

KIMBERLEY BIODIVERSITY: 2008 – 2015 (The Woodside 4 and 5 projects)

Clay Bryce, Lee Betteridge, Rainbo Dixon, Merrick Ekins, Andrew Hosie, John Huisman, Jeff Johnson, Glenn Moore, Sue Morrison, Peter Morrison, Zoe Richards, Monika Schlacher-Hoenlinger, Alison Sampey, Lexie Walker, Corey Whisson, Skipton Woolley.

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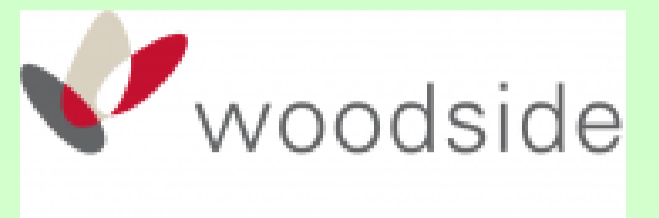
<http://www.museum.wa.gov.au/kimberley/marine-life-kimberley-region>

Contact: Clay Bryce (Project Leader)

WA Museum, Dept Aquatic Zoology

Clay.bryce@museum.wa.gov.au

Mob: 0457537784



OVERVIEW

- The marine biodiversity of the inshore Kimberley is poorly known and much of what is known is held within the collections of the Western Australian and partner museums.
- The Woodside Collection Projects (Kimberley) consists of two marine biodiversity projects (Woodside 4 and Woodside 5).
- Woodside 4 is comprised of two components, a historic data assessment of existing biodiversity collections and marine biodiversity surveys to Adèle Island and Montgomery Reef in 2009 and Cassini Island and Long Reef in 2010.
- Woodside 5 is a follow-on project, designed to increase the resolution of the Woodside 4 field surveys with four new surveys to be completed between 2011 and 2014.

AIMS

- To determine the current status of available knowledge of the marine biodiversity in the inshore Kimberley by utilising historic museum collections and report data. **(Woodside 4)**
- To undertake marine biodiversity surveys of the Kimberley in-shore reef habitats. **(Woodside 4 and 5)**

Woodside Collection Project (Kimberley): 2008 – 2011 (Woodside 4)

Historic data

- 30,000+ registered specimens from 13 faunal phyla and 5 marine floral divisions.
- This represents approximately 6000 marine faunal and floral species.

Outcomes

- 12+ peer reviewed papers – covering 13 faunal groups and marine plants.
- Species richness maps per taxa on the museum Kimberley website.

Survey overview (diving & intertidal):

- 14 researchers
- 7 marine faunal taxa (fish, echinoderms, molluscs, crustaceans, soft coral, hard corals, polychaetes) and marine flora (algae and seagrass).
- Replicated methodology
- 60 stations completed representing 840 on-station researcher hours.

Outcomes

- 12+ peer reviewed papers detailing survey results with biogeographic comparisons.
- Results featured on the museum Kimberley website, including imagery and educational video footage (video streaming of field activities).
- Public lectures

Woodside Collection Project (Kimberley): 2011 – 2015 (Woodside 5)

Overview

- The project will increase the resolution of the contemporary survey data collected during Woodside 4.
- Involves four surveys (2011-2014)
- Targeted taxa and field methodology to be commensurate with Woodside 4.

Outcomes

- Scientific papers for each taxonomic group incorporating Woodside 4 contemporary survey data.
- Regional synthesis analyses of surveyed taxa.
- Website: videos, images, survey data, papers, public lectures.

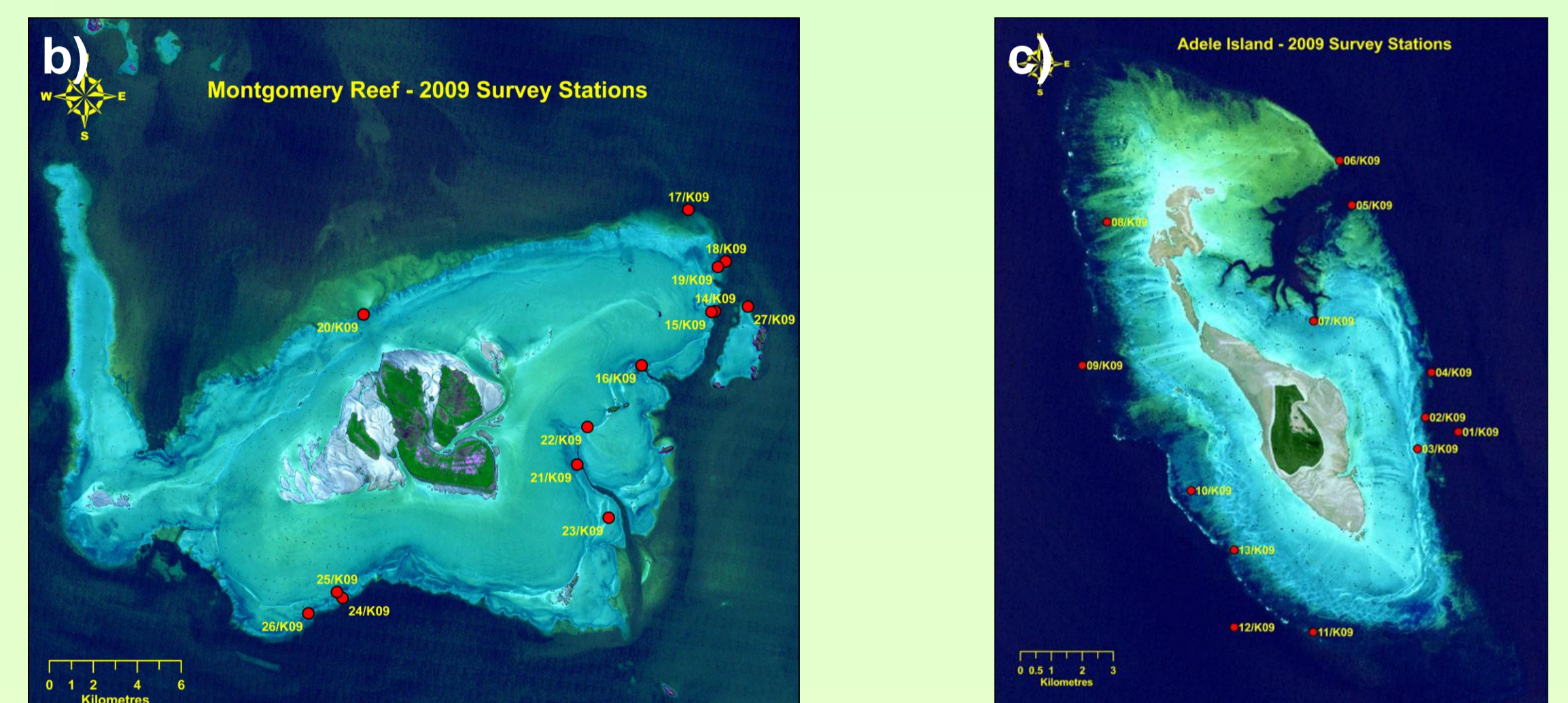
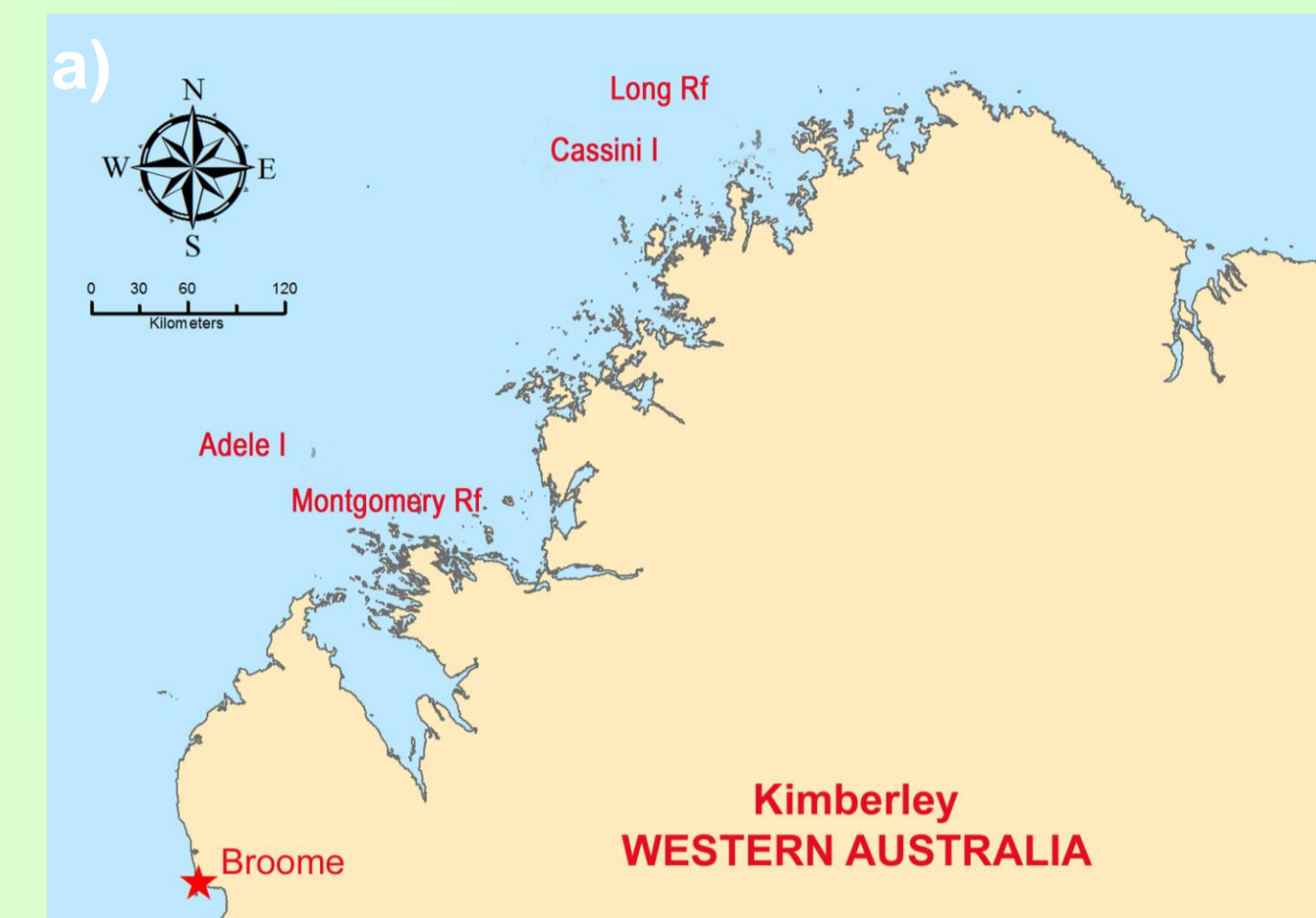


Fig. 1. a) Woodside 4 sampling locations b & c) Examples of sampling station imagery (Montgomery Reef and Adèle Island)



Fig. 2 a) Tidal cascade at Montgomery Reef b) Transect reef sampling c) Low tide at Adèle I. d) Species identification and processing

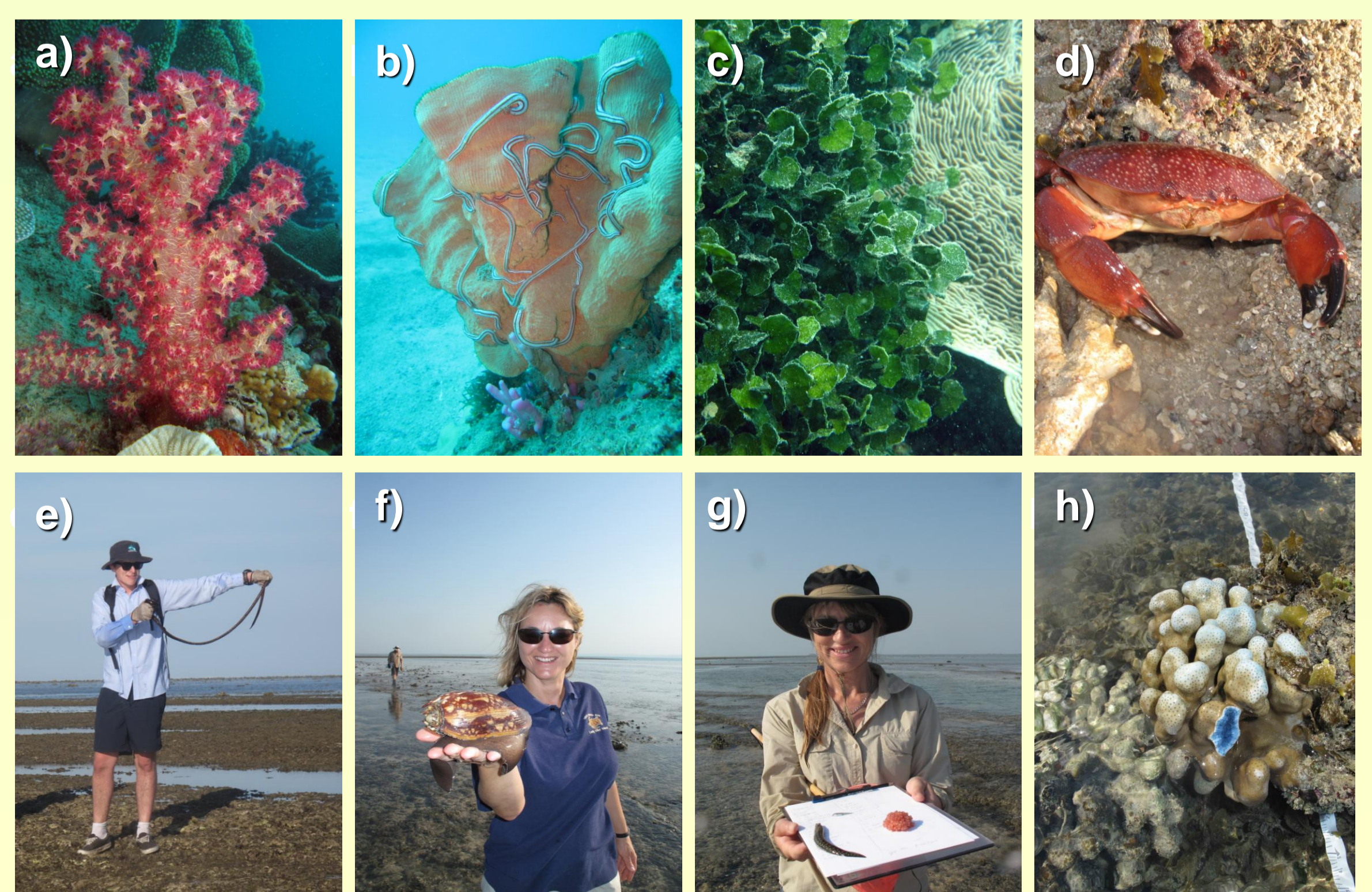


Fig. 3. a) Soft Corals (*Dendronephthya* sp.) b) Echinoderms (*Synaptula* sp.) c) Marine plants (*Halimeda* sp.) d) Crustacea (*Ategatis integerrinus*) e) Marine Worms (*Eunice aphroditois*) f) Molluscs (*Melo amphora*) g) Fishes h) Corals



