the main factors responsible for changes in abundance from year to year and over the long term. We have no control over weather conditions on Wrangel Island (and therefore recruitment) so our only option is to manage harvest on the winter grounds. From the 1950s to 1970s, the proportion of the Fraser-Skagit sub-population taken by hunters ranged between 15-20%. However, from 1987-88 to 2004-05, harvest dropped to 5-10% and this contributed to the growth of the sub-population. In response to the increasing abundance of geese, hunting regulations were relaxed in 2005-06. This raised the harvest rate to >15% and, in the process, helped reduce the growth rate of the sub-population in the last few years.

To maintain the sub-population within prescribed limits, harvest will need to continue at about 15-20%. The actual rate applied each year, however, will depend on the difference between the mid-winter count and the suggested upper limit of 60,000 birds and some lower level (yet to be determined). Given that a minimum number of geese must return to Wrangel Island each year, hunting may need to be prohibited altogether on both deltas if abundance drops below some critical level (again, to be determined).

Proposed Harvest mechanisms:

The primary means of increasing or decreasing harvest is by changing hunting regulations (bag limits, season lengths, open areas) in response to sub-population level. The large majority of geese is now being harvested on the Skagit delta; not only are there more hunters and more places to hunt compared to the Fraser delta, most of the geese are on the Skagit during late fall to mid-winter when a

substantial amount of hunting occurs. Hence, altering regulations in WA State has more potential to affect harvest and sub-population dynamics than any measures we undertake in B.C.

Monitoring:

Monitoring will form a key part of a successful snow goose management program. Monitoring goose abundance will be necessary to inform hunting regulations and ensure that the sub-population remains within the upper and lower limits, once established. Consequently, data from annual photo counts and hunter surveys are needed. It is also important to continue to monitor the bulrush zone on the Fraser delta to ensure that it remains at a healthy level. As noted above, a bulrush marsh overgrazed to the point where it no longer is a viable food supply could affect the ability of the geese to survive during extended periods of extreme weather.

Summary

The Snow Geese wintering on the Fraser and Skagit deltas are clearly a unique wildlife spectacle on the doorstep of a busy urban area. Not only are the geese enjoyed by naturalists and hunters, they play a major role in the ecology of these deltas. The Arctic is warming and recruitment of young into the population is increasing. This is contributing to an increasing trend in population size which, if allowed to continue, could have negative socio-economic and ecological consequences on the winter grounds. One way to alleviate this concern is to maintain the sub-population within some upper (suggested 60,000) and lower limits by managing harvest levels. Data from annual photo counts and hunter surveys are critical for this management prescription to succeed.

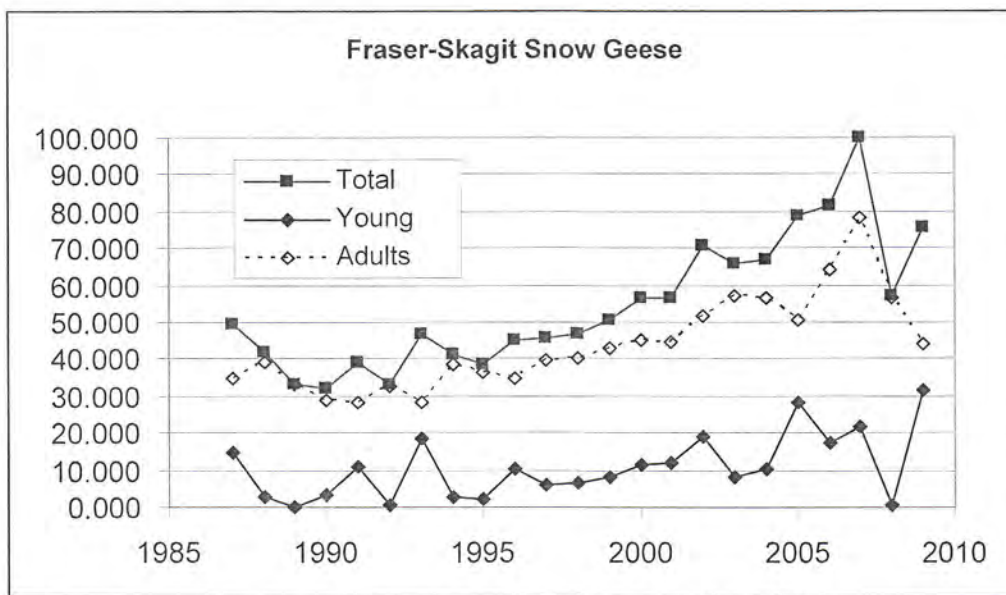


Figure 1: Abundance and recruitment of Snow Geese wintering on the Fraser and Skagit River deltas, 1987-88 to 2009-10. In 2008-09, 10-20K geese are suspected to have moved out of the traditional winter area.

continued overleaf ...

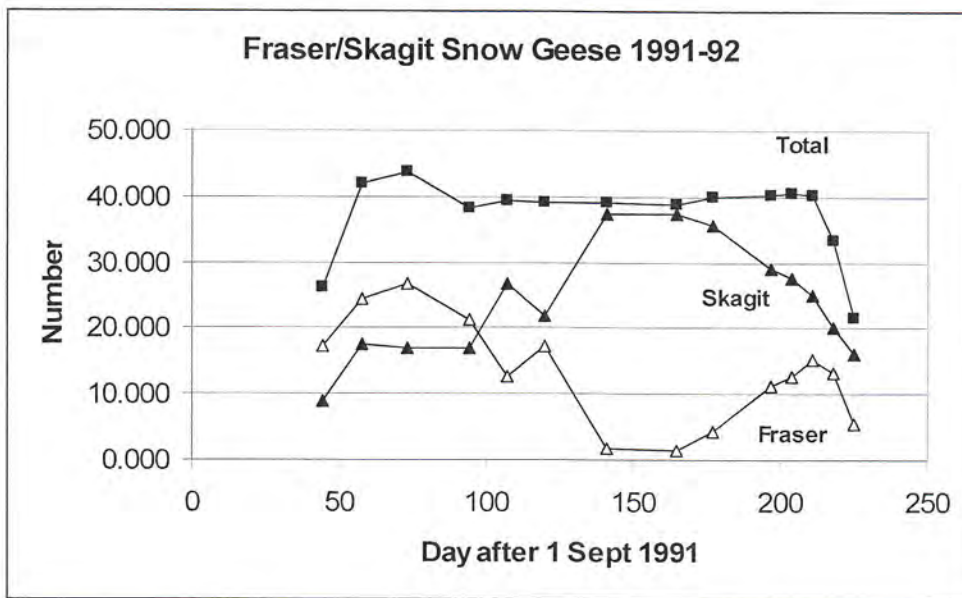


Figure 2: Abundance of Snow Geese on the Fraser and Skagit River deltas in 1991-92, showing the pattern of movement between the two deltas. This pattern has been consistent each year from 1987-88 to the present.

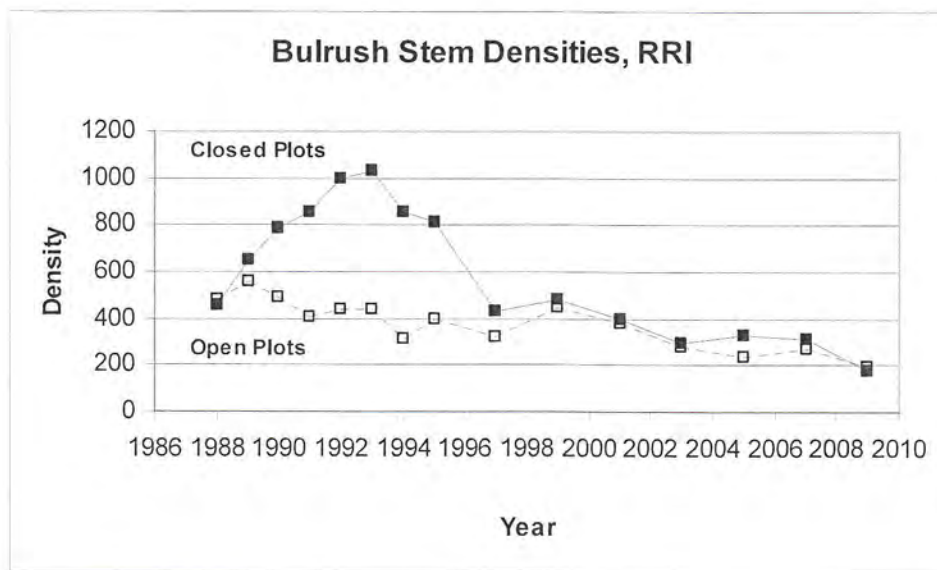


Figure 3: Mean bulrush stem density inside George C. Reifel Migratory Bird Sanctuary (RRI, Fraser River delta), 1988 to 2009. Solid squares represent closed plots from 1988-1992 (after which exclosures were removed) and open squares represent open plots.

Text: Dr. W. Sean Boyd

Sean became a Research Scientist in 1997 and an Adjunct Professor in the Biology Dept. of Simon Fraser University in 1998. He serves on advisory committees of graduate students affiliated with the Canadian Wildlife Service Chair of Wildlife Ecology at Simon Fraser University. He has worked with colleagues and graduate students on a variety of migratory bird projects such as: the winter ecology and demographics of Snow Geese; winter and migration ecology of Brant Geese; abundance and distribution patterns of Trumpeter Swans; population demographics and behavior of Harlequin Ducks; habitat interactions and natal return rates of Barrow's Goldeneye and Bufflehead; interaction between shellfish aquaculture and wintering scoters; migration ecology of Pacific scoters; migration ecology and abundance of Eared Grebes; and at-sea foraging distributions of Cassin's Auklets. Many of his projects are long-term in nature and involve the use and refinement of marking protocols, especially VHF and satellite radio-telemetry. Sean's research is necessarily multidisciplinary and international in scope. The objective is to provide scientific advice necessary to conserve migratory bird populations and their habitats in North America.

Manager's Report

The appeal of viewing young ducklings, goslings and other nesting birds generally brings regular springtime crowds in April, May and June and this year was no exception. Peak visitor days were Mother's Day on May 9th with 1039 visitors, May 24th with 951 visitors, and April 18th with 662 visitors. School programs were booked for nearly every day and we had an overall three-month total of over 21,000 visitors.

Sanctuary bird life in early summer is all about nesting and territorial displays, followed by endless sagas concerning the rearing of young and the annual moult cycle. Around the Gift Shop we have managed to watch the nesting activities of many bird species. Rufous Hummingbirds have recently finished several months of daily squabbling over ownership of the feeder by the shop. A log birdhouse with a tiny entrance hole in the nearby garden provided endless speculation whether the portly House Sparrow or the smaller Black-capped Chickadee would gain entrance. The Gift Shop and Warming Hut roof areas have already produced several Barn Swallow families, and many of the nest boxes in the area have active Tree Swallow nests. A Downy Woodpecker family made itself known in June when the young, begging endlessly from their nest deep in the snag by the workshop, decided to fly after their parents.

Waterfowl in the Sanctuary are in all stages of their nesting season now. Many of our earlier Mallard and Canada Goose broods are almost adult-sized but not yet flying, while Wood Ducks and some Mallards have only recently hatched new later broods, and the Gadwall nests are just hatching now. Gadwall are later nesters and their ducklings are frequently misidentified, as they look very similar to Mallard ducklings.

Nearly all adult waterfowl are moulting, feathers are everywhere, and the birds are in various degrees of flightlessness. During the hot summer days of late May and June, our recently cleared areas on either side of the Fuller Slough blind became the favoured loafing spot for many of the flightless birds, either because of the newly-seeded lawn growth or because they were separated from visitors by the split rail fence.

The Sandhill Crane family has been one of the main attractions sought by visitors this season. Our resident pair had laid two eggs by May 4th and hatched two chicks ("colts") May 31st and June 2nd. One chick had disappeared by June 4th, and the parent birds have been very protective of the remaining chick. We have not had a chick reared beyond one week since 2005.

During nesting season, we usually have to monitor the nature of crane and visitor interactions, as the cranes get aggressive when crowded by people, and visitors get too close sometimes in the pursuit of a good photograph. This June, within a day of the chicks leaving the nest, there was a photo-related incident, so the section of trail near their nest site was barricaded off for

three weeks to allow the cranes to rear their chick in the most natural way without visitors trying to pass by them all day. In the last week in June, the cranes began exploring other parts of the Sanctuary to feed, so warning signs now replace the barricades.

We apologize for any inconvenience to visitors who were detoured into the less-familiar grassy paths to the tower in those initial few weeks of crane life. The strategy seems to have given the chick a really good start on life, as it has grown to half the size of its parents in just one month. The temporary trail closure also kept well-meaning visitors from trying to pepper the crane family with bird seed. We encouraged people to watch instead while the parent birds sought out other softer foods such as flies, worms, minnows and berries for the colt. Visitors are currently enjoying watching the young bird learn to mimic the actions of its parents. When the female bird, for example, stands upright and flaps diligently, the chick will walk up close and practice the same thing. A few weeks ago, all three birds were surrounded by a crowd of ducks and people throwing seed. The male crane poked a Mallard out of the way, the female poked a duckling out of the way, and the colt started stalking a nearby sparrow!

Plans are coming into focus for the Fuller Slough area. We have dismantled the old blind and will be rebuilding a more open viewing facility there. The nearby structure housing our large interpretive signs and a map of the Sanctuary will also be redesigned this year.

For the past few months, management has consisted of keeping the paths clear, all grassy paths mowed, keeping machinery treatments reduced because of nesting birds, and maintaining some of the recent clearings created in the past year. Visitors may notice that the Triangle garden area in the center has some wildflowers and that clearings along the front entrance trail have been kept clear of blackberry, with some wildflower mix brought into the equation. We will be continuing with the fencing projects, and restoring rock and gravel shorelines later this summer.

David Bandiera has recently joined our workforce for the summer and will be helping in general around the Sanctuary while we clean up in preparation for the fall crowds and the return of the Snow Geese.

Text: Kathleen Fry, Sanctuary Manager

Varri's Quick Quiz Answers from page 3

Colt	American Coot
Sunflower Seeds	Brackish
Steller's Jay	Saw-whet Owl
Himalayan Blackberry	Mexico
Eclipse	Burrowing Owl
Carp	Parliament
	Snow Goose
	Cowbird

Sanctuary Highlights

The following bird highlights are contributions from our visitors and staff. Sightings are entered in the ledger on the deck of the Gift Shop and also verbally reported to staff. We appreciate your keen eyes and ears in identifying and reporting birds which in turn helps us keep our Sanctuary records up to date. From Saturday to Saturday we compile a weekly list and post it on the front window of the Gift Shop for our visitors to view.

APRIL: nesting activity was most noticeable throughout this month. On April 11th we had our first early hatch of mallards. Usually we see the first hatch of mallards in the last week of April. The species count for April was 103.

March 28th–April 3rd

The first sightings of Dunlin and Greater Yellowlegs heading north were recorded in this week. On March 31st, during the early morning, a Eurasian Wigeon was spotted on Robertson Slough. The first Orange-crowned Warbler for the spring was seen this week. This dull greyish yellow bird has an orange crown patch only visible when feathers are raised. Other highlights for this week were Canvasback, Redhead, Pileated Woodpecker, Merlin and Western Grebe.

April 4th–April 10th

The not often found Common Snipe was seen on April 6th. April 7th was our last sighting of the Northern Shrike as they leave to breed in Northern B.C., Yukon and Northern Alberta. Also seen this week a Mourning Dove, a late Varied Thrush, Sharp-shinned Hawk and Golden and Ruby-crowned Kinglets which contributed to the 66 species seen this week.

April 11th–April 17th

We had a total of 76 species during this week. On April 11th along with our first hatch of mallards our first report of a Savannah Sparrow (named for the city in Georgia). On April 12th the Eurasian Wigeon was seen again. This time it was in the ditch parallel to the east dyke. On April 15th the first sightings of the spring were recorded for a Turkey Vulture, Common Yellowthroat and Lincoln's Sparrow. On April 17th we saw our first Brown-headed Cowbird and Barn Swallow. In this same week we saw the last of the Trumpeter Swan as they migrate north to nest along ponds and lakes of Northern B.C., Yukon and Alaska.

April 18th–April 24th

On April 18th we spotted a male and female Yellow-headed Blackbird at the feeder by the gift shop. Also on the 18th a Palm Warbler was seen around the wooden viewing platform and a Peregrine Falcon hunted for shorebirds on the west field. April 19th a report of three Common Raven, a Barn Owl, both Swainson's and Hermit Thrush and a Bank Swallow. From the Gift Shop we saw a Eurasian Collared Dove feeding on the trail on the 21st. You can see these doves and Mourning Doves along the wires before Westham Island Bridge and along Westham Island Road. On April 22nd a flock of 35 Cackling Geese flew over the Gift Shop. Other birds of note out of the 71 species this week were the juvenile Black-crowned Night-Heron, Yellow-rumped Warbler

(Myrtle species has a white throat instead of a yellow throat in the Audubon species) and a Mew Gull.

April 25th–May 1st

The usually elusive American Bittern was seen for three days in a row on the grassy outer dyke posing for pictures. The single Black-crowned Night-Heron was still in the usual area opposite the warming hut. More than likely this bird will be seen throughout the summer as it is too young to nest this year. On April 26th we had our first Blue-winged and Cinnamon Teal show up and our first hatch of goslings. A Townsend's Warbler, Black-throated Gray Warbler, Wilson's Warbler, Orange-crowned Warbler, Yellow-headed Blackbird and a Turkey Vulture were other good birds recorded this week.

MAY: is the best month for seeing the ducklings and goslings. Unfortunately with the nesting season comes the predators. You might have noticed some of the nests have broken egg shells or eggs rolled out of the nest. This usually is caused by mink, seagulls, raccoons or crows. If the ducks or geese lay early enough and lose their first clutch generally they will have time to lay another clutch which will hatch in to June. The species count for May was 98.

May 2nd–8th

On May 2nd a member pointed out a Chipping Sparrow feeding on the front lawn of the house. The plumage of the male adults at this time of year is at its best, with a bright chestnut crown and a white line on top of the black line through the eye. The chest is a plain gray. The females are similar in markings but tend to be duller. Twelve species of shorebirds were recorded this week. Other sightings of note from our weekly list of 69 species were American Kestrel (my favourite bird of prey) Merlin, Peregrine Falcon, Pectoral Sandpiper and a Black-throated Gray Warbler.

May 9th–15th

Shorebirds moved out of this area right around now on their migration to their nesting grounds. On May 9th a Marbled Godwit was seen feeding in the West Field near the tower, it was probably on its way to nest in the southern sections of Alberta, Saskatchewan or Manitoba along the prairie sloughs and lakes. A male Black-headed Grosbeak was reported this week. Their song is very similar to that of the American Robin but louder and slower. A few of the other 66 species this week are the Northern Rough-winged Swallow, Common Raven, Olive-sided Flycatcher and Wilson's Phalarope.

continued on page ten

The Volunteer Corner

A special thank you to the following volunteers

- Trish Lee, Delta Senior Secondary students, and Angela Bedard and her girls who have all kept our bird feeders filled regularly these past months.
- Justin Malkonin, Shurli Tylor, Rita and Amy Bears, for their ongoing service bagging seed.
- The team of Elaine Whittaker and Eric Rossicci who have set the bar high for everyone by tackling the seed-bagging task as something to keep at until all the empty crates are filled.
- Jim Martin and all other members who have kept a careful watch over the crowds around the Sandhill Cranes these past two months and helped visitors to understand the ways of these large protective birds.
- Particular thanks to Mary Taitt, Brian Self, Al Russell, Bill Topping, Pam Hathaway, and new volunteer Lee Houghton for helping to host visitors on busy weekends and on the Sunday Walk.
- The RBC Community Outreach team from the Ladner Branch for the service day to help place rock and gravel along our trail edges June 9th.
- Doug Ransome's BCIT students who helped dust and re-label all the taxidermy specimens May 5th.

- Pam Hathaway, Anthea Farr and Brian Self for helping deliver all of the spring school program bookings.
- Max Boeck for his contribution of a lilac bush and a few assorted other plants.
- As always, the "garden ladies" Barbara Warwick, Irene Banack, and Arlie Darby, for their lovely summer flower garden displays.
- The Marshnotes "mail-out" team.

Volunteers are needed for the following:

- Hosting visitors along the trails or in the museum on weekends from July to September. You don't have to do much, just wear a volunteer vest, answer visitor questions, and report back if there are problems.
- Bagging bird seed, which people can volunteer for just an hour or sign up for a regular schedule.
- Work parties for some periodic trimming of blackberries or shoring up shoreline edges with rock and gravel. No real expertise required.

To volunteer for the above activities, leave your name and number at the Sanctuary office 604-946-6980 to discuss.

Text: Kathleen Fry, Sanctuary Manager

Why be a Member?

As a Member, you receive the following benefits:

- FREE admission to the George C. Reifel Migratory Bird Sanctuary 365 days a year.
- Quarterly issues of the BCWS publication "Marshnotes".
- A 10% discount on purchases in the Sanctuary Gift Shop.
- Membership in one of British Columbia's most respected conservation organizations.

With your support the British Columbia Waterfowl Society is able to:

- Staff, maintain and expand facilities at the Sanctuary for the benefit of its members and visitors (70,000+ visitors in 2009).
- Provide interpretive and education programs, including guided tours for organized groups of all ages.
- Contribute towards important scientific research on waterfowl to determine their life cycle needs for survival.
- Provide support for like-minded organizations who are working on waterfowl-related projects.

Enclosed is my cheque or VISA/Mastercard number for:

- SINGLE Membership: \$25
- FAMILY Membership: \$50
- LIFE Membership: \$500
- Donation: (tax deductible) \$ _____

VISA
Mastercard

Expiry Date: _____

VISA or Mastercard # _____

Name: (Mr. Mrs. Miss Ms.) _____

Address: _____

Postal Code: _____

Please mail to: **British Columbia Waterfowl Society**
5191 Robertson Road, Delta, BC, V4K 3N2

Telephone: 604 946 6980

Facsimile: 604 946 6982

Sanctuary Highlights/continued from page eight

May 16th–22nd

This week is generally the peak for warblers, tanagers, flycatchers and orioles. On May 17th, three male and one female Black-headed Grosbeak were reported by our Sunday morning birding group. This count is one of the highest for the spring at the Sanctuary. A late sighting of a Pied-billed Grebe was recorded when as it fed along Robertson Slough. This week the last report of the White and Golden-crowned Sparrow was being seen at the Sanctuary. Generally they are plentiful at the feeders but now they are in Alaska, Yukon and Alberta for the summer. One Bullock's Oriole (Western form opposed to Baltimore Oriole which is the Eastern form) was recorded along the trail to the left just after the Warming Hut. The Bullock's Oriole is brightly coloured with orange and black and large white wing patches. They do nest in our area and have a nest similar to that of a bushtit. They also will feed out of feeders filled with nectar much like the hummingbirds. Other nice sightings to report for the week were Barn Owl, Western Tanager, Mourning Dove, Pacific-slope Flycatcher and Townsend's Warbler.

May 23rd–May 29th

Bullock's Orioles were still being seen in the Sanctuary during this week. Our largest Tern, the Caspian Tern, was reported this week. This is generally a hard bird to locate in the sky as they fly high and blend into the sky well. They certainly have a distinctive call which sounds like a cross between cats fighting and a screeching heron!

JUNE: the big news for the month of June was our resident pair of Sandhill Cranes was successful in hatching their two eggs. The first egg hatched on May 31st, the second egg on June 2nd. Unfortunately the second colt did not survive through the first night, possibly due to predators. At the time of writing (July 2nd) the remaining colt is still doing well and is now two months old. June is the month when we start to see waterfowl moulting as they grow new flight feathers for their winter migration. The species count for June was 85.

May 30th–June 5th

From the 60 species spotted this week here are some of note. On May 30th a Sora Rail was reported. Rails are hard to locate but during low tides they can be seen bathing and preening at the water's edge or on very high tides when they are pushed in to the vegetation where they feed on stem climbing bugs. The Sora Rail winters at the southern tip of the United States and into Peru. During the week we had a report of an Eastern Kingbird. This insect eater is usually solitary and has a white tail tip and a not often seen red crown. Although named Eastern Kingbird it is located from central Canada to the Gulf of Mexico at breeding time and winters from Columbia to Northern Argentina.

Some of the other highlights from this week were American Kestrel, Turkey Vulture, Greater White-fronted Geese, Red-necked Phalarope, Western Wood-Pewee and a Black Swift. The Black Swift is our largest swift and it is fairly common in summer.

Swifts nest in southern parts of British Columbia including Vancouver Island, usually in a crevice of a mountain cliff or canyon near a waterfall. On fair weather days they forage high in the air for insects but on dull low pressure days they are pushed downward to feed.

June 6th–June 12th

The sightings list for this week dropped to 50 species. Summer is a quiet time as a lot of the birds have migrated north. The Eastern Kingbird was still being seen in the Sanctuary. You might have noticed large numbers of young Canada Geese with only one set of parents. Sometimes young parents will relinquish their young to older more experienced parents who will act as guardians for all the young. This is called creching. This day care system is based on safety in numbers. A large group of young together allows them to lose themselves in the crowd making it harder to be singled out by a predator. A Red-necked Phalarope, Spotted Sandpiper, Pacific-slope Flycatcher and Black-headed Grosbeak were a couple of the other highlights for this week.

June 13th–June 19th

On sunny days be on the lookout for the two species of turtles (Red-eared Slider & Painted Turtles) sunning themselves on logs throughout the Sanctuary. Some of the other non-bird species that were seen this week were beaver, coyote, muskrat, raccoon, River Otter and mink. At this time of year with nesting and eggs we see a lot of mink in the Sanctuary. Some birds of note for this week were Great Horned Owl, Greater White-fronted Geese, Ring-billed Gull, Northern Rough-winged Swallow and a male Ring-necked Duck.

June 20th–June 26th

A single American Coot is still in the area. The rest of them fly to lakes around Vernon, Kelowna and Penticton to nest. One Marbled Godwit and one Willet, both unusual sightings for the Sanctuary, were reported for this week. The Willet is a rare sighting in the summer at the Sanctuary as it should be nesting in the southern sections of the Prairie Provinces. The number of species seen this week was 54.



Jim Martin

Marbled Godwit

June 27th–July 3rd

With summer upon us and most of the birds having already migrated north you will notice that the number of species on the weekly list drops. Generally the end of June and the beginning of July is when we start to see shorebirds on their southward migration. Small flocks of Western Sandpiper, Greater and Lesser Yellowlegs are being seen. The first sighting for the summer of a Belted Kingfisher was on June 30th. Other highlights were Common Raven, American Bittern, Peregrine Falcon, Ring-necked Duck and Virginia Rail.

Text: Varri Raffan, Gift Shop Manager

References

The Birders Handbook – A field guide to the Natural History of North American Birds by Paul R. Ehrlich, David S. Dobkin, Darryl Wheye

Birds of British Columbia (Volumes I-IV) by R. Wayne Campbell, Neil K. Dawe, Ian McTaggart-Cowan, John M. Cooper, Gary W. Kaiser, Michael C.E. McNall, G.E. John Smith

Birds of Canada by W. Earl Godfrey

Peterson Guide-Western Birds by Roger Tory Peterson

The Sibley Field Guide to Birds of Western North America by David Allen Sibley

Marshnotes (BCWS Archives)

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Migratory Bird Sanctuary

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~ Raffle ~

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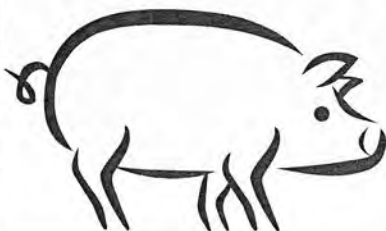
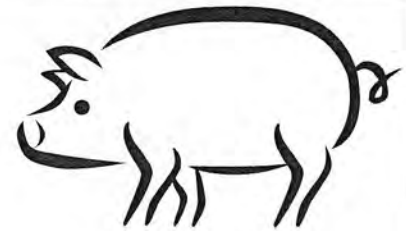
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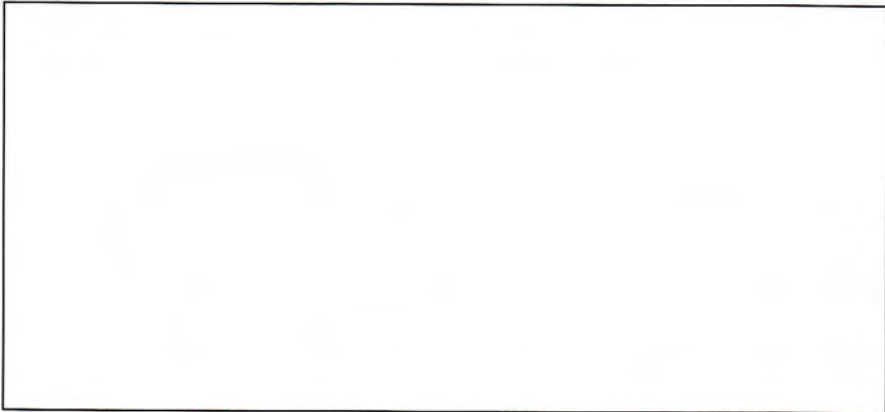
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