... about the Estuary



Birak-Bunuru 2024

We acknowledge the Whadjuk Noongar People as the Traditional Owners of the Derbal Yerrigan and surrounding country in which we are privileged to work. We pay our respects to their Elders who have handed down and continue to hand down their deep connection to country to future generations.

Healthy Rivers Forum

Recently, Margaret Matassa spoke at the Healthy Rivers Forum hosted by Lisa O'Malley MLA, along with four other speakers, including a beautifully illustrated address from Tom Lubin (FMBS) showing the precious and important birdlife of the area. Following on, Margaret's talk focussed on one Grey Plover's return journey between Alfred Cove and the Arctic.

"I want to tell you a story about a bird – a female Grey Plover.



She's from here, from Alfred Cove, and she took off last February and flew 10,000 km to the Lower Siberian Arctic Tundra. There she mated with her lifelong partner, laid her eggs and hatched her chicks. Then leaving her chicks still in the nest, she started alone on her flight back to Alfred Cove, while dad stayed a little longer to keep an eye out for predators. This left the chicks having to feed themselves. Fortunately, these chicks can just open their mouths and in fly a multitude of insects that have exploded in the Arctic Spring Thaw.

And once the chicks leave the nest, dad takes off as well but to a different destination.

The babies grow fatter and fatter until they are ready to fly off themselves. Each one will be aiming to eventually arrive at the same destination as their mother or father, yet without any adult guidance.

Meantime our female Plover has kept flying on, over the oceans, touching down a couple of times in the Yellow Sea shallows to get some food and rest; because she can't glide, she can't float, she has to flap every inch of the way, because she is a shorebird.

Picture her arrival at Alfred Cove – completely exhausted and coming into land on the mud flats to rest at last. She trusts her juvenile female young will arrive later.

This wondrous achievement has been happening in our midst for millennia.

But now picture our mud flats as our little Grey Plover arrives and there are 10 or more fisher people spread along their length.

She drops exhausted on the extremities perhaps, but the movement of people causes her to fly off again but where to? She might land on the Cove's edge but that does not have the same benthic life as the mud flats which is her food.

At every low tide she must feed and feed so as to double her weight for the flight back and for laying her next batch of eggs — but more and more people are out on the mud flats too.

And year by year fewer and fewer of these migratory birds are reaching their destination on their return journey.

Surely we don't want to lose this wondrous event from our midst.

The Swan Estuary Marine Park has the only mud flats in the river which are exposed long enough to allow our Grey Plover to feed, and the only samphire-lined foreshores where she can safely roost.

Surely we **can** let her, and the other shorebirds who come each year, have priority in the Marine Park section of our Swan River. Indeed, Australia has signed treaties promising to do so.



Minister, SERAG asks you to URGENTLY do two things:

- First, to request your colleague, the Minister for Fisheries, to cooperate in the process of declaring the Swan Estuary Marine Park a Wildlife Only zone;
- secondly to fund extra staff for the Marine Parks team so they can more effectively protect and monitor the Marine Park and its foreshore Reserves and educate people to walk and fish elsewhere.

Fishers have the rest of the river to choose from, as well as the expansive WA coast – we're asking just not these tiny portions of foreshore, seagrasses and mud flats – a mere three hundredths of the Riverpark. What is an extra 10 minutes' drive compared to 10,000 kilometres?

And these few acres of seagrasses are also the nursery grounds for the whole of the river – for fish, for crustaceans, for bird life, for benthic life; so surely those fishers will ultimately benefit by staying away from these nursery grounds.

I ask, for what purpose are millions of dollars to be spent on the Swan – Canning River? Surely the protection of the food bowl for river creatures, especially threatened species, should be the priority.

For what purpose do SERAG volunteers spend more than 3000 volunteer hours each year to restore the foreshores of the Marine Park if not for the sake of the birds and other creatures that depend on a healthy and accessible River habitat.

SERAG will play its part to help educate people as to how vital it is to have these undisturbed, Wildlife Only zones in the Swan Estuary Marine Park.

But Minister, you, as Minister for the Environment, are the one that can really make a difference. For the sake of our river birdlife and especially our Grey Plover, we hope you will *also* play your part and act NOW to protect the dwindling numbers of these incredible little birds."

Over to you, Minister Whitby!

World Migratory Bird Day

Every year, SERAG celebrates World Migratory Bird Day (WMBD). This day is critical for raising awareness of the need for conservation of our incredible migratory birds and their habitats. These birds fly thousands, of kilometres twice a year to find very specific habitats for feeding, breeding and raising their young.

The theme for World Migratory Bird Day 2024 is "Protect Insects, Protect Birds".

This theme shines a light on the unsung heroes of the natural world: *insects*.

They are the lifeblood of migratory bird populations, providing crucial energy reserves for the birds during their incredible journeys. Birds depend heavily on a variety of insects during stopovers to sustain their biannual migration. The decline in insect populations, therefore, spells trouble for our feathered friends. By safeguarding insects, we not only ensure the survival of migratory birds but also protect the ongoing function of essential ecosystems.

With this year's theme, WMBD urges immediate action, asking for

- reduced pesticide use
- organic farming practices
- and the preservation of natural habitats.

This year, SERAG was part of an event held at Troy Park, on the Attadale foreshore, on WMBD 2 - Saturday, 12th October. This event was held in conjunction with City of Melville, Friends of Melville Bird Sanctuary (FoMBS), Bicton Environmental Action Group, River Guardians (as part of DBCA) and Birdlife Australia.

The weather smiled on us, with a mild, sunny, relatively still morning.

The main focus of the morning's activities was the bird walks. We were amazed but extremely happy that over a hundred people had registered interest in the walks beforehand and others joined on the day. This meant that each walk was very well attended.



SERAG's Chairperson, Margaret Matassa, led two walks with Alex Hegarty leading a third, and Margaret was very glad to accept help from other SERAG members in organising so many participants - signing in, distributing binoculars, helping with identification of bird species seen etc.



Due to the relatively high tide, the only migratory bird seen on the morning was not on the mudflats but was on Alfred Cove shoreline, as these birds need the mudflats to be exposed for feeding. Many other local species were seen, however, including the Ospreys, and feedback was extremely positive and enthusiastic after each walk.

Another walk organised by Friends of Melville Bird Sanctuary was led by Gareth Evans and this walk focussed on bird photography.

SERAG had a display of photos and information about World Migratory Bird Day and the East Asian-Australasian Flyway, along with informative pamphlets on local bird species. Our 'flock' of migratory bird cut-outs also made an appearance.



Other participants provided activities for children (City of Melville and River Guardians); information about the Melville Bird Sanctuary (FoMBS); bird books, cards and jewellery for sale (Birdlife Australia); information about the importance of keeping dogs on leash and out of protected areas (River Guardians). City of Melville provided light snacks for morning tea.

This was an extremely successful event for all concerned and, no doubt, it will be repeated in future years.

Thank you to everyone who helped make it the success that it was.

A New Passion for Birdwatching

Hi, I'm Warin Chotirosniromit

I came to Perth from Chiang Mai, Thailand to study Environmental Science at UWA. In July 2022, I joined SERAG and served as a Program Coordinator for our monthly events at Pelican Point.



During this time with SERAG, I led student volunteers from UWA and worked together with Margaret to ensure they had an enjoyable and meaningful experience. After graduating in December 2023, I passed this role on to other students but I have continued to help with SERAG's work at Pelican Point every chance I get!

My newfound passion is birdwatching and I would describe a morning at Pelican Point with one word - Magical!



Pelican Point at sunrise - teeming with birdlife.

Pelican Point

This precious site is rich in birdlife and I believe that it is truly worth every effort to protect.



Pied Stilts lining up for a photoshoot.



Crested Tern stretching its wings.



Pied Oyster-catcher captured from a safe distance with a zoom lens



Our Valuable Volunteers

Yesteryear's song - "Love and Marriage, go together like a horse and carriage" describes a similar connection to that of SERAG's Committee Work and our Volunteers!

Committee Work and Volunteers' Hands-On Work are so intrinsically linked because we cannot achieve one without the other!

The many hours applying for Grants, identifying objectives to win specific outcomes, consulting with authorities (DBCA, Cities of Perth, and Melville) ordering plants, pickups and deliveries, purchasing tools, booking contractors, responding to all finances involved, and ensuring that plantings are watered - little of this work load is accounted for when acquitting the Grant.

It's the Volunteer Hours on the ground, calculated from the sign on sheets from which these hours are collated, priced at \$50 per hour, that must equal or exceed the estimates put in the grant application. Those estimates, which are usually more than twice the value of the grant received are important in securing the grant, and the hours must be strictly accounted to successfully acquit the grants.



To ensure that our plantings survive our hot summer, SERAG waters the most recent plantings for one or two summers. To achieve this involves several teams of our volunteers working long hours on hot days, including managing hoses and driving a watering trailer. The outcomes are very positive for which the Committee is sincerely grateful.

Acknowledging the accumulated hours that some of our members worked through the year, small tokens of thanks were presented at the recent AGM. Nine members worked more than 25 hours, seven members worked over 50 hours and one member worked for more that 100 hours in the last financial year.

There are many gains from Volunteering, not just the pleasure of working with like-minded individuals; it's a real learning "experience". And we share what we have learned, passing information on to others. It also provides an avenue for visiting "travellers" to join in and learn about this wonderful place we call home, whether here on holiday for a fortnight, 6 months or a few years.



For many years SERAG has worked with UWA guild to have their students join us at Pelican Point, one Saturday per month during the study year, for weeding, planting, or rubbish pickup and joyfully consuming "morning tea" after the hard work.

Curtin University Students are also participating in a similar manner, both at Pelican Point and Melville shorelines and are similarly gaining an additional hands-on understanding about this environment and our community. SERAGs' leaders, imbued with knowledge and a passion to share it, have been really at the forefront to educate and offer these opportunities to students, many from overseas!

Though not a requirement, our volunteers are invited to join SERAG, as the size of our financial membership can be a positive indicator when SERAG applies for grants. Volunteers are also encouraged to register as DBCA Volunteers, as the Department acknowledges the efforts of those registered through several incentives, including for example, those who accrue up to 50 hours annually, gain a 1-year free entry pass to National Parks in WA. There are also opportunities for workshops and training in First Aid, Snake and Reptile recognition and safety, Aboriginal Awareness workshops etc. Contact Julie Ginbey, by email at admin@swanestuaryreserves.org if you would like more information.

OUR VOLUNTEER WORK IS VALUED

- by our local community, who often comment on the improvement to the river, as well as by the local City Councils and DBCA and
- perhaps most importantly by the fauna and flora that call these foreshores home. As invasive weeds are removed (some having become a monoculture) we see the emergence of native plant species returning, no longer having to compete for space. With a healthier environment, little critters and birds too find food and shelter, and the possibility to breed.

The outstanding commitment by our volunteers on the ground and behind the desk, combined with the integrity of our leaders, means that SERAG continues to flourish and to make a significant contribution to our community and the environment.

Article - J Ginbey Photographs - M Matassa

Season of Birak-Bunuru - December - March (1st and 2nd Summer)
This Noongar Season is represented by the colour red/orange. It symbolises the season of the young and adolescence.

SERAG 2024 Annual General Meeting

In October, SERAG welcomed 24 members and 3 guests to their 2024 AGM, and after acknowledgment of the Traditional Owners, the Chairperson introduced the guest speaker for the evening, Brett Dal Pozzo, WA Seascapes Coordinator from The Nature Conservancy.

Brett gave an interesting and informative presentation about the Shell Reef Project and the Foreshore Urban Rivers Project, both located in the Swan River.

The Shell Reef Project began in 2019 with construction of artificial reefs in four deep water locations along the Swan River at Point Walter, Attadale and Freshwater Bay and was completed in 2022. Over the decades there had been clearing of catchments, build-up of sediment and loss of the reef system in the river. The Project aimed to return shellfish to the river as they act as water filters which is important for the water quality in the river.

The reefs were constructed in sediment laden areas of the river where there was no marine life and were seeded with 180 tonnes of mussels. Initially results were good but over the first 6 months of the Project there was a 93% loss rate. However, unexpectedly scallops appeared on the reef along with flat oysters which were thought to no longer be living in the river. The next step in the Project is to monitor fish life and plant growth and maintain the reefs.

In late 2023 it was announced that the Nature Conservancy would receive new Federal funding of \$3.5 million over 3 years for a new project, the Foreshore Urban Rivers Project. The Project is focusing on in-water shallow reefs for foreshore protection, with particular attention to foreshores where threatened species of birds are involved. The Project areas will be in shallow water areas with structures constructed underwater but off-shore to encourage marine growth, whilst dampening the waves causing erosion. The aim is to mitigate boat wash damage to the Swan and Canning River foreshores.

Over the first 12 months the Project has been carrying out modelling and mapping to find out what currently exists in the Project areas and what risks there are to shorelines.

Members expressed their disappointment that the new Project excludes the Swan Estuary Marine Park, and during question time, they raised the issue that the most threatened species of birds were the trans-equatorial migratory birds and these were almost exclusively present in the SEMP. Brett responded to this concern and said he would ensure this was considered before any work was undertaken and that SERAG would be involved in the consultation phase of the Project.

Brett was presented with a small gift and thanked both for his presentation and for his readiness to stay on and answer the many questions that arose from his talk, and he accepted the invitation to as stay for the rest of the meeting and

mingle over supper.

The Chairperson then opened the Annual General Meeting saying she was pleased to be able to report that it has been another successful and busy year for SERAG with support from the Department of Conservation, Biodiversity and Attractions, the Cities of Melville and Perth, and our wonderful volunteers.



SERAG is in a good position financially and in the last financial year was grateful to receive a further SALP grant for 2025. Additionally, our volunteering effort of more than 3,000 hours on the ground was valued at over \$150,000, and supported the planting of more than 5,000 plants.

SERAG has continued to advocate strongly for the Estuary including a submission on the Draft River Protection Strategy for the Derbarl Yeragan – Djarlgara, (Swan Estuary and Canning River) and has held three successful community events over the year.

The Chairperson noted how fortunate SERAG has been to have had a very active Committee and also thanked and farewelled Nigel Penfold who is retiring as SERAG's auditor after many years. The Treasurer presented Nigel with a gift in appreciation.

The Treasurer presented the Financial Statements and Auditor's Report for 2023-24 noting that during the 2023/24 financial year SERAG had received several generous donations. A finance Committee had been set up to simplify financial records and reports.

During 2023 SERAG was required to register as a charity with the Australian Charities and Not for Profit Commission (ACNC). Committee decided that it was opportune to update the SERAG's constitution, and the special resolution to adopt the new constitution was passed at the AGM.

SERAG Committee members were elected for the 2024-2025 year.

- Chairperson Margaret Matassa
- Deputy Chairperson Robert Harvey
- Secretary Alison Bullock
- Treasurer Nicole Elischer
- Committee members Julie Ginbey, Michael Paterson, Jennie Connolly, Rosemary Peek, Kim Robinson, Tim Graham-Taylor, Peter Cunningham

To conclude the evening the Chairperson thanked members and friends for their attendance and invited them to join in the refreshments.



Nigel Penfold and SERAG'S Treasurer Nicole Elischer

The Attadale Alfred Cove Master Plan

..... takes a step forward

The Attadale Alfred Cove Foreshore Master Plan was two years or more in the making, with community members and City staff members giving hours of their time to bring about its final consensus. The final plan was the outcome of intensive technical work and widespread community consultation.

Notwithstanding this, many of its proposals are challenged when the time comes for their implementation, resulting in more rounds of consultation between staff and stakeholders.

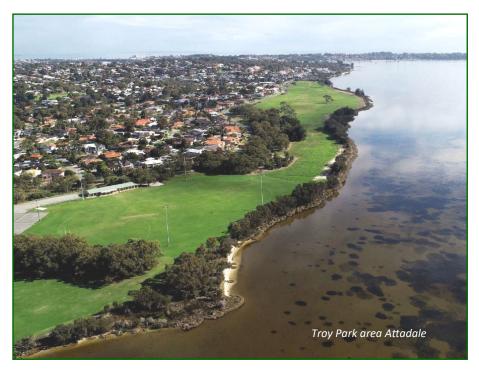
This helps explain why the timetable for the implementation of the AACFMP is constantly lengthening.

With that in mind, SERAG congratulates the City of Melville on their success in obtaining a grant to build the universal access walkway though the Attadale Conservation Reserve and to continue the restoration of its native bushland. A treat to look forward to!

The City also recently facilitated a consensus on the refurbishment of the Troy Park Sporting Associations' Clubrooms after multiple stakeholder meetings. The City is planning for many community groups to access the new building, whether they be the Y-Striders, the Football and Cricket clubs, the Friends of Melville Bird Sanctuary or SERAG.

Being in such a sensitive area in the midst of the Bird Sanctuary precluded the expansion of the number and size of the sporting codes using the facilities, which would have required a much larger or taller building footprint. SERAG hopes that all future users will remain cognisant of their closeness to nesting and roosting birdlife, and will modulate their noise and lights accordingly.

SERAG looks forward to having access to the new building for some much needed storage space and potentially for meetings.



Article - M Matassa

Photograph - City of Melville Attadale Alfred Cove
Foreshore Master Plan

Djidimya Update

We are happy to report continued success at the Djidimya site where Jem Stirling, Foreshore Officer with the City of Melville, is monitoring the progress of the plantings and direct seeding that occurred in late autumn and winter.

Weed management has been very important. Since the last newsletter, SERAG volunteers have weeded around the base of the tube stock that were planted at the community planting day in May. As well as hand weeding, Jamie Davies from the City of Melville has been carefully dabbing herbicide on to large weeds in the direct seeded area ensuring no damage is done to the emerging seedlings.

New vegetation has responded positively to winter and spring rains.

The eucalypts and other directly planted seedlings have also put on significant growth, which is very encouraging.

Species identified in the direct seeding area have included:

- Acacia saligna (Coojong)
- Allocasuarina lehmanniana (Dune Sheoak)
- Haemodorum sp (Mardja)
- Hakea lissocarpha (Honey Bush)
- Kennedia prostrata (Running Postman), as well as,



Acanthocarpus preissii (Prickly Lily)



Spyridium globulosum (Basket Bush)



Trachymene pilosa (Native parsnip)



Melaleuca species



Trachymene coerula (Rottnest Island Daisy)



Acacia species

Rakali - the Riparian Otter?

If there was a popularity contest for the native animal we most appreciate along the Swan River foreshore who would you vote for? Maybe the majestic Osprey? The elusive Tawny Frogmouth? Or some rare migratory bird from across the globe? Certainly birds would dominate the polls - being able to fly is an attractive skill. But what about another animal, a large rodent, how appreciated would it be? Could people see past the negative stereotype?

Australia's largest rodent is challenging the rat stigma. It even had a team from the Australian Nature Conservation Agency doing market research to boost its popularity. They decided to change its name from the underwhelming 'Australian Water Rat' and the ambitious 'Australian Otter' to a name fit for a magician — Rakali - the name given by the Ngarrindjeri people in the lower Murray and Coorong region of South Australia. In Noongar country Rakali are known as Moytj in the Perth region, and Ngurju and Muritya in the other areas of the southwest. While the species name is *Hydromys chrysogaster*.

Rakali are 23-37cm long (not including the tail) and live around Australia and Papua New Guinea along freshwater areas such as rivers, creeks, lakes, swamps and dams. They have thick water-resistant fur, which is gold coloured on the front and dark brown on the back. They have webbed rear feet for swimming and a distinctive white tipped tail. Rakali in the southwest of WA have darker fur than elsewhere, thought to match the darker tannins in the water.



Rakali

Because of its attractive waterproof fur there was a time when Rakali were popular, Photograph - J Pettit too popular, and people made fur coats out of them. Fortunately this was banned in 1957 when it was recognised they had nearly been hunted to extinction. Probably just in time, given their predation by cats and foxes as well.

Rakali's own prey is diverse - their traditional diet consisting of large insects, crustaceans, mussels, fish, frogs, lizards, small mammals, water birds, fungi and various plants. They take their prey to a particular feeding area, called a midden, to eat it. Being rodents they are opportunistic feeders and quite happy to forego popularity around human settlements by eating pet guinea pigs, raiding goldfish ponds and chicken coups, and stealing bait from anglers. In any control of the coups, and stealing bait from angles.



Rakali feeding midden Photograph - T Gamblin

However all this should be forgiven because Rakali are particularly skilled at hunting cane toads. In 2014 researchers in the Kimberley found a creek dotted with dead toads, each with a neat incision in its chest. The hearts, livers and sometimes leg muscles had been eaten, while the toxic parts of the toad were carefully avoided or removed. An infrared camera set up at night revealed Rakali as the clever predators. Vii They had already learnt to do this in QLD and NT, as seen on a YouTube video (see endnote Viii). Rakali are one of the only Australian mammals to learn how to feed safely on cane toads, and did so within 2 years of first encountering them.



Video still—Dieuwertje Smolenaars

Rakali are able to breed several times a year if conditions permit. They nest in a burrow, producing 2-4 young. These can fend for themselves after about a month of suckling. Adult Rakali are mostly solitary and survive for about 3-4 years. ix



Rakali footprints

Photograph - K Bettink

Rakali are found in the Perth region along those areas of the Swan and Canning Rivers with significant foreshore vegetation, as well as wetlands such as Lake Joondalup and Lake Gwelup. Fortunately the Federal Government is providing funding to improve and extend such areas through its *Urban Rivers and Catchments Program*, allocating \$3.5 million for the Swan-Canning Estuary. *

For people who are interested in keeping a look out for Rakali on their walks, any sightings can be reported to the Atlas of Living Australia website (*ala.org.au*). Rakali are mostly nocturnal but it may be possible to see their feeding middens or footprints. However it is important to stay on designated walking areas, and avoid disturbing places where wildlife need seclusion from people.



Photograph - C Hall

Footnotes:

- i https://riversofcarbon.org.au/quide-recognising-and-caring-for-rakali-our-australian-water-rat/
- ii Trocini S., Barrett G., Howard K. and Ramalho C. (2015) Rakali Community Survey 2014-2015. Report prepared by WWF-Australia and the Western Australian Department of Parks and Wildlife. WWF-Australia, Perth, WA.
- iii Map of rakali distribution, courtesy of R. Strahan. (1995). The Mammals of Australia, 2nd edition. (Reed Books: Chatswood NSW)
- iv https://victoriancollections.net.au/items/5ab8470621ea6a13c8e99f36
- v https://australian.museum/learn/animals/mammals/water-rat/
- vi https://riversofcarbon.org.au/guide-recognising-and-caring-for-rakali-our-australian-water-rat/
- vii Parrott Marissa L., Doody J. Sean, McHenry Colin, Clulow Simon (2020) Eat your heart out: choice and handling of novel toxic prey by predatory water rats. Australian Mammalogy 42, 235-239.
- viii https://www.youtube.com/watch?v=VBliuBbvqxA
- ix https://www.lfwseq.org.au/flash-rat-gold-tooth-belly-australian-water-rat-little-known-aquatic-predator/
- x https://www.joshwilson.org.au/2023/11/30/restoring-swan-canning-estuary/

Get to Know Our Plants

Berry Saltbush - Rhagodia baccata

This is a strong, spreading shrub that grows to 1 metre high, can clamber over other plants and is shade tolerant. Berry Saltbush is one of SERAG's favourite revegetation plants, and the reason is not what you might think.

It's not because it grows faster and bigger – it is a low-growing shrub of the foreshore.

It's *not* because it is pretty when in flower – the flowers are small and white and fairly inconspicuous. You might see them in Djilba, Kambarang and Birak (August – January).

It's *not* because you can eat it, which you can, but picking it from the foreshore would cause trampling of the revegetated area, so we recommend planting them in your own garden.

It's because the little red berries it produces are attractive to birds, which having eaten them, will drop the seed as they sit on a branch, and so often this results in the growth of new little plants of Berry Saltbush spreading around the revegetated area.

And as with so many natives, those which grow from seed in the ground are the hardiest plants of all.

So, our planting of one seedling of *Rhagodia baccata* repays us over and over.



Photographs - DCBA Florabase



Berry Saltbush – Rhagodia baccata – with tiny white flowers

Photograph - M Matassa

SERAG Calendar of Events



December 2024 - Season of Birak First Summer, Season of the Young

The Noongar Season 'Birak' marks a time of warming days and fledglings venturing from their nests.

- 02-08 National Coast Care Week
- Tues 03 TREEmendous Tuesday, Alfred Cove Planting (6:30am—8:30am)
- 05 National Soil Day
- 05 International Volunteers Day
- Mon 09 Monthly Monday at Milyu Rubbish pick-up (7:00am 9:00am)
- Tues 10 TREEmendous Tuesday, Alfred Cove Weeding (6:30am—8:30am)
- Sat 14 Monthly Bird Count, Alfred Cove (7:00am 9:00am)
- Watering Alfred Cove and Pelican point every 2nd or 3rd week

Please contact SERAG to register your interest in any event.

Email: admin@swanestuaryreserves.org



We wish everyone a happy and safe holiday season!

We encourage you to take a look at our Facebook page as well as our LinkedIn page -

https://www.facebook.com/swanestuaryreservesactiongroupserag/

https://www.linkedin.com/company/swanestuaryreservesactiongroupserag/ and follow them if you are active on either platform. You may need an account to view *LinkedIn*.

Swan Estuary Reserves Action Group Inc.

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