

Conservation through clay

Creating ceramic nesting modules for little penguins

Why would anyone buy an artwork knowing that they'd never see it again? More than a dozen investors have already eagerly done so through an ingenious project that assists little penguin conservation, writes **Keely Jobe**.

AT THE END OF WINTER, I came across a little penguin on our local beach. It was the first penguin I had seen in the wild since moving to lutruwita/Tasmania, and it was much smaller than I expected, around 30 centimetres in length. Its body was cold but not yet stiff; it had probably been dead for less than a day.

Population in peril

I couldn't see any obvious signs of predation, but I soon discovered that the little penguin, *Eudyptula minor*, faces a lengthy list of threats. There are natural predators such as sea eagles, kelp gulls, pacific gulls, long-nosed fur seals and orcas, all of which can be found in the waters around my home. There are new threats, too: rapidly warming waters (Tasmania's are warming at four times the global average), excessive silt from human industry, collisions with watercraft, plastics pollution, abandoned fishing nets.

But it's when the penguins come ashore to breed and to moult that the risks really stack up. In water, the penguins move with a grace akin to flight, but on land their gait is laborious and clumsy. Crossing the tideline, they face rats, cats and dogs, foxes, snakes, goannas and heedless humans. Once inside the nest, they're susceptible to heat stress and bacterial infections. Tasmania has seen significant environmental shifts in recent years, but the changes are rarely consistent from one place to the next. In some areas, while warming water brings an increase of fish and squid, equating to year-round food security for the penguins, their response to this environmental change is coming at a cost: the birds are no longer breeding seasonally but throughout the year, even in winter. This means they're on land more often, putting themselves at risk. In other areas, food is becoming scarce, and the penguins must travel further to find it.

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Conservation efforts are often compromised by the use of non-biodegradable materials. You don't get much cleaner than clay

Caption required/ Jane Bamford Ceramic Little Penguin Nesting Module for the Derwent Estuary Project 2021 Photo credit Peter

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I couldn't tell much from the state of the carcass, but the truth is, from the moment it had hatched, there had been danger at every turn for this diminutive seabird. Surviving to adulthood seemed to me a feat in itself.

Little penguins are the smallest penguins in the world. They can be found along the coastlines of southern Australia and New Zealand. Tasmania is a stronghold of the Australian population: it's thought that around half live and breed here, though population estimates are a difficult task in this state. The convoluted coastline and profligacy of small, suitable islands mean accuracy is never assured. Along the Derwent estuary, there is at least some clarity, with studies suggesting the population has dropped in recent decades from about 1,000 breeding pairs to 100 individuals.

Every penguin colony faces a different set of threats. For the Derwent population, these include human development, vegetation removal, weed infestation, drowning in gillnets, entanglement in coastal debris, and storm surges that cause critical damage to nesting sites.

Around the same time the little penguin washed ashore on my local beach, a pair of the same species was settling into a new burrow on Kangaroo Island in South Australia. The male had discovered the place unoccupied, and a female opted to shack up with him. The burrow sat comfortably above the tideline. It was a warm hollow tucked beneath a mash of boobialla, sea spurge and African boxthorn, and its walls curled in like a nautilus shell. This coiling kept one part of the chamber hidden from view. It was perfect. When the young ones arrived, they could be tucked away from prying eyes. The male had already gathered grasses and leaves, fashioning a cupped crib in the back of the chamber.

The burrow appeared to be made of stone. An oddly hospitable kind of stone, both earthy and bone dry. There were small chinks in the walls that could catch the breeze no matter which direction it blew from. A stable temperature and clean air might just be possible with a burrow that breathes. There was a metallic disc resting on the floor of the burrow. When the male came across it, he kicked it outside.

Art for the non-human world

Jane Bamford invites me to her home for tea and pumpkin soup. I drive to a small beachside suburb south of Hobart. Jane has been a celebrated ceramicist for many years but recently her practice has veered in a new direction.

Jane has spent much of her life in and around the waters of Tasmania. She snorkels and scuba dives, and volunteers with the local branch of Coastcare. When she was a child, her family would take regular drives up the coast to Triabunna to a shack they call 'The Duck 'oles'.

'The water used to boil with life,' she says. 'Now my kids won't even throw a line in. No point – there's nothing to catch.' She's alarmed by the environmental mess left for generations to come, both human and nonhuman. Over the past few years, this apprehension has found its way into her work.

'That,' she says, pointing over my shoulder to a pair of ceramic cups, 'that might be the last thing I ever make for a human.'

Jane's practice began to shift in 2017 when the CSIRO approached her to design and sculpt artificial spawning habitats for the spotted handfish, a critically endangered species that is found at only eight sites in the River Derwent. The fish's natural spawning method was to lay eggs upon the stalked ascidian (or sea squirt), which had been decimated by pollution, mooring chains and the introduction of an invasive sea star. Jane provided ceramic stems as an alternative. Clay was the key element. Conservation efforts are often compromised by the use of non-biodegradable materials. You don't get much cleaner than clay.

When the design was settled, the University of Tasmania provided a space and a kiln at its art school. Jane produced 3,000 stalks prior to spawning season in 2018 (see Signals 131, June 2020).

She tells me it was the most fulfilling work she had ever done. When the spawning habitat won the 'Design for Impact' category at the Design Tasmania Awards for her and the CSIRO, she realised that their submission was the only one conceived for the non-human world.

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Caption required/ Artists and scientists at workshop creating ceramic little penguin nesting modules for the Derwent Estuary 2021 Photo Peter Whyte

Caption required / Ceramic Little Penguin Nesting Modules for the Derwent Estuary Project 2021

Photo Peter Whyte

This insight marked a turning point in the way she approached her practice. Was there a way to make art that decentres humans while still enabling the artist to be paid for their labour? Was it worth pursuing grants from conservation funds when that pool was so drained and the competition so fierce? How might one seek funding from art investors while disrupting the notion of ownership? These questions laid the groundwork for her next project.

'May I see the penguin burrow?' I ask.

Jane rushes over to a table and gingerly removes a sheet of plastic covering a large hump. Beneath is one of her nesting modules, designed specifically for threatened penguin colonies along the Derwent. As with the handfish project, this is a collaborative effort. Jane has sought guidance from penguin ecologists, animal behaviourists and PhD students to ensure the most suitable habitat for the birds. With every piece of new information, the design evolves. In this iteration, a hook has been added to secure an iButton, a device like a watch battery containing a chip to record data, which in this case measures temperature inside the burrow. Penguins – like the male on Kangaroo Island – kick them out if they're not fixed.

The clay is still wet, but there's a distinct warmth to the material. Despite this being a conservation project that will ultimately be installed beyond human reach, I can understand why Jane gets most of her funding from arts organisations. This is a beautiful object; it belongs in a gallery. I would bring it home if I could. The burrow is built up with coils of clay, and while the figure is reminiscent of forms in nature, there is some hint of the human. The shape alludes to the artist's movement: a slow, deliberate lassoing. There is evidence of care and learning too, of time spent engaging with experts, or days squatting in penguin colonies studying place. When I look at this work, I see investment inscribed in every line.

An audacious thing to ask

But, for art collectors, this kind of investment is not so straightforward when it comes to the burrow project. Jane's first penguin module was exhibited at a design show in early 2021, following months of planning with South Australian researchers. The module was for sale, but there was one stipulation: the buyer was required to gift the piece into penguin habitat on Kangaroo Island, in one of the state's most vulnerable colonies. Jane was nervous. It was an audacious thing to ask of an investor – buy an artwork and never see it again. To soften the blow, she included a few unrelated ceramic works in the exhibition that could be purchased and taken home. Not one of these works sold. The burrow, on the other hand, was bought in a flash and two modules not included in the exhibition were also sold. (One of these has since been occupied by a pair of breeding penguins.)

Jane realised she was on to something.

'People want to support endeavours like this. You just need to give them the opportunity.'

I'm surprised that buyers are so willing to relinquish ownership. 'Don't they want to see what happens to their investment?' I ask. 'Is there a risk that they'll turn up at the colony demanding visitation rights?'

'It's not about you,' Jane replies, and I realise she's talking directly to the hypothetical investor. 'This is not a sculpture trail.'

Jane tells me that the most common guery she gets is whether she has seen her work installed into habitat. Has she done a dive to see the handfish spawning? Has she hovered on site to see the penguins move in?

'Why is that necessary?' she asks. 'Picture being a new parent. You're exhausted and starving. The kid requires all your attention, saps all your energy, and on top of it all some guy keeps wandering into your house, getting up in your space and blinding you with a camera flash.'

Later, she admits to some ambivalence. While she's not creating an outdoor exhibition, the investment model she has developed works precisely because the objects have aesthetic appeal. They embody the science, but they're suited to a gallery. They demand curatorial attention. Maybe this is why they sell so well.

Jane invites me to an upcoming group show, involving eight ceramic artists - Nanna Bayer, Miriam Berkery, Neil Hoffmann, Orla Marchment, Julia Mountain, Penny Smith, Anna Williams and herself – armed with some scientific input offering their own take on a penguin burrow.

Tasmania is a stronghold of the **Australian little** penguin population: it's thought that around half live and breed here

Dr Diane Colombelli-Negrel, Kate Welz and Sarah-Lena Reinhold installing Jane Bamford's first ceramic little penguin nesting module, Kangaroo Island, 2021. Image courtesy Kangaroo Island Wildlife Network

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A response to a need

I arrive at the exhibition 10 minutes early. The place is already packed. Fourteen plinths are occupied by 14 penguin nesting modules. Each is bound for a spot along the River Derwent. As a collective, the objects look like something left after high tide. Flotsam and jetsam. The human imprint has largely been muffled. A quick scan of the artworks shows that five have already sold. The curator has a page of red dots at the ready. Some of the buyers are pitching in as groups to secure a purchase.

While each piece is unique, there are a few uniform features. Every module has a removable lid for research observations, small gaps for ventilation and thermal consistency, and a curved form to keep a part of the chamber screened. There is no floor - the nest is formed in the natural ground – but a short entrance tunnel has bars like a cattle grid to help the penguins climb in and prevent predators from digging a larger access hole.

The external walls are textured to encourage *Tetragonia implexicoma*, the native bower spinach, a coastal shrub that conceals the burrow while warding off invasive plant species.

In the arts, I often hear the term 'a response to'. In this case, one should take the term literally. These artworks are answers. They're form and function as conversation. They demonstrate the kind of inter-species dialogue that comes from recognising the agency of another life form. In paying attention to the little penguin's needs through research, knowledge of place and imagination - the artists are given the ability to respond.

More than anything, I love how this exhibition troubles the notion of ownership. As I watch each piece acquire a red dot, I wonder if I'm witnessing a cultural shift. To purchase an artwork and donate it to another species flies in the face of capitalist standards. The individual is background in this transaction. Ego is de-emphasised here. I speak to Orla Marchment, an emerging artist whose work has been included in the show. She seems cognisant that the object has never been entirely hers.

'It hasn't even come into its peak yet,' she says. 'It won't until it's weathered and worn, until it's hidden by Tetragonia.'

The following day, Jane sends me a text. The show is sold out. But for me, a real mark of the show's success is that I can't get Orla's burrow out of my head. A pale, fleshy form with melting lines, it comes to me throughout the day tucked beneath a rocky outcrop, a coastal succulent ranging across its surface. The sea is near. Inside the burrow, I think there might be life.

Keely Jobe is a PhD candidate at the University of Tasmania. She lives by the sea on the east coast of lutruwita/Tasmania. An extended version of this article was first published online in *The Monthly*, December 2021.

Jane Bamford is a Tasmanian artist who has become known for creating functional forms in species support which embody creative problem solving, functionality and compassion for the non-human world. Over the last 6 years Jane has consciously moved her artistic practice to focus on projects in collaboration with scientists and researchers in species and habitat support.

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Jane's collaborators in this project are:

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