



The Saga of Singapore Daisy Along Peregian Creek

Singapore daisy (*Sphagneticola trilobata*) is an aggressive, fast-growing ground cover that has spread rapidly in many areas on the Sunshine Coast, particularly along waterways including Peregian Creek. Left unchecked, it has an allelopathic effect, preventing the germination of native plants as well as outcompeting and suppressing native plants, reducing biodiversity and adversely altering the natural habitat.

The Peregian Creek bushcare group has been dedicated to restoring the natural beauty and ecological health of the dunal area for the last ten years. Singapore daisy is one of the significant weeds on which the group has been working. By targeting this invasive species, we've been able to create space for native plants like midyim to grow as part of restoring a healthy, thriving ecosystem. But before the group was actually initiated, Paul Ryan decided in October 2012 that he was fed up with the amount of Singapore Daisy in Peregian Creek on either side of the footbridge just east of David Low Way. He got permission from Noosa Council and Landcare (who were coordinating bushcare activities in Noosa Shire) to start removing the weed. This, he proceeded to do by hand with the help of a mattock.



Singapore daisy



*Singapore daisy at
footbridge, Peregian Creek,
Oct. 2012*



*Starting Singapore daisy
removal, Peregian Creek,
Oct. 2012*

By April 2013 after toiling in wet, sucking and stinking mud and filling 50 white bags, he had removed about a third of the Singapore daisy. At this point Council workers came in and removed the rest in that area. In June and July 2013, he then planted 120 seedlings of native species in the cleared area, although there was already natural regeneration of sedges occurring as the photos below show.



By early 2013 further native natural regeneration was occurring in the creek that had been cleared of Singapore Daisy and by early 2015 the creek was totally occupied by regenerated natives as well as some of those planted. There was little if any sign of Singapore daisy.



Peregian Creek natural regeneration after removal of Singapore Daisy (February 2013)

Peregian Creek cleared of Singapore Daisy with regenerated native plants (March 2015)

In August 2013, Paul commenced removing Singapore from the south side of the creek towards the foredune and creek mouth where it had encroached up to the boardwalk. For the next six months, until March 2014 he removed 62 bags of the weed and then planted 140 native species seedlings in the cleared area.



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Commencing removal of Singapore daisy from near creek mouth, August 2013



August 2013

The Peregrine Creek Bushcare Group had its first working bee in March 2014. Then in April 2015, Landcare contractors brush cut the combination of para grass and Singapore daisy that had reinvaded much of the earlier cleared area near the creek mouth. The bushcare group followed up by rolling up the Singapore daisy and digging out para grass roots. 135 seedlings of native species were then planted in May 2015 in the cleared area.



Heavy infestation of Para Grass after Singapore Daisy removed and planting done at creek mouth (March 2015)



Area cleared of para grass and Singapore daisy, Oct 2015



Landcare bushcutting para grass and Singapore daisy, April 2015



Planted November 2015



Area previously covered in Singapore Daisy in 2013 now with native plants restoration, 2023

The area towards the foredune that had been cleared of Singapore daisy, then a combination of Singapore daisy and para grass, has now been totally transformed with native trees, shrubs and grasses, as the above photos shows. Singapore daisy still creeps up from the creek but has been relatively easily removed.

By 2020, the Singapore daisy had reappeared in the area originally cleared up downstream of the footbridge, stealthily coming up amongst the natives, probably from pieces of runners that had been buried in the mud during the earlier clearing or had washed down from across the David Low Way where there was a heavy infestation at the edge of the state reserve there (subsequently cleared by Council). By 2021 had again become dominant in the creek and nearby banks from David Low Way to below the footbridge. Efforts were made by the bushcare group to remove the Singapore Daisy. However, the group's efforts together with some help from Landcare contractors could not effectively control the weed. Areas from which it had largely been removed would regenerate within a matter of a few weeks if no further follow up was done, particularly in the creek itself.



Singapore daisy back in the creek, early 2020



Start being made on removing Singapore Daisy from below bridge, Dec. 2020



The decision was taken in 2022 with advice from Council officers and Landcare to concentrate our efforts at removing Singapore daisy on the creek banks and beyond, and not concern ourselves with any infestations in the creek. This has been how we have proceeded.



Clearing Singapore daisy from near the footbridge, late 2024

More recently, the group has been successful in removing most of the Singapore daisy from the creek bank upstream of the bridge and to some extent downstream. This was done with a mixture of arduous hand weeding and rolling up the weed, then carefully spraying the remaining growth and the piles of Singapore daisy that had accumulated with Metsulphuron.

Similar efforts were also undertaken during 2024 towards the creek mouth where Singapore daisy had again worked its way back up the bank. In both cases the areas have been cleared of the weed and open for natural native species regeneration or planting.

For other bushcarers with a Singapore daisy problem, here are some lessons learned and best practices that have helped in the ongoing efforts at Peregian Creek:

1. **Early Detection and Removal** are key to maintaining control over any Singapore daisy invasion. It's important to monitor areas regularly to catch any new growth of Singapore daisy before it has a chance to spread.
2. **Follow-up Monitoring and Removal** after the initial clearing is essential. Singapore Daisy can sneak back, regrowing from remaining stolons, particularly in muddy sites.
3. **Hand Weeding** is the common method for removal of Singapore daisy but care should be taken to ensure that root nodules are removed, not just the leaves and



stolons. This may require tracing back along the stolons to the main root. In hard ground a small mattock is useful in digging out the roots. The weed should be removed in bags or piled up and sprayed with weedicide.

4. **Weedicides** such as Metsulphuron can be highly effective in selectively killing off Singapore daisy while affecting very few native plant species. But particular care is needed in the vicinity of *Casuarina* and *Banksia* species, which are highly sensitive to the weedicide. The Metsulphuron may also be used to spray piles of the removed weed. A foliar spray of Glyphosate may also be used to kill patches of Singapore daisy, provided no native species are in the nearby vicinity.
5. **Solarization using Black Plastic** was tried to kill off Singapore daisy in-situ or to kill off the weed that had been removed. The former method proved ineffective except for isolated patches of the weed that could be completely covered. It was very effective in killing and drying out Singapore daisy that was piled up on and then covered by black plastic, However, it took about a month for the process and was not suitable for large amounts unless adequate open space was available for the solarization.