

SILVERLEAVES CONSERVATION ASSOCIATION INC.

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NEWSLETTER

September 2023



FORESHORE EROSION



There has been significant erosion along the Silverleaves foreshore over winter, exacerbated by a high king tide in June and strong northerly winds, particularly at the western end of Silverleaves at the Sanders Road beach, where erosion appears to have worsened since the construction of the boulder wall. A primary sand dune of around 7 metres, along with around 15 metres of foreshore have been washed away and vegetation including mature banksia trees, tea-tree and coastal grasses have been lost. The foreshore vegetation is vital to Silverleaves as it provides a home to native animals and birds and protects properties from the sea.

This has severely impacted the capacity of the foreshore to recover and is now threatening to extend into the adjacent remaining foreshore areas and private properties. The public beach tracks are difficult to access and sand dunes are increasingly unstable and, with climate change and predicted sea level rises, this will only increase the threat of continuing foreshore erosion.

Mayor Michael Whelan, Cr David Rooks, the Member for Bass, Jordan Crugnale and a representative of the Department of Energy, Environment and Climate Action (DEECA) have all visited the area and in response undertook sand renourishment works.

In July, bulldozing of sand and woody debris barricades at the Sanders Road beach as a short-term measure occurred and in late August further sand renourishment works began, where sand has been taken from below the high tide line using excavators and moved to the upper beach near Sanders Road.

SAND RENOURISHMENT WORKS



Above: Location of the proposed dune and beach renourishment works at the Silverleaves foreshore.

Notification of Sand renourishment works by Bass Coast Shire Council 20 August 2023.

“The works are being conducted as an immediate-term response to mitigate wave erosion following a recent storm surge event that affected the site. The sand renourishment is being undertaken to “hold the line” of erosion until longer-term responses are implemented. This response is from a partnership between Council and the Department of Energy, Environment and Climate Action (DEECA). Sand renourishment is one option that is commonly applied to mitigate coastal erosion. It has been applied statewide, and at other locations in the Bass Coast, such as Inverloch, Surf Beach, Cowes Main Beach, Cowes East and the Phillip Island Penguin Parade Beach. The renourished sand is considered “sacrificial sand” that may be removed in future storm surge events. Therefore, further renourishment efforts may be required.”

Renourishment Works Details

Sand will be sourced through beach scraping from an intertidal borrow area located immediately east of the nourishment area (see image above). Machinery will be used to move the sand and place it within the dune and upper beach area.

Mid to Longer-term Response to Erosion at Silverleaves. *Coastlines are dynamic environments that are constantly changing as natural processes like waves, wind and tidal currents shape and reshape the sandy shoreline and dunes. Council, DEECA, the community and researchers have actively monitored the Silverleaves area for many years. This data provides an important backdrop from which to understand the changes observed this winter.*

Without a sound, scientific understanding of the coastal processes at Silverleaves, poorly considered works could worsen the erosion or transfer the issue further down the beach. To better understand what is happening at the site, the State Government is undertaking a Coastal Processes Study which will commence later this year. The Study will assess risk, inundation, existing coastal protection infrastructure, coastal processes and provide options for current management in a local context, enabling communities to understand and implement adaptation planning for current and future coastal hazards. The report will determine all options for adapting to climate-change-induced sea level rise, plus increased storm activity over coming years and decades. "For more information about the Silverleaves Sand Renourishment Project- <https://engage.basscoast.vic.gov.au/silverleaves>



Photo Christine Irvine

Photo Louise Hill

WHAT THE SCA HAS BEEN DOING

The Silverleaves Conservation Association (SCA) has been working hard advocating for the protection of the foreshore over the last few months, lobbying the Bass Coast Shire Council (BCSC) to take action.

In Mid-August a few SCA committee members met with Cr David Rooks who has agreed to be the SCA conduit for communication with BCSC regarding coastal erosion, monitoring, study findings and ongoing actions by Council.

We agreed that any short term and long-term actions to address the Silverleaves foreshore erosion problems need to be backed up by evidence, analysis, and an assurance that any actions taken will produce the right outcomes for the protection and remediation of the Silverleaves foreshore. We look forward to the findings of the State Government Coastal Processes Study which will commence later this year.

WHAT YOU CAN DO ABOUT EROSION

Stay away from erosion areas and eroded sand cliff faces to minimise further damage.

Use the designated beach access tracks and avoid using small beach tracks in front of foreshore properties. These tracks make the sand more vulnerable to further erosion.

Protect the foreshore vegetation as it plays an important role in stabilising sand dunes, as tree roots and grasses make the sand more stable. The foreshore is home to wildlife and birdlife and protects properties from the elements.

Consider joining the ongoing work by the SCA working bees revegetating the foreshore and do your bit by planting a tree!

Spread the word, talk to your neighbours and visitors about the importance of preserving the Silverleaves foreshore for the future. Silverleaves faces losing accessible beach at high tide, and the possibility of ongoing sand replenishment works, further groynes or rock walls at considerable cost to the community.

Bass Coast Shire manage all foreshore reserves and if you notice any clearing of vegetation to gain a view or path notify the Bass Coast Shire 1300 BCOAST (226 278).

JOIN THE SCA

If you are concerned about foreshore erosion, consider becoming a member of the SCA. Your support will help with the important work of the protection of the foreshore, vegetation protection in Silverleaves, weed control and replanting with indigenous species, protecting our wildlife as well as the protection of the Rhyll Inlet and the ongoing replenishment of the Silverleaves Reserve. Membership includes four issues per year of the SCA Newsletter. For more information contact the SCA via email silverleavesconservation@outlook.com

The SCA has a Facebook page where you can get updates on activities and events. <https://www.facebook.com/silverleavesca>

Please visit the SCA webpage, which includes archived newsletters and membership forms. <http://www.silverleavesca.org>

KING TIDES

King tides happen twice a year when the tide is at its highest, one during summer and one during winter.

Tides are long-period waves that roll around the planet as the ocean is "pulled" back and forth by the gravitational pull of the moon and the sun as these bodies interact with the Earth in their monthly and yearly orbits. Higher than normal tides typically occur during a new or full moon.

These king tide events are important because they show what average water levels might look like in the future based on sea-level rise projections. This is of particular concern when a king tide occurs under storm conditions, causing extreme storm surges that can lead to significant damage to property and coastline.

SCA COMMITTEE MEETING

**Saturday 23 September at 3.00pm
Koala Conservation Centre meeting room**

Please come to the meeting and hear more about SCA plans, propose ideas, and meet other residents of Silverleaves. We are keen to hear from you about any issues or concerns regarding the Silverleaves environment.

WORKING BEE 2023

**Sunday 24 September at 10.00am – 12.00pm
Meet at the Silverleaves reserve.**

BYO garden gloves and appropriate footwear. Tea and cake will be provided afterwards. Come and join us, get your hands dirty, pull up a few weeds, plant a tree and make a difference. In years to come, you will look at a fully grown tree and be able to proudly say, "I planted that tree."

SCA WORKING BEES

In June, a small group of resolute SCA members gathered at the Silverleaves Reserve on a very wet Saturday morning. There may have been few of us, but we achieved a lot. We planted in the area near the noticeboard with plants donated by PI Landcare. In August, 18 Banksia trees were planted at the reserve, a generous donation from a Silverleaves resident and wire guards were made to protect them from the wallabies. We look forward to seeing them become established over the coming months.

VICTORIAN COASTAL MONITORING

The Victorian Coastal Monitoring Program (VCMP) was established to increase understanding of how coastlines change over time, informing hazard mapping, erosion advice, and adaptation planning. The program started in 2018 and for three years every second month drones have been flown over a 2.1km stretch of beach, from Erehwon Point to almost the end of Silverleaves residential area, at low tide from the dunes to the water line. The community can look at these images through their portal. Go to www.propelleraero.com and select "Log in". Then enter the following details: Username: VCMP@delwp.vic.gov.au and Password: VCMP12345. There are a number of videos on how to use PropellerAero and you can use the cross-section comparison tool (fourth video) to draw a line along the beach in front of your house and compare the data to previous dates.

HISTORY OF EROSION AT SILVERLEAVES

Cowes East and Silverleaves have a long history of foreshore erosion. To try and reduce this, in 1947 timber groynes were built east of Erehwon Point and large rocks were placed at the top of eroding sand dune in 1949. However, in 1957 the northern entrance to a Uringah Court property was flooded and in 1968-75 timber sea walls and more groynes were built between Scotch Camp and Coghlands Road. In the 1980's further stone breaching was built between Ellen Road and Sanders Road.



Groynes at east Silverleaves 1967

At the east end of Silverleaves a set of six groynes were built in 1967 which are now completely covered in sand.

In 1989, following prolonged heavy rain, the water table reached above ground level at the eastern end of Silverleaves Ave and flooded a couple of houses on the north side. In 1994 during a high spring tide water from the Rhyll Inlet flowed across the front north side of two properties on the south side of Silverleaves Ave. An earth bank was built east of the foot track to prevent further flooding.

SPRING AT SILVERLEAVES

After a long and very wet winter, Spring is on the way and is a wonderful time in Silverleaves. Plants are in flower, attracting the birds and wildlife, and wildlife begin their breeding season. You will hear the Kookaburras, Magpies, Lorikeets, the noisy Wattle birds and if you look closely, you will see Blue Wrens, Firetails and the Southern Yellow Robin.

Spring is when migratory birds such as Curlews Sandpipers, Godwits, Knots, Stints and Pied Oyster Catchers return to the Rhyll Inlet after a long journey of over 12,000 km from Arctic breeding areas. Hooded Plovers and Red Capped Plovers also return to our beach to breed.

Spring is a great time to be in the garden and plant some native plants; they are low maintenance, and drought tolerant and so require little water. They also provide habitat for native birds, butterflies, bees, lizards, and other insects. With habitat disappearing at an alarming rate across the Island, you can provide a wildlife oasis for them to thrive in.

ECHIDNAS



Photo Myra Holmes

Silverleaves is home to many echidnas, and they will be out and about in spring as its mating season. Echidnas are egg-laying mammals, known as monotremes. The female lays a single soft-shelled egg and deposits it directly into her pouch, which will hatch after 10 days of gestation. The young echidna, called a puggle sucks milk from the pores of the two milk patches and remains in the pouch for 45 to 55 days. The mother digs a nursery burrow and deposits the young puggle, returning every five days to suckle it until it is weaned at seven months. Puggles will stay within their mother's den for up to a year before leaving.

Echidna snouts function as both mouth and nose and are toothless. They use their electroreceptive snout to sense earthworms, insects and ants which they lick up with long, sticky tongues.

The average lifespan of an echidna is about 14–16 years and a female can weigh up to 4.5 kilograms and a male up to 6 kilograms. Echidnas are very timid animals. When they feel threatened, they will bury themselves or curl into a ball, using their spines to shield them.

Echidnas face many dangers from feral cats and domestic dogs. If you see an echidna crossing the road, please slow down to let it pass. Pull over if it is safe to do so and put your hazard lights on to encourage other drivers to slow down.

If you see an injured Echidna call Wildlife Victoria on (03) 8400 7300 who will direct you to Wildlife Rescue & Rehab Shelter Phillip Island & Bass Coast.

WEATHER REPORT

The Australian Weather Bureau has confirmed there will be an El Niño developing during spring. El Niño summers tend to be warmer across southeastern Australia with hotter daily temperature extremes but fewer long warm spells and often lead to less rainfall. With a hot summer ahead, this is a good time to mulch your garden to maintain moisture and protect vegetation and consider planting indigenous and drought tolerant plants.

POWERFUL OWL



Image source https://en.wikipedia.org/wiki/Powerful_owl

On a quiet night at Silverleaves you might hear a low rather mournful-sounding double -hoot, *whoo-hoo*. This is a Powerful Owl calling. The owl is very impressive looking and the largest owl in Australia, measuring 45 to 65 cm in length and spans 112 to 135 cm across the wings. They hunt small to medium sized marsupials. Other owls found on Phillip Island are the Barn owl and the Southern Boobook owl.

The editor recently came across a disembowelled ring tail possum and contacted Phillip Island Nature Parks thinking it may have been killed by a feral cat. It seems disembowelling is the owls M.O. and they will return later to feed off the dead animal.