

Marshnotes[®]



**BRITISH COLUMBIA WATERFOWL SOCIETY
SUMMER 2017**

BRITISH COLUMBIA WATERFOWL SOCIETY

Managers of the George C. Reifel Migratory Bird Sanctuary Since 1963

- dedicated to the conservation and study of migratory waterfowl-

Marshnotes:

Editor: Kathleen Fry

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DEADLINE FOR THE NEXT ISSUE OF MARSHNOTES

October 15th, 2017

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Hours of Operation: 9:00 a.m. to 4.00 p.m. every day. The Sanctuary is wheelchair accessible.

Admission: Members: Free
Non-Members: Adults: \$5 Children (2-14 yrs) and Seniors (60 yrs +): \$3
School Groups: Special discounts available; pre-booking is required.

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Seasonal Notices

Please do not pick anything.

Think of this place as a giant garden managed for the wildlife. What grows in the Sanctuary stays in the Sanctuary. Take home only your memories and photos.

Thanks very much!

Thanks to many members for their Calendar photographs.

As in previous years, our members have submitted excellent photos for the upcoming 2018 calendar and we will have it assembled in time for sales in the Gift Shop this fall.

Many thanks for all contributors!

Improving Your Birding Skills

If you would like to become more confident of your birding skills and protocols, ask now at the Gift Shop about our member birding programs starting this fall led by our volunteer Brian Self.

Registration will be limited to 10 people for each session and a small registration fee (\$30) is required. Minimum age required is 14 years. Participants in each session will attend 6 consecutive Saturday mornings, working in this small group format to learn birding skills, get personal help with problem identifications and to become familiar with the Sanctuary's habitats and birds.

Sessions (includes all 6 Saturdays of each period):

1. August 26th to September 30th
2. October 21st to November 2nd
3. February 17th to March 24th
4. April 21st to May 26th

A Note From The Editor

Note that the most useful photos for Marshnotes are those featuring birds of the three months covered by that edition. The best approach is to send thumbnails or reduced images or links to posted images. See page 2 for my email and the next deadline. Kathleen Fry

About Our Covers

Front Cover: *Sharp-shinned Hawk* © Jim Martin
Back Cover: *Trumpeter Swan* © Dennis Nelson

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Bird Highlights

April is typically the primary nesting month at the Sanctuary. We start to see Canada Geese standing guard over future nest sites. The sound of singing birds is heard as they search for mates or establish their nesting territory. The species count for April 2017 was 97.

April 2 – April 8

As nesting instincts take over we lose the Pied-billed Grebes, Common Mergansers, Sharp-shinned Hawks, Common Ravens, Varied Thrush and Pine Siskins as they make their way to their various breeding grounds. In return we have a few newcomers showing up to stay with us over the summer. One of them is the Brown-headed Cowbird which was spotted on the 7th. These birds are “brood parasitic” which means they don’t build their own nests but lay their eggs in other birds’ nests and get the host birds to raise their young. Most commonly used nests by Brown-headed Cowbirds are that of Flycatcher, Vireo, Finch and Warbler species. In the case of the Yellow Warbler, who is too small to roll out the Cowbird egg they use their brain instead of brawn and build a second nest over the first one and start over again hoping the Brown-headed Cowbird doesn’t come back.



Common Yellowthroat

Photo: Michelle Lamberson

April 9 – April 15

We had the first sighting of a Common Yellowthroat this week. The Common Yellowthroat, which is in the Warbler family, has lovely markings. The males have a black mask. Both males and females have a bright yellow throat, pale bellies and drab olive backs. The males have a loud call which consists of 3 to 5 phrases of *Wich-i-ty, Wich-i-ty, Wich-i-ty*. A few Greater White-fronted Geese are being spotted this week. They will forage in the area until about middle of May when they will head out to their breeding grounds in Alaska and Western Canadian Arctic. On 11th a male Yellow-headed Blackbird, which is seldom seen here, was spotted at the tower. Even showier than the male Common Yellowthroat, the male Yellow-headed Blackbird, has a bright yellow head and chest with a black mask, black body and white patches on their wings. The call is loud and sounds like it is being strangled or like a very rusty hinge. Females don’t have as much yellow and have a brown body. A good place to find them in the spring is at Iona Regional Park near the YVR. On the 15th four Wilson’s Snipe were seen at the main front gate. At first glance they resemble Dowitchers with their proportionately long beak, plump bodies and rhythmic probing action as they feed, much like a sewing machine. Wilson’s Snipe tend to feed in rich organic soil in wet grassy areas and don’t mix with the Dowitchers who prefer shallow waters and open mud flats. Some of the other highlights were Merlin, Peregrine Falcon, and Hermit Thrush. The White-throated Sparrow and Lincoln’s Sparrow were the most unusual of the seven sparrow species reported this week. There were 73 species reported this week.

April 16 – April 22

We see fewer Northern Flickers, Dark-eyed Juncos, Golden-crowned Sparrows, Fox Sparrows and Purple Finches as they are now heading to their breeding grounds. Wilson’s Warblers along with the already present Common Yellowthroats, Yellow-rumped Warblers and Orange-crowned Warblers are all seen this week ending with 69 species.

April 23 – April 29

The weekly list, which we post on the front Gift Shop window, has now increased to 77 species. The first hatch of Canada Geese with 4 goslings showed up on the 28th. Parents of Spotted Towhees, House Finches, Rufous Hummingbirds, Black-capped Chickadees and European Starlings are all very busy collecting food for their fledglings that are very vocal with their high pitched calls sounding much like “feeeed meee”.

A flock of approximately 300 Greater White-fronted

Geese were spotted flying high and northward. There is still a small flock of about 60 Lesser Snow Geese offshore. These geese are either not in a hurry to head to the snowy tundra of Wrangel Island Russia or could be non-nesters. On the 23rd we saw the first spring sighting of Northern Rough-Winged Swallows and Long-billed Dowitchers. On the 27th along the North Dyke a Townsend's Solitaire was reported.

May brings shorebirds, flycatchers, warblers and other songbirds moving through our area heading north. Now that the male, or drake, mallards have finished mating they will start their summer moult. They will lose their bright plumage. Most waterfowl will go through this moult and grow new feathers in time for their fall migration. The species count for May 2017 was 92.

April 30 – May 6

Since the installation of a new set of Purple Martin nest boxes east of the existing ones back on June 11th, 2014 we haven't seen much interest from the birds towards their new houses. It was encouraging now, though, to see an adult Purple Martin atop one of the new boxes. On the 30th a Turkey Vulture flew over the Sanctuary, more than likely heading to the caves and rocky outcrops of the southern coast of Vancouver Island to build its nest. When you view them in flight from the ground their wings are 2 toned gray and black in color and are in a raised "V" shaped angle. Their heads, pinkish red in color, look proportionately small as they are devoid of feathers. Their good eyesight and sense of smell comes in handy as they soar over open ground in search of mainly fresh carrion. The lack of head feathers comes in handy for an easy clean up after a meal. Although you can see them from April to October above the Sanctuary, I can't remember the last time we have ever observed one perched. Black-throated Gray Warbler and Warbling Vireo showed up on the 4th.

May 7 – May 13

May seems to be the best month to view both adult and young Rufous and Anna's Hummingbirds busily feeding at our 4 feeders. Another bird which will also feed from a nectar feeder is the Bullock's Oriole which was heard calling along the East Dyke. Their call has a series of rich whistles mixed with rough chatter. They like the same feeder mixture that hummingbirds like which is 4 parts water to 1 part sugar, but they are attracted to the color orange instead of the red which hummingbirds prefer. Putting out chunks of oranges will also work. Bullock's Orioles are not with us for very long as they are migrating through to their breeding grounds of

southern British Columbia and eastward to the Great Plains of the USA. May 8th one of the 2 Sandhill Crane eggs hatched. The second egg never hatched. May 13th flying over the Southwest Marsh a Black-headed Grosbeak was spotted. The first Blue-winged Teal observed at the Sanctuary was on the 12th. Other highlights from this week's list of 72 species were Purple Martin, Greater White-fronted Goose, Cackling Goose, Peregrine Falcon and Barn Owl.



Black-headed Grosbeak Photo: Michelle Lamberson

May 14 – May 20

Predators are plentiful at this time of year, and Raccoons, Seagulls, Crows, and Mink are all on the lookout for unattended waterfowl nests and eggs. This is probably one of the reasons we haven't had many young mallard broods this year. Wood Ducks, although they nest in boxes or tree cavities aren't any safer, as squirrels and even mink will get in and deplete a nest. So it was nice to see a family of Wood Ducks with 9 young in the slough by the parking lot on the 14th. Canada Geese have done well with their broods as they will defend their nests with much vigor. Also on the 14th a Nashville Warbler and Western Tanager were both seen in the trees around the house. Although not seen from the Sanctuary trails, an unusual sighting of 25 American White Pelicans was reported in the vicinity on the 18th. This week we noticed another pair of Sandhill Cranes had dropped in for a visit. Now that our pair has done nesting and territory is not so coveted they don't seem to mind entertaining guests. New arrivals this week included Spotted Sandpiper, Eastern Kingbird, Warbling Vireo and Swainson's Thrush.

May 21 – May 27

Even though most diving ducks left at the end of April, we still have 1 female Lesser Scaup and 1 female Hooded Merganser. Another bird that should have already moved on is the Dark-eyed Junco but

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one was spotted along the East Dyke. On the 25th a Western Wood-Pewee turned up. It is not a great time of year to see birds of prey, but Red-tailed Hawk, Cooper's Hawk and the Northern Harrier are present. Both the Red-tailed Hawk and Cooper's Hawk nest in trees while the Northern Harrier nests on a platform of thick vegetation just above the water in the estuary. The Killdeer is one shorebird that can be spotted throughout the year and will also nest in our area. Their nests aren't much to look at, mainly just a scrape in the ground lined with small pebbles and feathers. They have a unique way of luring predators away from their nest site or their young. The adult bird will feign injury by dragging its tail or wing as it walks away from the nest area. They have a loud call resembling their name "kill dee, kill dee". With antics like feigning injury and their loud call, I thought their Latin name *Charadrius vociferous* was fitting.

At the end of June 2017 we had a total of 83 species recorded, an average of 58 per week. June is the beginning of a quieter time. Young birds are growing up and adults are going through their moult.

May 28 – June 3

On the 28th a female Wood Duck swam across House Pond with 20 ducklings in tow. An average clutch size for Wood Ducks is 10 to 15 eggs. Female Wood Ducks are known to lay their eggs in more than one nest site. This is known as "dumping". So the brood that we observed was more than likely made up from 2 or more females. Five species of Warblers are still present but not as many of each. One Snow Goose was found in a flock of Canada Geese. It might have been injured and couldn't make the flight north. Virginia Rails have now gone silent. They will be quietly nesting among the cattails and bulrushes of the marsh on nests constructed much like that of the Northern Harrier. Virginia Rails can have from 2 to 12 eggs but rarely more than 9 hatch. If you are at just the right place anywhere between the first weeks of June to mid July, you could catch a glimpse of the small pure black young as they scuttle between the cattails. We haven't been lucky enough this year to have spotted any broods.

June 4 – June 10

Usually the first two weeks of June is the best time to start looking for the family of Great Horned Owls that generally reappear every year at the end of the East Dyke and the lower grassy trail of the northeast corner. This year we have been able to regularly spot one adult with one owlet. On the 9th 2 Wilson's

Phalaropes were seen at the south end of the West Field. Flycatchers, such as Pacific-slope, Olive-sided and Willow are now moving into our area. Discerning one Flycatcher from another is very difficult. The best way to do so is by listening to their calls. Looking to the tree tops is the best place to find them as they forage for insects. Another species that is a challenge to locate is the Warbling Vireo seen this week.

June 11 – June 17

Visitors are still coming across the adult and juvenile Great Horned Owl. Morning seems to be a better time to see them before they are spooked by the human traffic below. On July 15th and 16th the flock of American White Pelicans are still being seen in the vicinity of Brunswick Point and Tsawwassen Ferry jetty. On the 16th a Marbled Godwit was seen in the south end of West Field. This large shorebird, approximately 18" in length is usually found by itself. They nest on prairie ponds. I am not sure if this bird was still heading to the prairies to nest or was returning. While walking along the seaward dyke, heading north, look for the spherical shaped nests of the Marsh Wren. They construct their nests out of narrow strips of marsh grasses, feathers and plant down and fasten them between upright stalks of marsh vegetation. Another nest to look for at this time of year, especially in the rafters of the Warming Hut, Gift Shop and some of the bird blinds, is the well constructed mud nest of the Barn Swallow. You might be lucky to view some of the pudgy baby birds packed tightly in their nest.



Barn Swallows in the nest Photo: Varri Raffan

June 18 – June 24

On the 18th the Sunday morning walk reported 25 Purple Martins. Fifteen young birds and ten adult birds were atop both old and new nest boxes. One Least Sandpiper and one Semi-palmated Sandpiper

were found mixed in with a flock of Western Sandpipers. Lots of adult Barn Swallows, House Sparrows, Red-breasted Nuthatches and Downy Woodpeckers all busy now making non-stop food runs for their hatchlings. The American Goldfinch is one of the later birds to nest in North America and is now just starting to nest. This is tied in with the late blooming Thistle Seed which is their primary food source and main nesting material.

June 25 – July 1

With waterfowl in moult and not looking like they should, I have a few folks inquiring as to “where have all the Mallard males gone?” They are still around but in moult they lose their lovely iridescent green head and chestnut brown front and tend to look like fe-

males. An easy way to tell them apart is to know that the males have a khaki green bill while the females have a two tone brown and orange bill. The Peregrine Falcon, Belted Kingfisher, Lincoln’s Sparrow, and Bank Swallow are now making their summer visits. If you are interested in finding out when certain birds appear at the Sanctuary you might find it helpful to purchase a \$2 Reifel Migratory Bird Sanctuary Checklist from the Gift Shop next time you are out.

Text: Varri Raffan
Gift Shop Manager

Hummingbirds at Reifel in 2016 and 2017

In the Lower Mainland, we regularly see two species of hummingbird, the Rufous (*Selasphorus rufus*) and the Anna’s (*Calypte anna*), which was just voted Vancouver’s official bird. Both of these species of hummingbirds are found at the Reifel Migratory Bird Sanctuary.

In addition to being wonderful aerial exhibitionists, hummingbirds are important warm blooded pollinators that are able to provide these ecosystem services in all types of weather. How many of us have marvelled at the tenacity of the Anna’s who not only brave the temperature extremes of winter, but breed then too! Unlike the Anna’s, which is present year round, the Rufous Hummingbird is migratory, traveling the longest distance of any bird relative to body size. They winter in Mexico and the Gulf States of the US, and then follow a wave of flowering north to start breeding in the early spring in BC.

While the Anna’s Hummingbird population is expanding rapidly and these delightful birds have become a common sight across the Lower Mainland in recent years, the Rufous Hummingbird population is suffering a major decline. Its migration may play a part, since there are many challenges encountered along the way, from climatic events, to agricultural and urban landscape change. How these birds benefit or are impacted negatively by conditions on their breeding and wintering locations, or on their migration routes, will eventually play out as population changes. Since the main Rufous breeding ground is in BC, it is important that we learn more about their activities and movements when they are here.

Banding allows individual birds to be identified. It can provide very precise information about faithfulness to site, timing and survivorship. In 2015, Rocky Point Bird Observatory, collaborators from various universities (Royal Roads, Swarthmore College and Simon Fraser University) and Environment Canada, and assisted by many amazing volunteers, started a collaborative effort with various site partners such as the Sanctuary, to look more closely at the relationship between agricultural lands, hummingbird populations and survivorship in BC. The monitoring is low disturbance sampling, with banding for only 3 hours, once a month from late April to late June. As an extra component to this project, we are passively collecting faeces and urine from birds in the hand. These waste samples can be used to determine pesticide exposure (the neonicotinoid Imidacloprid in the urine) and diet (arthropod DNA in the faeces). Waste collections are simple, as ‘donations’ are made regularly and copiously (often onto the bander), given the hummingbird’s diet of large volumes of nectar and soft invertebrates (note: contrary to urban mythology, they do not eat ants).

You may ask why Reifel is such a desirable site for this study. Reifel is a secure natural habitat that borders agricultural land. Feeders at this site provide a place where hummingbirds visit regularly from year to year and so the presence of individual birds can be tracked over time. Hummingbird banding at Reifel began in late June 2015.

In 2016, it was a very early spring, with flowering

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well in advance of normal and temperatures rising quickly. Many Rufous returned early to BC and we started our banding on a lovely sunny morning in late April. Volunteers and visitors waited with bated breath for the first bird and it was not long in coming. Rufous males were clearly in abundance, with dive displays and wing trills coming from all around the banding area. Not surprisingly, all nine Rufous Hummingbirds captured were male. We often see sites having more of one sex or the other, and so it is likely that the banding area is a Rufous male HOT zone. Three female and one male Anna's were also captured. It is always a special experience to share what we are learning with visitors and volunteers, so we were particularly delighted when a visiting school group even came to watch the banding process up close - they asked so many insightful questions!

Our banding sessions in late May and June of 2016, were not quite as busy, as we would expect. Although the Rufous males were starting to leave in May, we still captured six individuals and one of them had been banded previously in April. Our first recapture! How could this happen when so few birds had been tagged? It turns out that hummingbirds are very faithful to feeding and travel sites. This behaviour makes sense if you think that it takes energy to find new resources. Being an expert about the resources in your own area allows you to use your energies for breeding and survival. Clearly, this was his territory and he was not just moving through.

In late June, the banding area was fairly quiet, as many of the Rufous had left on return migration and the few birds on site were quite happy to disdain the trap because there was an ample supply of flowers to choose from. We did capture two birds, one of which was a Rufous female, who was probably moving through the site on return migration.

It was clearly a very successful banding season in 2016 and this project was well and truly off to a strong start. However, in this project, we were also keen to learn if the neonicotinoid pesticide *Imidacloprid* would be detected in the urine of birds in the Fraser Valley. Hummingbirds sample the environment by collecting nectar from plants, sap from trees, and eating soft flying prey that emerges from ditches etc. If they ingest the pesticide in these food sources, it will come out in the urine. To our surprise, we detected *Imidacloprid* in the urine of hummingbirds throughout the valley, including at Reifel. It was not present in urine collected in unsprayed areas like the Sooke watershed and lower Alberni Inlet on Vancouver Island. These data will provide a baseline

for sampling in future years.

Monitoring in 2017 turned out to be a study in contrasts. It was cold and wet. Flowering was about 3 weeks later than normal and the Rufous return was late and much lower than usual. It is possible that some birds bred further south, as there may not have been sufficient resources for them to reach their normal breeding grounds in time.

The April session in 2017 was quiet. There were only few Anna's and a solitary male Rufous in evidence and none chose to volunteer for the study. Our end of May session was much more successful, with 24 birds caught. All the recaptures (one adult female Anna's, and two adult male and one adult female Rufous) had been banded at Reifel in 2016. Such a high recapture rate is very much a characteristic of the site fidelity shown by these birds. The final session was much slower, with only two birds caught (both juveniles – a male Rufous and female Anna's). This was likely due to competition with abundant natural resources that finally became available, as well as lower bird numbers. For Rufous, many of the adult and juvenile males had already left the breeding grounds, and the second clutch had not yet fledged (we did get to see an active nest). For Anna's, it is likely that fewer birds were around because some of them undertake a short migration to the interior and leave the coastal breeding grounds over the summer.

What will the 2017 urine tell us? We are very curious. Most of our 2017 samples were collected prior to spraying because flowering was late this year. If *Imidacloprid* is detected in the samples from Reifel, it will imply that it remained from previous season treatments. At this point, we just don't know, but we will make sure you hear all about in a later edition.

We greatly appreciate the support from Reifel's volunteers who helped equally enthusiastically when it was busy and slow, and in good and poor weather. Our thanks to you all. We look forward to seeing our human and feathered volunteers again next year.

Text: Alison Moran, PhD
Rocky Point Bird Observatory

Manager's Report

Visitor numbers for April, May and June were all slightly higher than for the past few years. (24,960 combined three-month total compared to 23,044 in 2016 and 23,904 in 2015). The weather was highly variable in April and May, but many school classes attended in spite of this. June was warm and sunny and made up most of the increase in visitor use.

There were relatively few Mallard and Wood Duck broods this year, and to date, we have not seen any Gadwall young either. The latter nest quite late, but usually by July we have noted at least some families. There may be some factor at play related to the cool wet spring, as they need tall grass to nest in, and until the hot weather finally started grass growing, nesting habitat was probably a bit scarce for them. Canada Goose nesting was about normal, with about 20 families hatching over a two month period in May and June, and hundreds of others gravitating to the estuary to complete their annual moult. Visitors were coming out from the trails with fistfuls of Canada Goose primary feathers, as well as the distinctive iridescent feathers of the speculum (wing patch) of mallards.

The Sandhill Cranes were successful in hatching one of their two April eggs, and the chick seemed strong and healthy until it was 10 days old, when it began to fail, appearing listless and eventually turning up dead along the shoreline near the nest island on May 20th. This was a disappointing end, but actually better than we thought their nesting season might go, as the female was breaking in a new young male as a mate and he was learning all about nesting and chicks for the first time this year. About a week before the chick died, two of our former "gang" came back to spend the summer, and although they now hang around together peaceably with the resident pair, when the chick was present, they were not allowed anywhere near the family.

By June, as many of the waterfowl are flightless and putting all of their energy into growing fresh feathers, we really have to encourage visitors to leave them alone, or at least not try to pet them (or the cranes). In fact, a good challenge for families visiting at this time of year is to consider really reducing the emphasis on feeding the ducks as an activity, and move more into learning about and watching other species groups.

Did you know that the greater majority of species present in summer are not interested in bird seed? Summertime is when Hummingbirds are looking for

small insects, sap and flower nectar, Cedar Waxwings are eating berries and insects, and Brown Creepers and Red-breasted Nuthatches are gleaning small insects from cracks in the bark of trees. Swallows, Flycatchers, and Purple Martins are all hawking insects from the sky and bringing back mouthfuls of insects to their young at their nests. Shorebirds such as Western Sandpipers, Yellowlegs and Dowitchers all focus feeding time digging in the soft mud for small amphipods, worms and other invertebrates.



Rufous Hummingbird nest

Photo: Dan Dixon

From late May onwards, the hot weather began and plants started to grow with great enthusiasm. Careful pruning of blackberry away from pathways keeps us busy every year from May until early July during the nesting season, but the need becomes more reduced when these plants start to put their energy into the maturing berry crop.

In May and June, our staff grew each weekend to include Jason Wei and Robert Keen, two local secondary school students. The extra manpower helped us deal with crowds and the many pruning projects. Robert Keen is continuing with us for the remainder of the summer. Habitat maintenance is likely to focus on the cattail problem in West Field in late summer and there may also be some disruptions in September to replace the roofs on all the buildings.

Text: Kathleen Fry, R.P.Bio,
Sanctuary Manager

Future Cattail Management In West Field

Members may have noticed that patches of the marsh plant Cattail (*Typha latifolia*) in West Field have spread in the past few years. The figure on the bottom right shows the north part of this field, with the white patches being new areas colonized since 2009. This growth is starting to compete for shorebird feeding space and to impede water flows and management.

For the past few years we have manually removed some patches or cut some sections on a small scale only to have them re-establish again. It will require some consultations and permits, but we will likely need to bring in some heavy equipment to at least open up some of the key channels for water circulation. This field was last cleared in 1985 when Ducks Unlimited Canada plowed and disked the majority of it while the area was drawn down for machine access for water control structure repairs.

There are a number of reasons for the increased growth in recent years. Cattail colonizes and spreads in shallow areas like this if it has lots of sun and little competition. Whenever we draw down water levels to make those ideal almost-mudflat conditions for shorebirds, Cattail seeds in exposed mud zones germinate and underground energy reserves (rhizomes) get lots of light and send up new shoots outside of their patch boundaries. In 2012, West Field had little water available for most of the summer while the adjacent Southwest Marsh was drawn down for some work. The resulting “drought” exposed large areas of shoreline mudflats and these have now all been colonized by cattail.

Very high waters are also a problem, causing Cattail clumps to uproot and migrate to clog up water flows. When Sanctuary drainage was compromised by a pipe failure at the outlet in the fall of 2015, water levels were very high in West Field and the path to the tower was underwater. It looks like some clumps may have floated to relocate in the northwest corner and perimeter ditch leading past the tower.

There is also some indication that some of the Cattail patches may be either the Narrow-leaved species (*T. angustifolia*) or a hybrid of the two species which is in itself considered a highly invasive species.

Text and photos:

Kathleen Fry, R. P. Bio,
Sanctuary Manager



Cattail stands in West Field from the dyke (above). Increased areas of Cattail distribution from 2009 and 2017, as indicated in white patches (below).



The Volunteer Corner

Special Thanks To:

- ◆ Our regular Sunday birding team of Mary Taitt, Brian Self, and Istvan Orosi, as well as Jim Martin, Emma Turgeon and David Bruce for helping host visitors along the trails.
- ◆ Justin Malkonin, Eric Rossicci, and Eileen Axford for bagging seed and filling bird feeders, and new volunteer Ben Lambert for the many hours of weekend help.
- ◆ Our spring newsletter mailout team of Vera Maceluch, Jim Martin, Eric Rossicco and Eileen Axford.
- ◆ The team of Arlie Darby, Irene Banack, and Barbara Warrick for all the garden work.
- ◆ Ivy Whitehorne, Jessica Weiss, Kristina Breit and newcomer Sam Micner for their assistance with bird surveys.
- ◆ New volunteers Owen and Jamie Shutter and Justin Huang for their assistance pruning back vegetation these past few months.

Upcoming Volunteer Opportunities:

- ◆ Trail maintenance ; Weekend hosting of visitors; and bird surveys.

For more information, visit our website.
www.reifelbirdsanctuary.com/volunteers.html

Please leave your name and contact information at our office 604-946-6980 or send me an email.

Kathleen (kathleen@reifelbirdsanctuary.com.)

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 issue 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 visitors and members; 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; and 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

VISA or Mastercard # _____

Expiry Date: _____

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

Address: _____

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