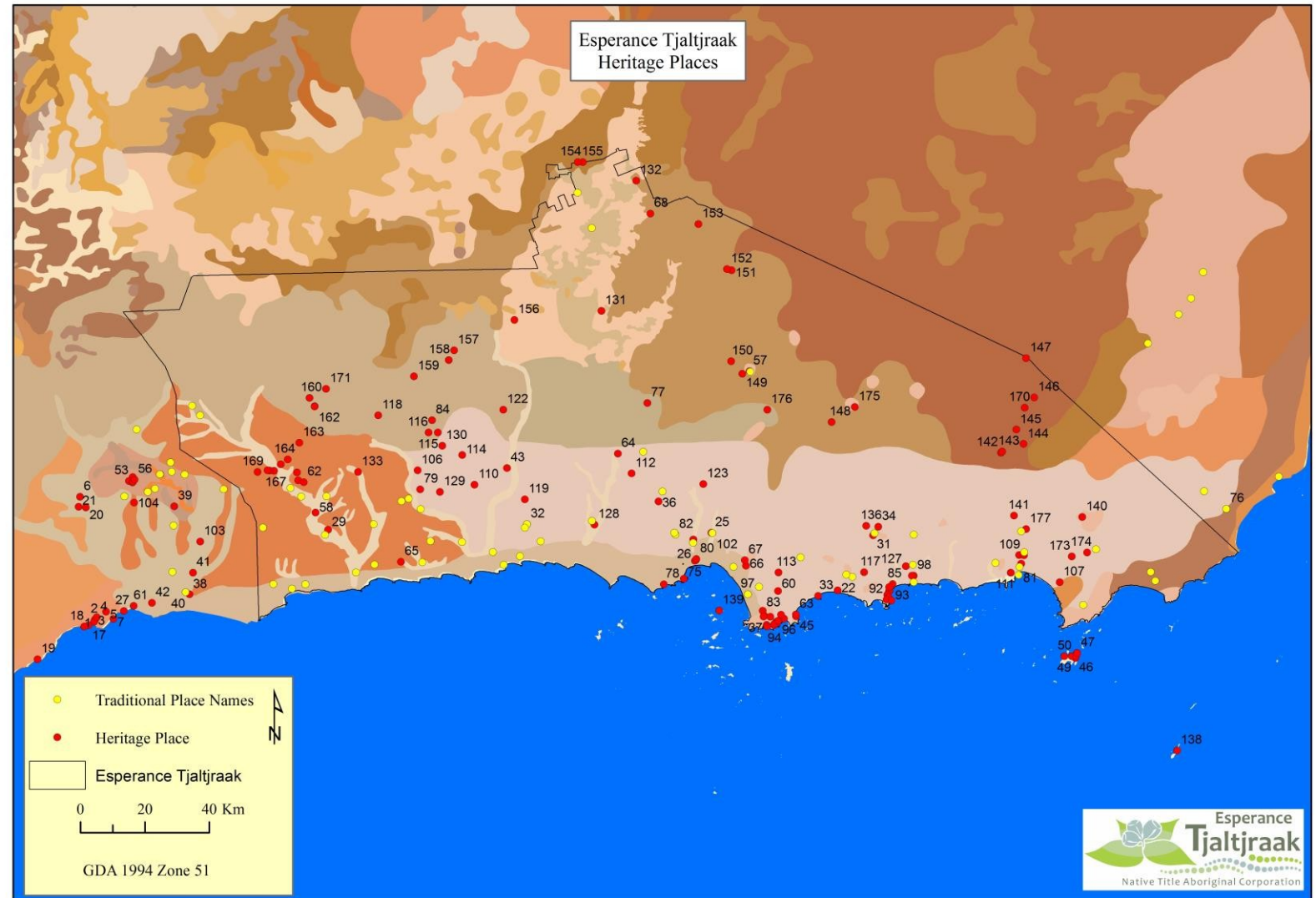


***Cultural Leadership in Coastal and Marine  
Management Research: A multi-disciplinary approach***

***A Case Study from Tjaltjraak Country (southern Western Australia)***

# Introduction

- ▶ As a Custodian and Cultural Leader for my People, one of my roles is to guide and integrate researchers working in Our Country.
- ▶ The collaboration we have developed includes an impressive list of specialists, working respectfully under the direction of our Elders and community.
- ▶ This presentation provides an overview of some of our integrated coastal and marine research, and the power of true collaboration.



# Background

- ▶ I have been engaged in community affairs and cultural heritage protection regimes over 40 years.
- ▶ We set up the **Bay of Isles** Cultural NRM program, and integrated with the nationally-recognized **Restoring Connections** program.
- ▶ From here we developed the **Gabbie Kylie Foundation**, that led the way in cultural and environmental management and research.
- ▶ The Foundation was gifted to our newly formed PBC, following the settlement of our Native Title Claim - **Esperance Tjaltjraak Native Title Aboriginal Corporation** program. I now lead negotiator on behalf for our Native Title Holders



# Forming Partnerships: How it Works

- ▶ Esperance Tjaltjraak Circle of Elders are the principal leaders and advisors for the land and sea management program. They advise on which projects are prioritised. They are the principal cultural advisors for all land and sea programmes.
- ▶ A partnership approach between ET cultural coordinator, Doc Reynolds, and community based specialist advisor (Archaeologist) David Guilfoyle are responsible for the development and implementation of the natural and cultural resource programmes.
- ▶ It is important to have these facilitators working together – connecting Traditional Owners to researchers and vice versa.
- ▶ These critical roles are not recognized and so rely on in-kind time and support for this planning and development role.



# Our Group

- ▶ We have developed a reach program that includes:
- ▶ **Cultural leadership** led by ET Circle of Elders
- ▶ **Cultural NRM** Projects identified by Traditional Owners
- ▶ **Botanical** research led by Professor Steve Hopper, Centre of Excellence in NRM
- ▶ **Archaeological** research led by David Guilfoyle, Applied Archaeology
- ▶ **Anthropological** research led by Myles Mitchell, Australian National University, PhD
- ▶ **Maritime History** research, led by Dr. Ross Anderson, Maritime Archaeology Dept., WA Museum
- ▶ **Sea Mammal** research, led by Richard Campbell (Pinniped Research Scientist) and Holly Raudino (DPaW Marine Science Group)
- ▶ **Seabird** research led by Dr. Jennifer Lavers, Institute for Marine & Antarctic Studies.
- ▶ **Wildlife, logistics and support**, led by Marc and Shelley Payne, Finding Salisbury Inc.

We are also supported by Dr. Moya Smith from the WA Museum and Robert Reynolds, Department of Aboriginal Affairs.



# Cultural Mapping

- ▶ Surveys along the coast and across accessible Islands of the Recherche Archipelago have demonstrated our ancestral connections to these places when the land was all connected.
- ▶ Our work focuses on on-ground protection of sites and linking them to management plans.
- ▶ By protecting and respecting the spiritual foundations and restoring the land, we are reconnecting to, and healing, our tribal kinship systems, our families and our Law, our cultural features, places, & landscapes



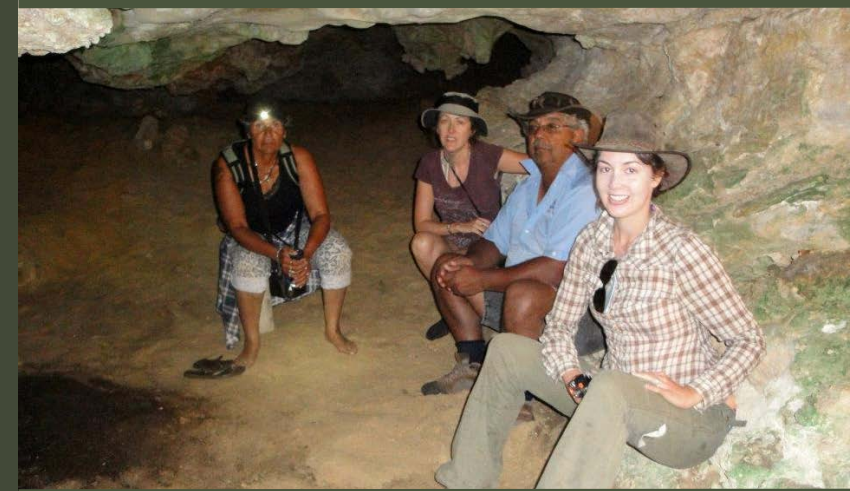
# Cultural NRM

- ▶ We develop and lead on-ground projects to protect cultural places and the wildlife, plants and animals using these special places.
- ▶ Examples:
  - ▶ Woody Island Native Rat Trapping
  - ▶ Pink Lake Boardwalk and Heritage Complex
  - ▶ African Boxthorn removal
  - ▶ New project: Drone Weed Mapping of Islands



# Archaeological Research

- ▶ Our team have identified numerous sites on the coastal zone and island groups, including extensive stone artefact scatters and quarries, fish traps, lizard traps, burials, stone arrangements, gnamma holes, rock art, and many other features.
- ▶ The information is collected and placed into an interactive database.
- ▶ The work demonstrates long and continuous occupation since the end of the last Ice Age.
- ▶ We have developed a model showing how the islands were formed and cut off from the mainland at different times (see Guilfoyle et al. 2017 paper in the new book - "At Home on the Waves.")





# Botanical Research

- ▶ Working with Professor Steve Hopper and Alison Lullfitz, we have been running ethnobotanical surveys across my Country.
- ▶ This work is ground-breaking and showing how Our People used and managed the landscape, including transporting cultural plants to key locations.
- ▶ See recent paper: **Human Niche Construction: Noongar Evidence in Pre-colonial Southwestern Australia, *Conservation and Society* 15(2): 201-216, 2017.**



# Lucky Bean!



# Maritime History

- ▶ Led by Dr. Ross Anderson, we are studying the patterns of early exploration, whaling, sealing, and colonial settlement along the south coast.
- ▶ The connection between our People and this early period of European exploration and settlement and any evidence of aboriginal watercraft used for inter-island movement
- ▶ Protecting sites, developing a database of maritime history, and searching for shipwrecks and evidence of Australia's only known pirate – Jack Anderson.



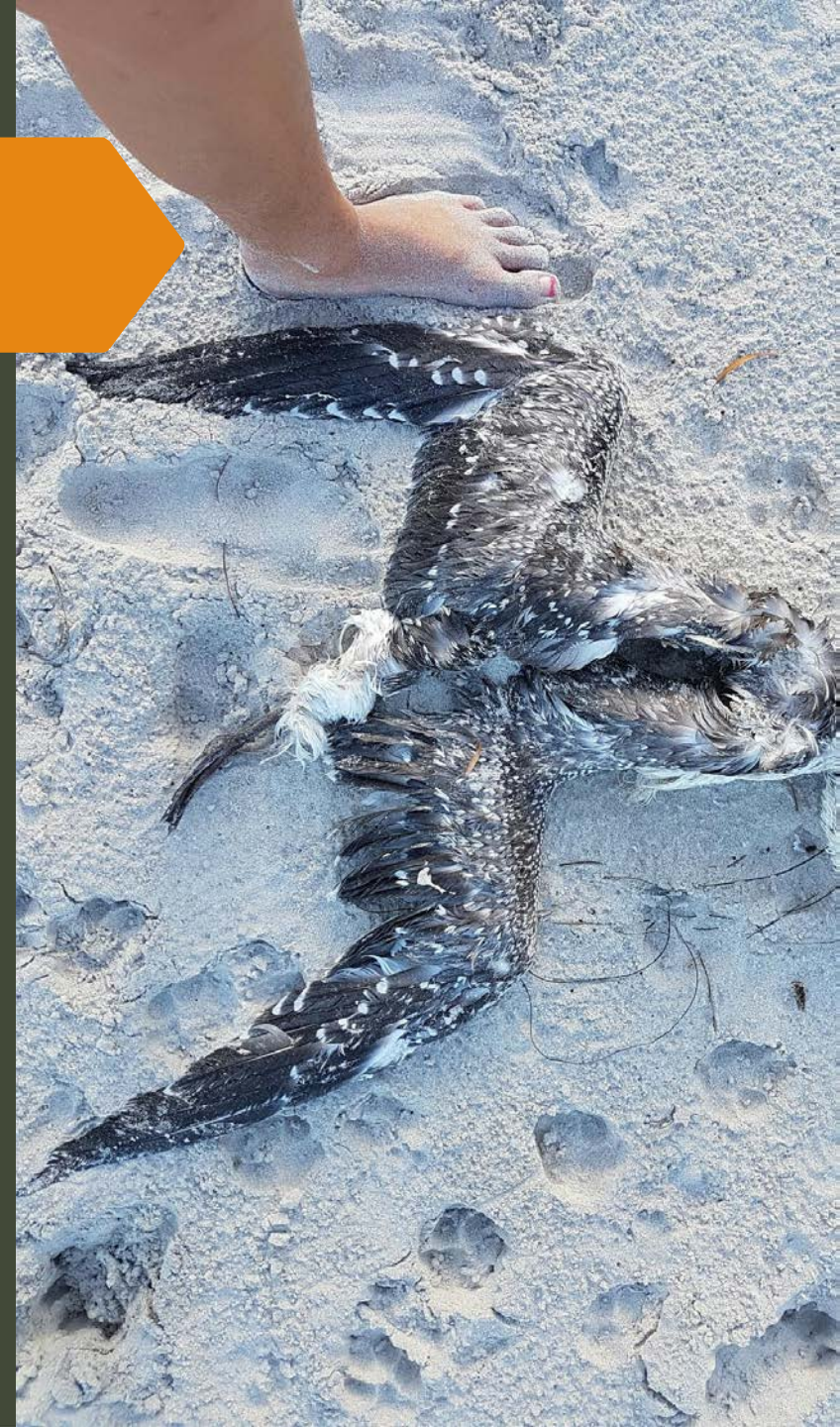
# Seals and Sea Lions

- ▶ We are working with research scientists to study patterns of seal and sea lion distribution and abundance, including the threatened Australian sea lion and New Zealand fur seal
- ▶ Counting, tagging, weighing, swimming is part and parcel of the work!
- ▶ Soon we will be using drones to help with seal counts and monitoring.
- ▶ Changes in the abundance and distribution of the New Zealand fur seal (*Arctocephalus forsteri*) in Western Australia: are they approaching carrying capacity? *Australian Journal of Zoology* (2014), 62(4) 261-267



# Sea Bird Research

- ▶ Sea birds are relative indicators of the health of the marine and island environments.
- ▶ We have partnered with Dr. Jennifer Lavers to explore the population, distribution and condition of sea birds such as the shearwaters.
- ▶ This work involves counting individual burrows directly from drone photos
- ▶ Physically accessing a sub-set of islands, on foot, to properly ground truth burrow counts, as well as to estimate the % of burrows that are actually occupied by nesting shearwaters (and potentially which species is breeding there, as this can vary by island)
- ▶ Population status and threats to Flesh-footed Shearwaters (*Puffinus carneipes*) in South and Western Australia ICES Journal of Marine Science (2015), 72(2), 316–327.



# Shark Research

- ▶ Led by the Finding Salisbury team, we are working on a non-invasive Great White Shark monitoring program, that includes underwater remote sensor cameras, live filming and seasonal counts and identification studies.



# Why it Works

- ▶ Cultural Leadership
- ▶ Cultural Governance
- ▶ Dual Facilitators
- ▶ Relationships and Trust
- ▶ Public Outreach
- ▶ Collaboration
- ▶ Being out and active (on Country) with the programme ensures traditional practises and knowledge maintained.
- ▶ The two knowledge streams corroborate and converge over time-very clear pathway of information back to Traditional Owners and Circle of Elders



THANK YOU

