

STAR SWAMP



As urban development surged along the coast around Perth city in the 1970s, the few remaining patches of natural suburban bush became jewels to be treasured. One such jewel, Star Swamp, was jealously guarded by a group of local residents, who became as tenacious as a bull terrier in their quest to save their 'local jungle'.

By John Hunter

The Perth coast was once dotted with small wetland depressions like Star Swamp; usually about one kilometre back from the beach. Because they could not be built on easily at the time, these bits of bush were often left to become dumping grounds, which were eventually filled in for development some years later.

Star Swamp had a couple of things going for it. Development of the adjacent suburbs of North Beach and Waterman, which had been established in 1918 as a holiday resort, and a rush by developers in the 1970s to open up lucrative high ground to the east and north, both left the swamp and its surrounds intact. But the swamp's most important asset was its neighbours—people who had adopted the orphan bush as their own island of nature in a sea of development.

EARLY DAYS

Before European settlement, Aborigines on their seasonal treks to the coast camped at Star Swamp, where there was an abundance of wildlife, shelter and fresh water.

In 1869, surveyor James Cowle marked the unnamed wetland with an asterisk on his coastal survey. Perhaps because of this mark, or because of a man called Bob Star (or Starr) who lived nearby, the name Star Swamp came into use.

From the mid-nineteenth century, for about 60 years, drovers on the Coastal Stock Route from Geraldton to Fremantle camped around the swamp. It was also part of the local Hamersley family pastoral



lease. Orchards and market gardens flourished on the western banks of the swamp, and a local dairy grazed its cattle there until the mid-1940s.

During the gold rush of the 1890s camels were imported in large numbers, and Star Swamp was then used as a Camel Quarantine Station. Later, during World War II, the swamp was used as a watering point and stockyard for the Australian Light Horse Regiment.

To add further insult to its injuries, marl (a coastal clay material) for road building was extracted from the swamp sporadically during the 1920s and 30s. Adjacent to the swamp was a sanitation disposal site, into which rubbish and toilet refuse were poured.

Nonetheless, local residents still continued to enjoy the serenity and peacefulness of their small wetland forest and its wildlife.

With the building of Hamersley Primary School (now North Beach Primary School) on bushland adjacent to the swamp, on-site nature education became a regular event. In 1945, the then Perth Road Board, realising the value of recreation and nature education, wisely acquired two hectares of the swamp and its shoreline and three hectares of nearby bushland as Recreation Reserves.

From then on, children, students and adults alike continued to form a bond with their 'little jungle', where bushwalking and nature study became a ritual throughout the 1950s and 1960s. Today, as people are becoming more in tune with the environment and appreciative of its natural values, bushwalking and nature study is enjoying something of a revival, and Star Swamp is enjoyed by more than just the locals.

A WALK AROUND THE SWAMP

Star Swamp Nature Reserve is situated on the corner of North Beach Road and Marmion Avenue. Every day, thousands of Perth commuters pass by on their daily surge along Marmion Avenue to and from the city. Few suspect what lies and over the hill to the west.

The reserve occupies a broad swale within the gently undulating terrain of the Spearwood Dune system of the Swan Coastal Plain. Pale brown to yellow-brown sands mantle much of the area, with dark organic loams occupying the fringes of the swamp. Four communities of woodland (paperbark, tuart, mixed banksia and open heath) grow there, their distributions being broadly related to

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The paperbark trees provide habitat for many birds, insects and spiders, as well as putting tannin into the water, which gives the swamp its 'coffee' colour.

Photo - Kim Howe

Above: Black swans were relatively rare on the swamp until land clearing east of the reserve caused the water level to raise.

Photo - Rob Davis

Left: Black ducks and coots are common on the swamp for most of the year, only leaving in late summer when the water dries up.

Photo - Kim Howe





soil conditions, elevation and the occurrence of limestone outcrops.

The focal point of the reserve is the swamp itself. Here, visitors can experience the dynamic interface between the aquatic world and the land.

A grassed area on the western boundary flanks the swamp and makes an ideal spot from which to view the compact forest of paperbarks. The green foliage and white twisted trunks festooned with shredded bark hang over blackwater. Beneath the surface of the water are long-necked tortoises, gambusia and many species of aquatic insect. Black ducks, grey teal, mallards and swamp hens are common, puddling about among the greenery. If you are lucky, you may see white egrets and sacred kingfishers hunting for prey, or night herons roosting in the inner sanctum of the paperbarks.

The trail around the swamp passes beneath overhanging tuart and wattle trees, and the dank smell of waterlogged soil and lush undergrowth hangs in the



Top: Banksia woodland covers the northern and southern areas of the reserve.
Photo - Rob Davis

Top right: Slender lobelia, the most spectacular of three species of native lobelia found in the bushland.

Middle right: Fragrant waitzia is found over most of the reserve in spring. Its papery white flowers last for many months.

Photos - David Pike

Lower right: The exquisite, sweetly-scented flowers of the honeybush.

Photo - Chris Garnett

Above: The purple swamphen is relatively tame and struts about the aquatic vegetation with its characteristic tail flick.
Photo - Chris Garnett

RESERVING THE RESERVE

The State Housing Commission acquired a portion of the vacant crown land adjacent to the Star Swamp Recreation Reserve in 1951. Although there were no announcements of immediate development, local residents, who considered themselves the custodians, were alarmed.

In the late 1970s it was reported that the area could be cleared and developed at any time. The Trigg-North Beach-Waterman Community Association reacted like a swarm of worker bees. Meetings were held, petitions collected and a program of intense communication activity was established between politicians, scientific and education institutions, government departments, conservation groups and the media.

The scientific community responded magnificently, with the University of Western Australia staff and students providing an unfunded report on the bushland, supporting its preservation as a reserve. On the basis of a joint submission, the Stirling City Council and the local community succeeded in having the area classified as worthy of preservation by the National Trust.

This was the beginning of a process of petitions, political lobbying, reports and land swaps aimed at persuading the State government to reserve the whole bushland area. Greening Australia also backed a vegetation regeneration plan, with funding from Alcoa Australia Ltd.

Finally, in January 1985, Star Swamp Nature Reserve, a 96-hectare piece of metropolitan bush, was vested in the City of Stirling as an 'A' Class Reserve, to be protected forever.

At the same time, the newly formed Department of Conservation and Land Management (CALM) offered the services of an experienced ecologist and planner to assist the City of Stirling with its new charge. This ensured the same quality of protection for the swamp as for other State Nature Reserves.

The newly-formed Star Swamp Advisory Committee, which was made up of representatives from CALM, the City of Stirling and the Friends of Star Swamp Bushland, began working to rehabilitate the area and to plan for its future recreational and educational uses. While the committee continues its work, the Friends group organises a variety of activities throughout the year, including the popular guided walks that take place on the fourth Saturday of each month at 8.00 am.

air, adding to the 'jungle' atmosphere. All around are native and introduced species of aquatic pondweed, creepers, grasses, sedges and rushes, which in winter harbour an orchestra of bell, banjo and moaning frogs. In summer, when the water level drops, dugite snakes and scorpions may be found among the undergrowth searching for prey.

Surrounding the paperbark woodland to the east, and running roughly north-south, is the tuart woodland. Tuarts dominate the skyline, their rough grey trunks and branches reaching out nearly as wide as the trees are high.

The effects of insect attack on the tuarts are evident. Many trees exhibit stag horns, from which kookaburras, kestrels and black shouldered kites survey the ground for sand dragons, crickets and bush cockroaches. Dead tuarts are common, and they provide nest sites for corellas, galahs and 'twenty-eight' parrots. At night, bats and owls patrol the airways, while at ground level, local foxes prey on the resident rabbit population.

Also found here are jarrah and marri trees. Below the tree canopy especially in the southern area near the swamp, the prickly moses, dwarf sheoak, green stinkwood and blackboy are interspersed with many introduced weeds, such as veldt grass, freesia, hare's tail and buffalo grass.

On the higher ground east of the tuart woodland is the more diverse mixed banksia woodland, separated in the centre by open heathland running east-west. The banksia woodland areas of the reserve are dominated by four species: candle banksia and the occasional bull banksia, which flower in the spring and summer, and firewood banksia and saw-tooth banksia, which flower in late summer to winter.

The banksias—together with the flowering spikes of blackboy and the bark and blossoms of Geraldton wax, grevilleas and wattles—attract most of the 27 species of jewel beetle found throughout the reserve. There are also many nectar-loving ants, weevils, moths and predatory spiders. Late winter and early spring reward visitors with many wildflowers, including red and green kangaroo paw, blue fairy orchid, bright red cockies' tongues and yellow acacias.

The central raised heathland has shallow soils with occasional surface limestone, and only supports stunted



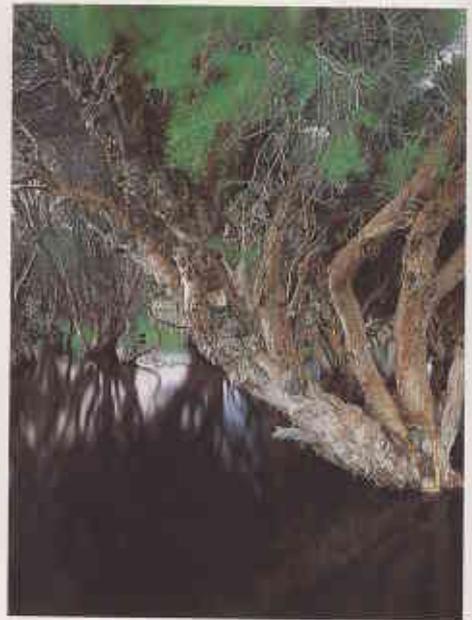
vegetation, but it is a haven for reptiles and a food source for birds. Here parrotbush, native buttercup, one-sided bottlebrush and summer-scented wattle tempt white-cheeked honeyeaters, wattlebirds and various wrens. On the exposed sands and rocks below this sea of gnarled and prickly shrubs, you can find small lizards and skinks, including the ever-present bobtail. If extremely lucky, you might observe a racehorse goanna as it investigates nooks, crannies and rabbit burrows for a tasty morsel.

HELPING HANDS

Although it has been invaded by alien species, used as a dump for refuse, burned by vandals and spurned by authorities, the dogged determination of ordinary people helped make it the first piece of bushland in WA to be won by community action. The swamp is slowly responding to rehabilitation programs and to the care lavished on it by the Friends of Star Swamp Bushland, which still includes many of those people involved in its fight for survival.

Since its vesting in 1985, an advisory committee of representatives from the Department of Conservation and Land Management (CALM), the City of Stirling and the Friends of Star Swamp Bushland have helped design and install firebreaks, trails, fencing, signs and rehabilitation plots, as well as compiling a priority listing of major environmental projects identified as essential components of a Management Plan.

Despite its chequered past, Star Swamp Nature Reserve still contains a wealth of different plants and animals.



Top left: The Christmas, or jewel, spider can vary its colour pattern and 'pulse' the colours when disturbed.

Above left: The bull frog is the most common of four frogs around the swamp, it is often seen sitting in shrubs at night. Photos - David Pike

Above: The peace and tranquility of a close paperbark wetland, provides an inner sanctum for many creatures. Photo - Chris Garnett

With the installation of facilities—more recently with assistance from the Scarborough Beach Rotary Club—it has become a much-loved haven where students, scientists, bushwalkers and ordinary people continue to enjoy nature.

John Hunter is Public Affairs Officer at CALM's Corporate Relations Division and can be contacted on (09) 389 8644.

Thanks to David Pike and Anne Bloemen of the Friends of Star Swamp Bushland, who assisted the Author with research material and a guided tour of Star Swamp.

You can find more information about the Star Swamp Nature Reserve in: *Reserving the Star Swamp Bushland*, published by the City of Stirling; and in *Perth Outdoors* and *Family Walks in Perth Outdoors*, which are published by CALM.

LANDSCOPE

VOLUME TEN NO. 1 SPRING ISSUE 1994



Yellow-billed spoonbills have visited Star Swamp for the last three years. They sift small crustaceans from the shallow water. The story of this suburban wetland is told on page 45.



About a quarter of Stirling Range National Park has been closed to protect its unique flora from dieback disease. Turn to page 10 to discover these plants on the edge.



A marine park is proposed to adjoin the Prince Regent Nature Reserve. The Complex Coast (page 49) discusses the need for integrated management of land and sea around our coast.



Found all over Australia, short-beaked echidnas are one of two Australian egg-laying mammals. They still occur around Perth. See page 18.



The orange-bellied frog is part of the South West's fine-scale richness and variety. Find out more about these fascinating creatures on page 35.

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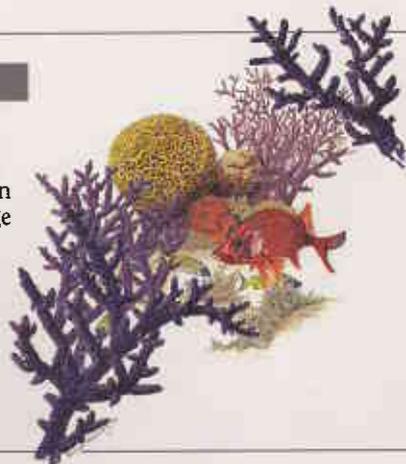
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COVER

The coral gardens in the sheltered lagoons of the Rowley Shoals contain dozens of different varieties of staghorn coral and are inhabited by a huge range of colourful reef fish. See 'Coral for Keeps' on page 28.

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Managing Editor: Ron Kawallak
Editor: David Gough
Contributing Editors: Verna Costello, Kate Hooper, Carolyn Thomson
Scientific and technical advice: Andrew Burbidge, Tony Start
Design and production: Maria Duthie, Stacey Strickland
Finished art: Gooitzen van der Meer
Illustration: Gooitzen van der Meer
Cartography: Land Information Branch CALM, Promaco Geodraft
Marketing: Estelle de San Miguel ☎ (09) 334 0296 Fax: 334 0489
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