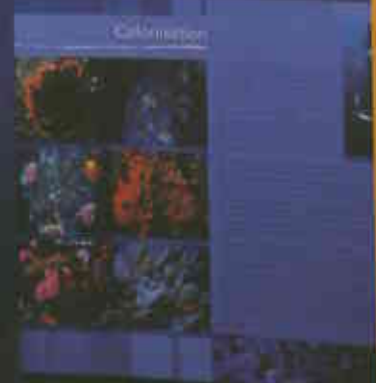


Voyage to the bottom of the ocean



Until recently, the privilege of viewing the aquatic wonders beneath the Busselton Jetty has mostly been limited to divers. Now, everyone can experience the jetty's brand of unique magic—without getting wet!



by Margaret McNally

For people of the seaside resort town of Busselton, 220 kilometres south of Perth, the recent opening of the Underwater Observatory at Busselton Jetty is a dream—27 years in the making—come true. And it is all thanks to the devotion and determination of locals who helped Busselton Jetty get more than a reprieve. It is not a bad effort, to say the least, considering the jetty itself came close to demolition after its somewhat turbulent past.

A lengthy history

When the jarrah timber jetty began operation in 1865, it is doubtful whether settlers of the Busselton region could have predicted its near fate. Fulfilling its primary purpose of linking prosperous trade between ship

and shore, it was not long before the 158-metre-long jetty was almost rendered unsuitable for use. An accumulation of drifting sand, building up under the jetty, necessitated adding another 129 metres within the first ten years of its construction. This ongoing problem saw five more extensions to the jetty between 1884 and 1896.

Horse-drawn carts travelled back and forth along the jetty, carrying

timber, food and other goods to people in the town. They soon gave way to trains, with the construction of a railway jetty in 1911. Extensions to the now 1,277-metre-long jetty continued until 1960, when it reached its current length of 1,841 metres. The jetty was—and still is—the longest wooden jetty in the southern hemisphere. But it was officially closed to shipping in July 1972, as ships began using Bunbury Harbour as a port of call instead of Busselton.

The human touch

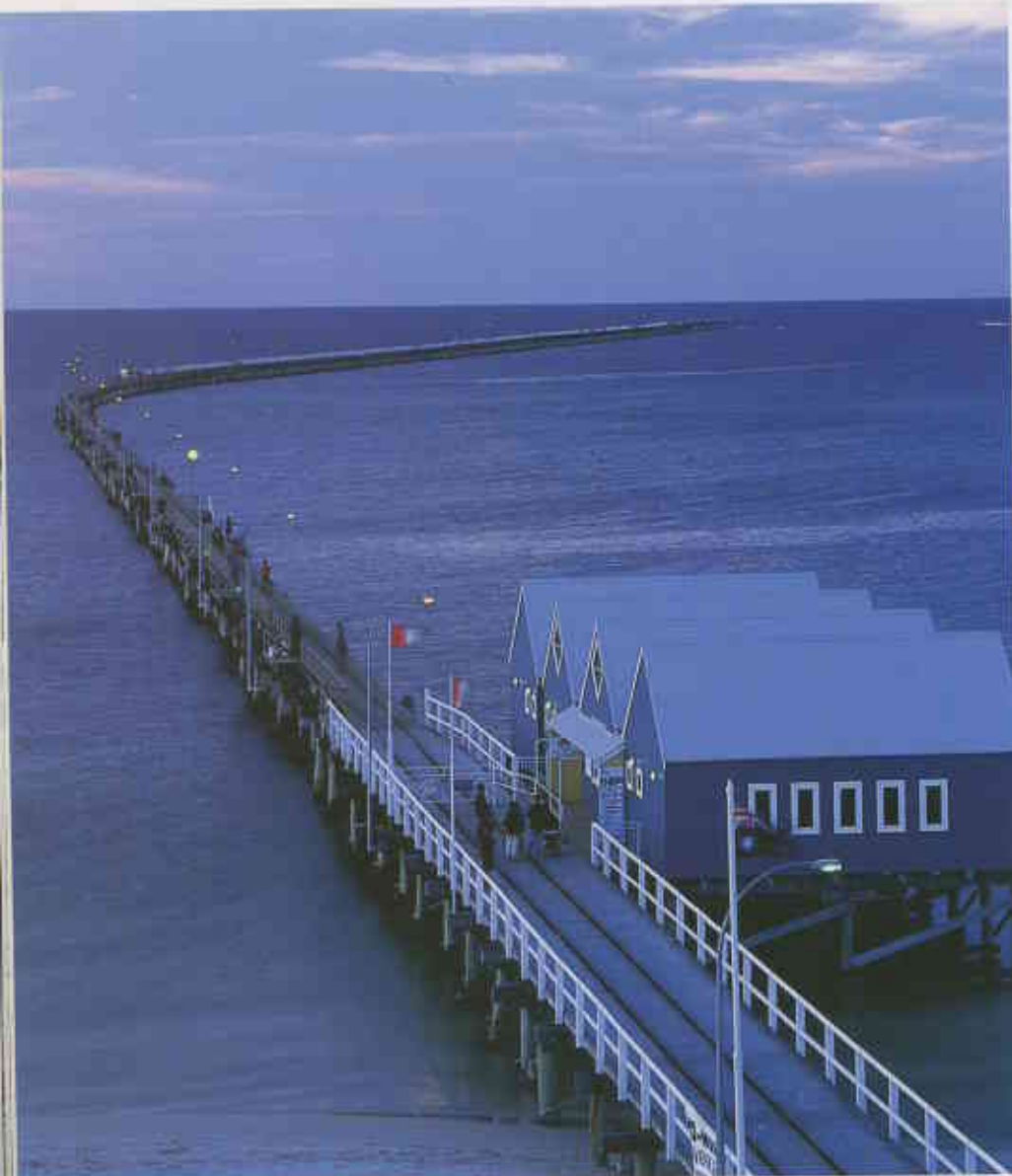
Following its closure, maintenance on the jetty was discontinued. In March 1976, at a public meeting held in Busselton to discuss fundraising ideas to restore the jetty, the seed for an underwater observatory was planted. The idea had barely found its sea legs when, in 1978, Cyclone Alby destroyed a large section of the shore-end of the jetty.

In the years immediately following the cyclone, Alf Bussell, a descendant of the first family to settle in the Busselton area in 1834, became involved in the campaign to save the jetty. A vocal public figure, Alf also garnered the support of the local townspeople.

Once the Jetty Preservation Society (now the Busselton Jetty Environment and Conservation Association) was formed in 1987, a rigorous fundraising program began. Generous donations and the dedicated efforts of many Busselton residents helped the committee to raise more than \$5 million for jetty



● Busselton



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Main Fascination at every window: looking out from the Busselton Underwater Observatory.

Inset The attractive Underwater Observatory entrance building at the far end of the jetty.

Photos – Ann Storrie

Left Busselton Jetty Interpretive Centre, where tickets are bought for the Underwater Observatory.

Photo – Andrew Davoll/Lochman Transparencies



Above Interpretive displays and viewing window on the second level.
Photo – Ann Storr

maintenance and reconstruction projects. The committee also secured several State and Commonwealth government grants that contributed to the project.

However, it still took a fire that ravaged 70 metres of decking at the jetty's seaward end in December 1999, and a redirection of committee funds to repair it, before the idea, planted in 1976, would bear fruit.

Allie Scott, who, like others, worked tirelessly—and voluntarily—for the jetty, chaired the committee for 11 years. He became legendary for his tenacious lobbying for funding to support jetty projects. Sadly, at the age of 90, Allie Scott passed away in December 2002—just months ahead of him realising his long-held dream of seeing the Underwater Observatory completed.

Today, the \$3.6-million observatory, located at the seaward end of the jetty, has not only revamped a local icon, but also created an ecotourism facility of international standard. The jetty's 200,000 visitors per year, plus an estimated 60,000 visitors to the observatory from around the globe, can collectively witness the prolific marine life below the sea's surface.

Constructing colonies

With an internal diameter of nine metres, and descending eight metres to the bottom of the ocean below the

jetty, the Underwater Observatory is a feat of engineering. Cylindrical in shape, it was prefabricated on land before being towed from Henderson, south of Fremantle, and effectively sunk into position and fixed to the sea floor.

Several of the existing timber piles were removed to accommodate the cylinder's concrete shell. Other piles from the edge of the previously burnt section of the jetty were relocated to most of the 11 picture windows that frame the spectacular underwater scenery. Additional steel piles were installed to support the structure, producing a new marine habitat.

These newer piles are already becoming coated with marine life. During the internal fit-out phase of construction, colonisation of the piles began and this will continue for many years to come.

The concrete cylinder itself also attracts marine life like a magnet. In time, it too will be colonised, much to the sightseeing delight of divers.

A two-way fish bowl

The railway that had once transported goods to the end of the jetty now carries passengers from the shore to the observatory. Inside the observation chamber, visitors come face to face with the inhabitants of the marine world, as colour and life floods their view.

But the sightseeing opportunities are two-way, as fish and a curious octopus alongside the glass seem equally fascinated looking into the chamber full of people looking out at them.

There are three levels to the bottom of the observatory via a spiralling staircase. On each of these platforms, visitors can view hundreds of marine species encrusting the piles, and colossal schools of fish that gather in the area. Additional windows are located halfway between the levels next to the staircase and provide opportunities to view marine life at different depths.

Life beneath the waves

The vibrant marine species encase the entire lengths of most of the jetty piles. The quantity and biological diversity changes up and down the pile, largely depending on conditions in the water.

From the first windows, as you descend into the observatory, you can see the area immediately beneath the decking of the jetty where pigeons and swallows frequently nest or shelter from the wind or rain. The next window



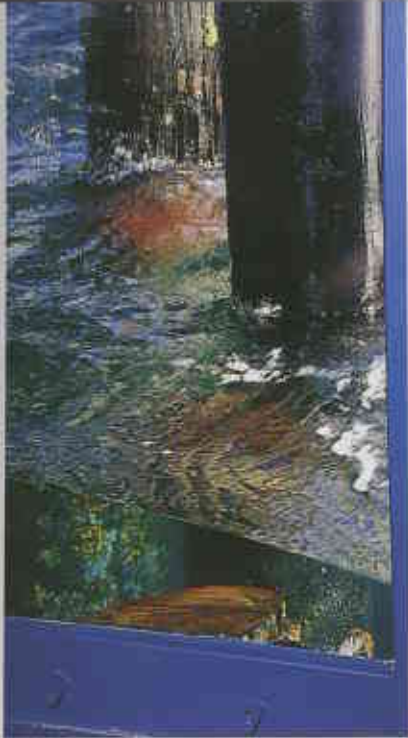
allows you to explore the intertidal zone. Up to a metre of the piles may be exposed during low tides, when many marine animals become vulnerable to extreme heat. Few can survive without water to aid breathing and feeding. Which is why barnacles and mussels are mostly found here. These animals can close up to wait for the high tide to return. At low tide, the water just laps the bottom of the window.

Moving downwards into the subtidal zone (about two-and-a-half metres below the surface), you will find three windows that look out to the north and at the 'Piles of Life' display. These are some of the non-structural piles that had either fallen or been removed and subsequently fastened to the new piles. Sponges and sea squirts, and the delicate tangled tubeworms and telesto soft coral are present in this zone. Many of these species live here because they would be easily dislodged by waves in the intertidal zone.

Above left Schools of old wives are often seen beneath the Busselton Jetty.

Above An amazing tube anemone with divers seen in the background.
Photos – Peter & Margy Nicholas/Lochman Transparencies

Left Life in a fish bowl. Everyone can now share the magical underwater world that divers have enjoyed for so long.
Photo – Ann Storrie



The next window before you reach the bottom of the observatory is in the mid-water zone, about five metres below the surface. From this south-facing window, you might see yellowtail scud, leatherjackets, old wives, wrasse, sweep, moonlighters and globefish. A large pile displays telesto soft coral, which balloons out from the structure and dominates this window.

Seven-and-a-half metres below the surface, and about a metre above the ocean floor, we reach the base of the observatory. There are four large windows looking north and through them you can clearly see the rubble environment beneath the jetty. Old fallen piles, rails and other debris from the jetty's years of use now provide habitat for bottom dwellers like cuttlefish, octopus, wobbegong sharks, gurnard perch, cobbler, flatworms and nudibranchs. Schools of silver drummer, long-finned pike and tarwine can also be seen here.

The final window of the ground floor is the west-facing window that looks out onto the meadows of seagrass that dominate Geographe Bay. Standing quietly below the ocean and peering out through the thick glass windows you can only marvel at the natural wonders of our marine environments.

Where different species meet

Considering the precarious history of the 138-year-old Busselton Jetty, the Underwater Observatory is a monument in which two worlds—above and below the water—benefit. Whether you scuba dive or snorkel, or



Above Interpretive displays and the viewing window between the first and second levels.

Above left The water rises and falls at the intertidal zone window.
Photos – Ann Storrie

soak in the view from the indoor comfort of the viewing chamber, the observatory bridges the gap between land-faring human colonies and our underwater counterparts. With the spotlight now on the once lesser-seen marine world, the Busselton Jetty Underwater Observatory illuminates Allie Scott's legacy, and brings dazzling new marine life into sharper view.

Margaret McNally is a final-year student in the Department of Communications and Cultural Studies at Curtin University, where she is completing a double major in Professional Writing & Presentation and Publishing Practice.

The full colour book *Beneath Busselton Jetty* by Ann Storrie, Sue Morrison and Peter Morrison, was used in researching and writing this article. It is available for purchase at the Underwater Observatory bookstall, CALM offices, and selected bookstores.

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