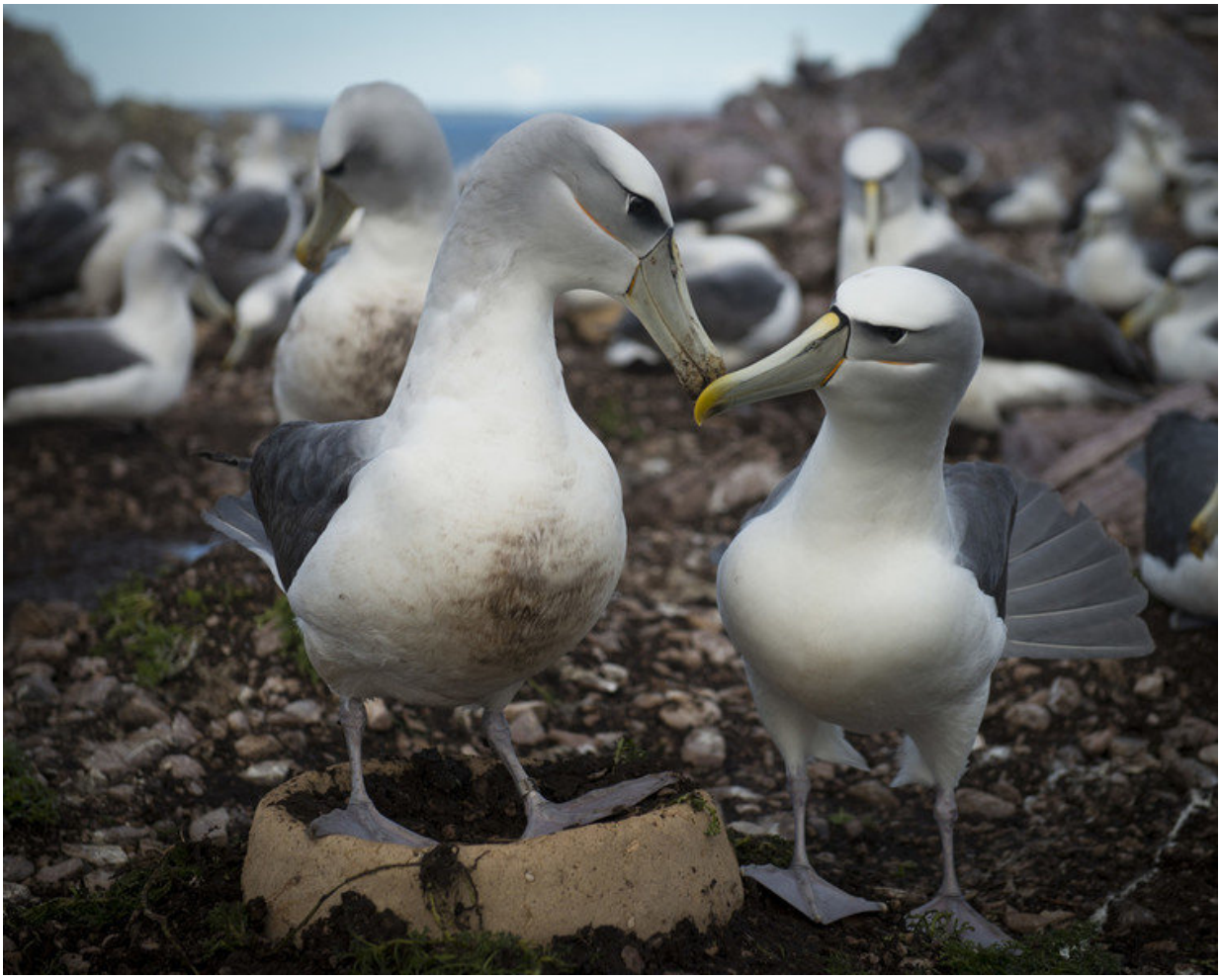
Artificial nests aim to increase Shy Albatross breeding success

October 9 2017



A pair of shy albatrosses (Thalassarche cauta) reunite for the breeding season and engage in courtship rituals, Albatross Island, June 2017. Credit: Matthew Newton / WWF-Aus

Specially built mudbrick and aerated concrete artificial nests, airlifted on to Bass Strait's Albatross Island in a trial program aimed at increasing the breeding success of the Tasmanian Shy Albatross, appear to have been accepted by the vulnerable sea-birds, early monitoring is showing.

A co-operative effort – which brought together wildlife and funding partners from WWF-Australia with support from the WWF-US Wildlife Adaptation Innovation Fund, the Tasmanian and Australian Governments, CSIRO Marine Climate Impact and the Tasmanian Albatross Fund – saw an air and sea operation that installed 120 of the pre-constructed nests on to the island.

Department of Primary Industries, Parks, Water and Environment Wildlife Biologist Rachael Alderman said the first post-installation monitoring trip this week has shown that most of the artificial nests are being used by the birds.

"This is fantastic to see as the operation was several years in the planning from developing the idea, testing a small number of proto-types, and refining and expanding to this larger study that will enable evaluation of whether this approach can provide a boost to the population.

"Albatross lay a single egg each year and they invest enormous energy into incubating the egg and raising the chick. On average, over half the attempts will fail, and one of many factors in this is the nest quality," Dr Alderman said.

"Their nests range from a barest scrape on the rocks to a high sculptured pottery-like pedestal. Monitoring data shows that pairs breeding on high quality nests have higher breeding success than those on poorer quality nests.

"This trial is based on the simple theory that if ready-made high-quality

nests are put in areas where nests are typically of lower quality we increase the chances of albatross pairs successfully raising a chick."

Acting Threatened Species Commissioner Sebastian Lang said the Tasmanian Shy Albatross was identified by the Australian Government, through the Threatened Species Prospectus, as an important species in need of action and strong partnerships to assist its survival.

"The species is nationally listed as Vulnerable, but is still relatively abundant. We are acting early and working co-operatively to understand the threats to its survival, and trial and implement on-ground actions to address these threats," he said.

WWF-Australia's Head of Living Ecosystems Darren Grover said with breeding success key to maintaining viable populations, the nests were seen as an important measure.

"If good quality, artificial nests help more chicks survive until they are big enough to fly then over time that could make a real difference to the population," he said.

"After several proto-types, the team developed an artificial nest that mimics a good quality real nest.

Mr Grover said nest installation was timed to maximise acceptance by the birds.

"Researchers positioned the artificial nests just as the birds were starting to stake out nest sites and begin construction. Although it is still very early days it's encouraging to see some birds starting to utilise the artificial nests," he said.

"We're hoping to see many eggs hatch and many chicks survive on

artificial nests," Mr Grover said.

Dr Alderman, who has been monitoring the population for nearly 15 years, said with the Tasmanian Shy Albatross only breeding at three offshore islands near Tasmania, the species was particularly vulnerable to impacts such as climate change.

"Already some impacts are being seen with fewer chicks produced in years of higher temperatures or increased rainfall – also there is evidence of birds spending longer periods at time at sea obtaining food," Dr Alderman said.

"While some species can physically relocate to more favourable environments or adapt in other ways, the biology of albatross make them particularly vulnerable to rapid negative changes. Their low reproductive output and innate compulsion to return to the same colony each year, restricts their ability to move to more favourable environments.

"Unprecedented changes in the marine and breeding environments have already been documented and we know that climate change is here to stay. We need to be developing strategies now if we want to ensure our most susceptible species persist in the future".

Provided by WWF

Citation: Artificial nests aim to increase Shy Albatross breeding success (2017, October 9) retrieved 18 July 2024 from https://phys.org/news/2017-10-artificial-aim-shy-albatross-success.html