

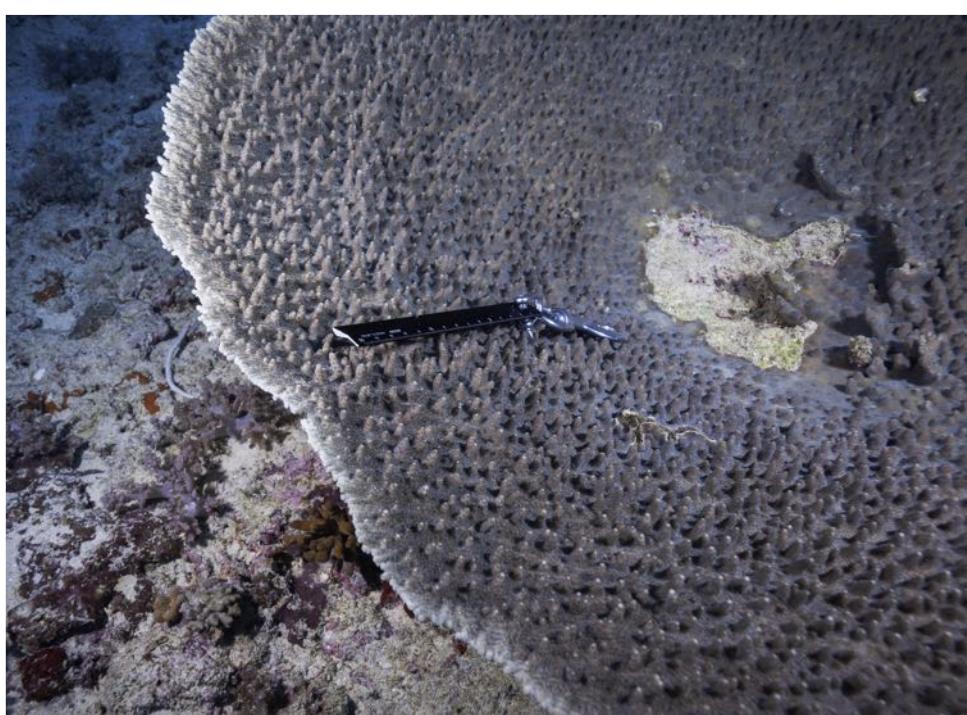
THE CORALS OF NINGALOO

The use of molecular techniques has revealed that the traditional approach of identifying corals solely based on morphology does not always work. The upshot is that most of the species names in the old field guides are incorrect. Project Phoenix uses an approach tried and tested in other organisms but new to corals, that focuses on the collecting specimens from the location where the species was first described. These “topotypes” then serve as molecular archetypes against which other specimens can be quantitatively compared. We then combine morphology, geography, and life history traits as multiple lines of evidence to give confidence for species hypotheses.

The corals of Ningaloo are an important part of the overall puzzle because at least 40 species were described based on specimens collected in Western Australia on voyages such as the Baudin Expedition from 1800-1803. A few iconic Ningaloo species that are commonly seen in the lagoons are presented below, some of which are not in the field guides and others of which are likely to be new to science.



Acropora indiana
Wallace, 1994



Acropora sp.
Undescribed



Astreopora myriophthalma
(Lamarck, 1816)



Acropora protoeiformis
(Saville-Kent, 1897)



Montipora crassituberculata
Bernard, 1897



Echinopora aff. *horrida*
Dana, 1846



Acropora sp.
Undescribed



Platygyra cf. *daedalea*
Ellis & Solander, 1786



Porites cf. *lutea*
Milne-Edwards & Haime, 1851