

A WEIGHTY PROBLEM

Major maintenance work at the Port of Esperance throws up some interesting challenges, some unforeseen, others foreseen but requiring more ingenuity than usual.

Such was the case with the most recent 16-day shutdown of the berth three iron ore loading circuit to deal with major corrosion problems, the third such shutdown over the past 12 months. A fourth, and final one to complete corrosion repairs on the conveyor, occurs this month (April).

To deal with a potential environmental problem caused by the blasting grit falling into the ocean and dust escaping, an intricate scaffolding arrangement had to be erected and encapsulated to capture this material.

Conventional scaffolding was erected for the first two shutdowns, but the third shutdown presented that interesting challenge: it was along the bridge conveyor section between the shore side conveyor and the berth three ship loader and, unlike the other sections that had been repaired, this section had far less structural support as it was between the supported ends of the conveyor.

The weight of conventional scaffolding could have literally "broken the back" of the conveyor.

One of the Port's partners in this project, South East Scaffolding sought advice from suppliers in Perth who came up with the idea of using lightweight scaffolding modules made from aluminium. The modules would be assembled on the ground and then craned into position and supported off the conveyor.

A trial in Perth showed that three modules put together like a giant meccano set, each weighing about 4.2 tonnes would enable a 24 metre section of the conveyor to be encapsulated for the corrosion repair work.

Once on site, however, modifications had to be made to "custom fit" the conveyor. Fortunately, the Port had engaged specialist engineers who provided essential advice on site to enable the project to continue, and compromises and changes to

Lightweight aluminium scaffolding on the berth three conveyor is encapsulated to capture blasting grit.



be made on the run.

The scaffolding suppliers had not taken into account the Esperance weather and only two full-size 4.2 tonne modules could be erected. A smaller module weighing about three tonnes had to be used due to difficulties in lifting the module into place.

The encapsulation on the modules created a sail effect once wind speeds topped 35 knots, creating an extra live 600kg of weight, which would have tested the strength of the conveyor structure.

The go ahead was given to install the modules with the proviso that the encapsulation be removed if the winds exceeded the safe limit, which could have delayed progress and extended the life of the project and held up shipping operations.

Fortunately the weather was favourable most of the time and the project was finished on time.

Meet SPA's CEO

French-born Nicolas Fertin took up the role of Chief Executive Officer with the Southern Ports Authority (SPA) on March 25, 2015.

He oversees the operations of the Ports of Esperance, Albany and Bunbury following their merger on October 1, 2014.

Mr Fertin moved to Australia 18 years ago and lives in Perth.

He graduated with an MBA from Melbourne's Deakin University and has held senior executive positions at Pacific National Rail, P&O Ports - DP World

(Global) and UGL Property Services (Asia-Pacific).

He has extensive experience in managing and developing large-scale port and logistic operations, valuable assets in his role to develop and expand SPA's business.

"I enjoy leading multiple business units where teams, assets and processes can be challenged to effectively optimise complex supply chains," Mr Fertin said.

"In this regard, the Ports of Esperance, Albany and Bunbury each have their unique aspects, but I have already learnt

that they face common issues and challenges.

"I believe we can accelerate the development of trade across the three ports, increase our commercial focus, facilitate supply chain benefits and manage our assets and operations in a socially and environmentally responsible manner for future generations."

Mr Fertin said that he also looked forward to engaging with local communities, each Port's customers and stakeholders.

Children's Safety Message

The Port of Esperance's safety message transcends its operations, its maintenance works and even its boundary, to reach into the homes of our employees, and the homes of their friends. Importantly, it reaches into the minds of children.

You may ask how? Simply by running a competition or, in particular, a Safety Calendar Drawing and Colouring Competition. It's the second year that this has been organised by our OHS Department.

Designed to get children aged from as young as two to start thinking about safety, the competition is about filling young minds with the knowledge that safety is important, not only in the workplace, but also in the home and in the playground.

Our people were asked to discuss with their children what safety means and why it is important to be safe, and then they were asked to draw and colour a picture of what was discussed, for example, wearing seatbelts, wearing PPE, knife safety, electrical safety, road safety, water safety and so on.

Thirty-three entries were received and judge, Anthony Kicic, Associate Professor of the Telethon Kids Institute, again praised the high standard of entries and the scope and insight of their safety messages.

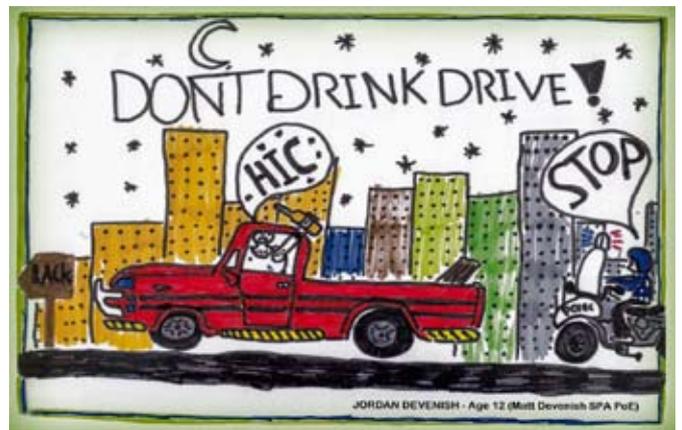
Twelve winners were selected (four from each age group) and the winning entries have been printed in a 2015 calendar that has been distributed to all Port workers and contractors. Each entrant received a certificate of participation and their drawings have been put on display around the Port.

More importantly, however, we recognise and acknowledge all the hard work that these children put into their safety project, their amazing entries and the knowledge they have gleaned from this exercise that will remain with them throughout their lives.

The Port of Esperance encourages everyone to continue a safety dialogue with young people of all ages as it takes lots of small steps to complete a long journey, that being to live a safe and happy life.



Competition winner Stephen Kirby with his parents Tam and Marcus and sister Georgia. His safety message: Never play with matches or your house could burn down.



Jordan Devenish's Safety Message: Don't Drink and Drive.

IRON ORE FOAMING TRIAL

Vigilance is the key to managing many aspects of the Port's operations - like making sure our people always remain safe, like making sure our infrastructure remains in tip-top shape enabling us to meet our customers' requirements, and making sure our operations have minimal impact on our environment and our community.

We are particularly vigilant about dust.

Airborne dust generated by extremely dry and windy conditions is hard to manage, particularly in summer, although we seal problem areas, spray unsealed roads and sweep roads and berth decks regularly.

Within our operations, however, managing dust is one of our highest priorities; particularly dust from our iron ore circuit which has handled more than 100 million tonnes of the bulk product since shipments began back in 1995.

Back then, storage sheds were built, the conveyor circuit was fully enclosed to stop dust escaping and dust management procedures introduced, like vacuuming the circuit after each shipment.

But we are always on the lookout for ways to further diminish any dust being generated by our operations. We can't afford to rest on our laurels.

In December last year we started trialling a foaming system that conditions incoming iron ore that has been discharged from the rail wagons at the rotary car dumper (RCD) into a hopper before being transferred by conveyors to a storage shed. Dust collectors manage any dust issues at the RCD.

The system generates foam by mixing high pressure air with a mix of wetting agents and water. The foam provides a high surface area to promote absorption into the ore and minimise "water beading" caused by surface tension.

The system has been installed at a number of transfer points along the conveyor circuit, where the ore is transferred from one direction to another. It is at these locations where dust may be a problem.

The foam is sprayed onto the ore as it falls from one conveyor belt to another, so that it is mixed through the product.

Initial observations indicate that dust levels are reduced when the foaming system is activated, but modifications to the system are required to optimise its effectiveness and minimise clean up.

Modifications are being carried out and further trials undertaken. Once the improvements have been made, detailed dust assessments will be conducted.

The trial has the support of Cliffs Natural Resources who may adopt the system at their mine site should it prove successful.

CORMORANT RELOCATION PLAN

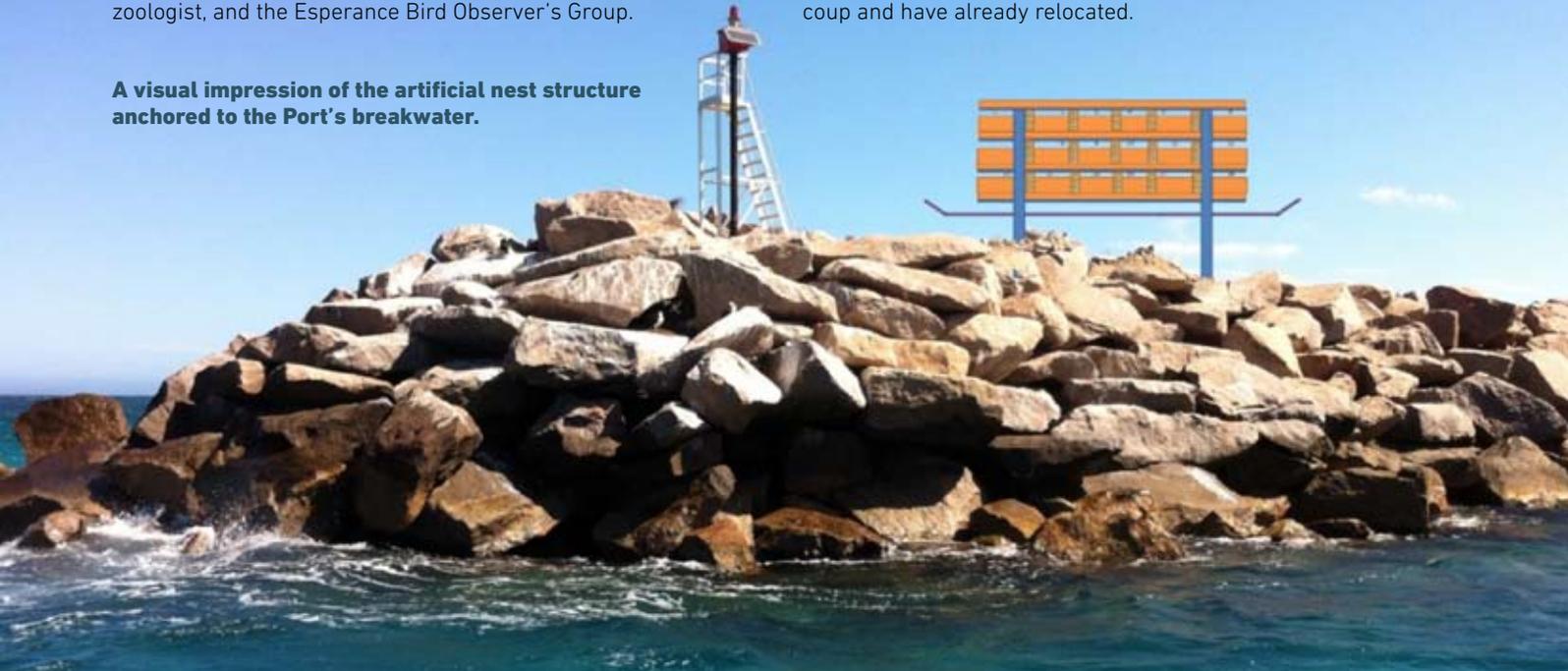
Work is progressing on plans to design and construct an artificial nest structure for Black-faced Cormorants, the species that have an established colony on the derelict Tanker Jetty Island.

The new structure will be located at the end of the Port breakwater where the species already roosts and nests among the rocks.

The Tanker Jetty Island will be demolished before the coming winter as it is a hazard to people and craft on the water.

The design of the nesting structure follows Port of Esperance consultation with Bird Life Australia, a Griffin University researcher who has experience with these birds, a consultant zoologist, and the Esperance Bird Observer's Group.

A visual impression of the artificial nest structure anchored to the Port's breakwater.

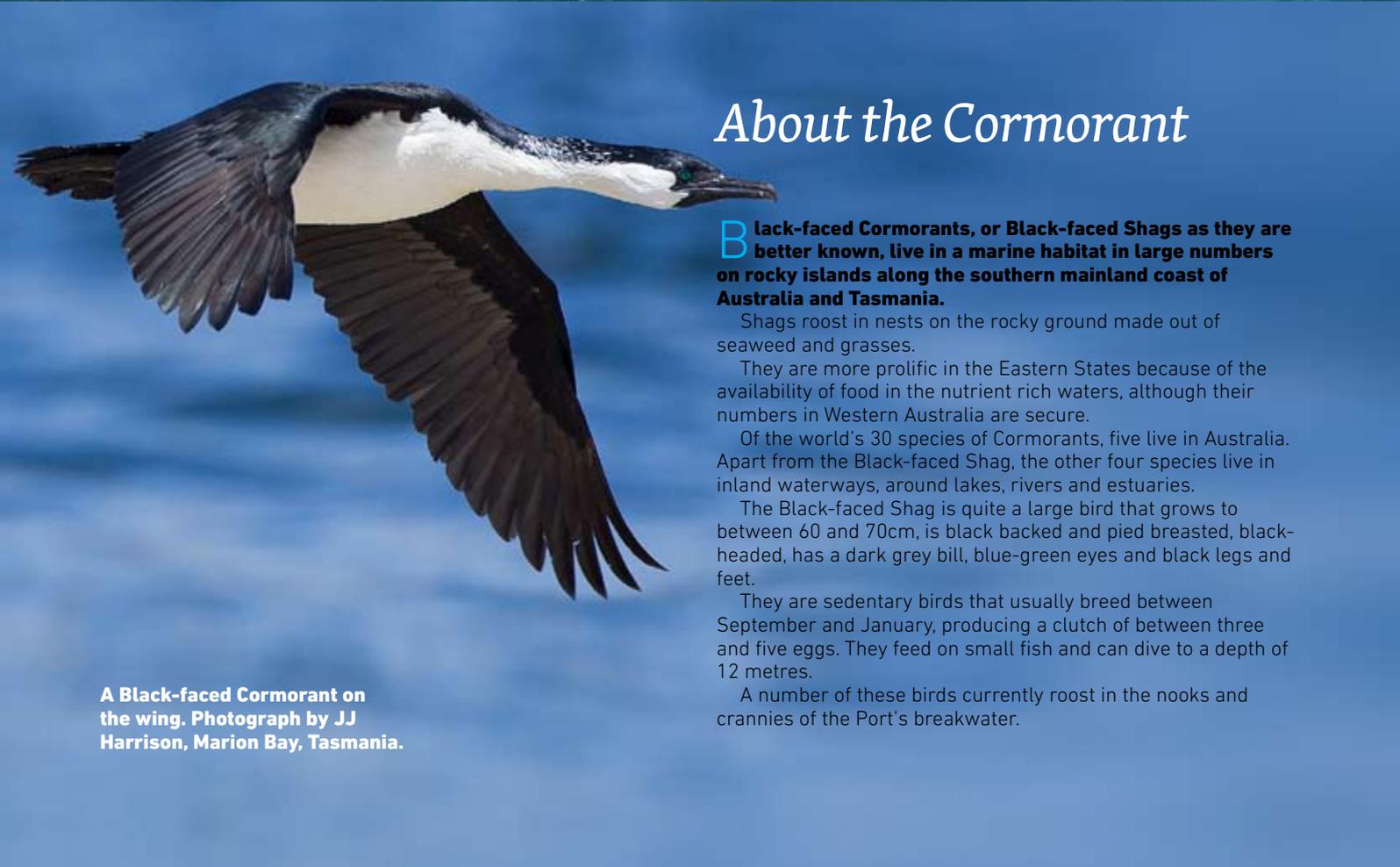


Comprising of three tiers that will accommodate up to 30 nests, the structure will be four metres long, two metres wide and three and a half metres high, high enough to protect nesting birds and their fledglings from cats.

With a life of up to 20 years, the nesting structure will be constructed from wood and steel and anchored to the breakwater.

Plans are also in place to relocate some of the existing nests from the Tanker Jetty Island before it is demolished to the new structure to encourage the displaced birds to take up residence on the breakwater.

This will be done after last year's nestlings have flown the coup and have already relocated.



About the Cormorant

Black-faced Cormorants, or Black-faced Shags as they are better known, live in a marine habitat in large numbers on rocky islands along the southern mainland coast of Australia and Tasmania.

Shags roost in nests on the rocky ground made out of seaweed and grasses.

They are more prolific in the Eastern States because of the availability of food in the nutrient rich waters, although their numbers in Western Australia are secure.

Of the world's 30 species of Cormorants, five live in Australia. Apart from the Black-faced Shag, the other four species live in inland waterways, around lakes, rivers and estuaries.

The Black-faced Shag is quite a large bird that grows to between 60 and 70cm, is black backed and pied breasted, black-headed, has a dark grey bill, blue-green eyes and black legs and feet.

They are sedentary birds that usually breed between September and January, producing a clutch of between three and five eggs. They feed on small fish and can dive to a depth of 12 metres.

A number of these birds currently roost in the nooks and crannies of the Port's breakwater.

A Black-faced Cormorant on the wing. Photograph by JJ Harrison, Marion Bay, Tasmania.

Port Personality

Dave Melbourne

Dave and Irene Melbourne



Dave Melbourne is big on teamwork, on partnerships. He has to be.

When acting as a Plant Supervisor for one of the Port's five operational teams that handled over 11 million tonnes of cargo last year, and as a member of our Emergency Response Team, he has to be able to get along with others.

On the job Dave is known for his ability to bond people together, he plays a leadership role in that regard, and is highly respected by his peers for his common-sense approach to most things. Probably something he learnt from his six years in the Australian army.

Just as important though, he has to get along with his wife of 34 years, Irene, for he is one half of Two-a-Penny, a musical duo who have been doing gigs around Western Australia since he moved west from Brisbane back in the 1970s to work in the iron ore industry.

While Irene is a classically trained pianist, who plays Chopin, Beethoven and Mozart on a 120 year old Julius Feurich grand piano that Dave bought for her 50th birthday, he is a self-taught guitarist.

(That piano, by the way, was built in Leipzig, Germany, and could be the only one of its kind in Australia. Listening to Irene on its keyboard is something special.)

Together they play all styles: jazz, blues, country, Irish and rock 'n roll and

they share the vocals. They mix up their repertoire with Irene squeezing out a tune on the accordion and Dave a jig on guitar or mandolin. Amazingly, though, Dave can't read music.

Ever since his Grandmother bought him a guitar for his 13th birthday back in his home town of Yackandandah in Victoria, he's been playing by ear.

Now, however, some 4000 gigs later at various venues such as hotels, dance halls, and restaurants and at weddings, folk festivals, and concerts all around the State they have a finely tuned act and a following of fans.

But being a self-taught musician is one thing, working the giant bulldozers, shovels and cranes in the iron ore industry up north is something else. Dave, a fitter by trade, has acquired a myriad of skills that provided him with the experience to take on most jobs like

the 20 years he spent in boat building and mine maintenance in and around Geraldton, and the last 12 years at the Port of Esperance.

In 1997, Dave and Irene came to Esperance to visit her sister and nieces who lived locally. They have been here ever since, moving into a rural property opposite Pink Lake where once Esperance's illegal two-up game was played in the paddock, and the somewhat ramshackle dwelling located on the land was aptly described by Irene as "a cake with no icing on top".

But she can't say that about the home Dave has built for them, including a music room for Irene to teach her piano pupils.

Dave recently turned 65, but has no plans to retire yet, either from the Port or from playing music. He's enjoying life too much to think about hanging up his guitar.

SUPPORTING OUR COMMUNITY

The Port of Esperance's Sponsorship and Donation Policy supports local organisations, individuals and businesses whose initiatives and projects provide benefits to the local community.

Since it was introduced back in 2005, more than half a million dollars has been provided to schools, local community service groups, sporting clubs and arts organisations whose initiatives made Esperance a better place to live and work.

Last financial year, 46 entities received between them more than \$80,000 for various initiatives that met the Policy requirement in one way or another, and for the first six months of 2014-15 to December 31 last year, more than \$51,000 had been paid or committed.

Recipients so far this year include \$4000 for the Esperance High and Esperance Primary School students who took part in the Tournament of the Minds, \$4545 to the Surf Lifesaving

Club for the purchase of Junior Nipper Surfboards, \$2000 to the Esperance Bay Rotary Club for the New Year's Eve fireworks, and \$1500 to the Basketball Association for the indoor sports stadium renovations.

The Port continues to be a major sponsor of the Esperance Chamber of Commerce and Industry (\$6500) and the Chamber's Business Awards (\$2273), Festival of the Wind (\$5000), South East Football Academy (\$5000); and the Esperance Apex Club (\$6000).

We also supported the RFDS, Esperance Cricket Association, Community Arts and the Esperance Bay Yacht Club.

If your organisation has an initiative that you believe will benefit our community in one way or another and you need some sponsorship support, give the Port a call on 9072 3333.

We may be able to help.



SOUTHERN PORTS AUTHORITY
Port of Esperance



(08) 9072 3333



enquiries.esperance@southernports.com.au



PO Box 35, Esperance WA 6450



www.southernports.com.au