People and Saltwater Country in the Kimberley

Dean Mathews, Yawuru

Albert Wiggin, Nyul Nyul
Kimberley Indigenous Saltwater Science Project (KISSP)

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Project Timeline

2012 – Initial engagement with Traditional Owners in the Kimberley was difficult.

2015 – Workshop in Broome to discuss the future of the project
   • Chaired by Pat Dodson
   • all Kimberley saltwater country groups invited

2016 – Kimberley Indigenous Saltwater Science Project (KISSP) and Working Group formed.
KISSP Objectives

Objective 1

Integrate Traditional Ecological Knowledge (TEK) and management practices into Kimberley marine conservation and management.

Objective 2

Develop standard and agreed community protocols and a research agreement template to underpin marine research in the Kimberley and an implementation strategy to build awareness in the science community of the need for this engagement.

Objective 3

a) Develop a framework and protocols for standardising data collection, storage and analysis methodologies that can be used to monitor saltwater country across the Kimberley.

b) This includes the development of a training package for agreed research targets for delivery to Rangers to develop internal capacity in these standardised techniques.
Working Group’s Research Approach

Led by the KISSP Working Group.

Rangers resourced to facilitate workshops.

TOs and Rangers identified approach, agenda, who to attend and venue.

7 x ‘On-Country’ workshops (103 Traditional Owners).

October 2016 Working Group workshop.

July 2017 Working Group workshop

Working Group feeding back all information to PBCs
## Research Team Selection Process

<table>
<thead>
<tr>
<th>Objective</th>
<th>Who</th>
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<tbody>
<tr>
<td><strong>Objective 1</strong>&lt;br&gt;Integrate Traditional Ecological Knowledge (TEK) and management practices into Kimberley marine conservation and management.</td>
<td>Beau Austin&lt;br&gt;Cathy Robinson&lt;br&gt;Stephen Garnett</td>
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<td><strong>Objective 2</strong>&lt;br&gt;Develop standard and agreed community protocols and a research agreement template to underpin marine research in the Kimberley and an implementation strategy to build awareness in the science community of the need for this engagement.</td>
<td>Gina Lincoln</td>
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<td>Rebecca Dobbs&lt;br&gt;Fiona Tingle&lt;br&gt;Paul Close</td>
</tr>
<tr>
<td><strong>Objective 3b</strong>&lt;br&gt;This includes the development of a training package for agreed research targets for delivery to Rangers to develop internal capacity in these standardised techniques.</td>
<td>Gina Lincoln&lt;br&gt;<em>Mosaic Environmental Consulting</em></td>
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Acknowledgements

- Traditional Owners (103)
- Working Group (below)
- WAMSI – Stuart Field and Kelly Waples
- Research Team (CDU, CSIRO, UWA, KLC, Mosaic)

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<thead>
<tr>
<th>Traditional Owner Group</th>
<th>Representatives</th>
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<tr>
<td>Balanggarra</td>
<td>Tom Nagle, Ranger Coordinator</td>
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</table>
| Bardi Jawi              | Daniel Oades, IPA Coordinator (Deputy Chairperson)  
                          | Kevin George, Co-Chair & Head Ranger |
| Dambimangari            | James Mansfield, Ranger Coordinator/IPA Manager |
| Karajarri               | Sam Bayley, IPA Coordinator  
                          | Joe Edgar, Traditional Owner  
                          | Dooli King, Senior Ranger |
| Nyul Nyul               | Mark Rothery, Ranger Coordinator  
                          | Albert Wiggin, Ranger (Deputy Chairperson) |
| Yawuru                  | Julie Melbourne, Manager Land & Sea Unit  
                          | Dean Mathews, Yawuru Project Officer (Chairperson) |
| Wunambal Gaambera       | Tom Vigilante, Healthy Country Manager  
                          | Rob Warren, Ranger Coordinator |
Mobilising Indigenous Knowledge for Collaborative Management of Kimberley Saltwater Country

Beau Austin, Cathy Robinson, Gina Lincoln, Rebecca Dobbs, Fiona Tingle, Stephen Garnett

with the Balanggarra, Bardi Jawi, Dambimangari, Karajarri, Nyul Nyul, Wunambal Gaambera & Yawuru Traditional Owners.
Why Mobilise Indigenous Knowledge for Collaborations in Saltwater Country?

• See changes, threats and connections between things that science might not.
• Connect environmental, social, cultural, economic and spiritual aspects of Country.
• Support Indigenous people to look after languages, governance systems and way of life.
• Mix Indigenous knowledge and western science to see things in new ways.
• In lots of the Kimberley, it is the only knowledge!
Why Mobilise Western Science to Look After Country?

• To gain holistic and thorough understanding values in Kimberley saltwater Country.
• Collaborative strategies that allow science to be efficient and meaningful towards long-term management
• Development technical capacity to help Indigenous people to look after Country
Traditional Owners want to work with both local knowledge holders and western scientists to make the best decisions for Kimberley Saltwater Country.

“In a way science is catching up to our knowledge. Collecting data makes it a bit easier to explain to scientists and put them in our shoes. Where knowledge is missing science can fill in the gaps.” Kimberley Saltwater Traditional Owner.

“It makes us and the rangers work better and know about Country. And we might have similar thoughts.” Kimberley Saltwater Traditional Owner.

“All the older people should be teaching the young ones at the same time as science is being taught to the young ones.” Kimberley Saltwater Traditional Owner.
Recognising Indigenous Knowledges

• Most common examples of Indigenous knowledge for Saltwater Country:
  • **Seasonal indicators** (flowers, wind direction, temperature, etc.).
  • **Historical knowledge** (to detect changes and new pressures/threats on Country e.g. bleaching, disease, erosion, pollution, tourism, etc.).
  • **Knowledge of tides and currents** (for travel, safety, fishing, hunting, etc.).
  • **Hunting** locations, seasons, nutritional content and laws/rules of key species (e.g. fish, turtles, dugong, shellfish, etc.).
  • **Location of cultural values, sites, boundaries and connections** (e.g. clan estates, fish traps, ceremony sites, burial grounds, navigation markers, recreational places, hunting tracks, stories, spirits and Old People, etc.).
  • **Health indicators** (species and ecosystems).
  • **Connectivity** (social-cultural-ecological).
  • **Risk management on Country** (crocodiles, weather events, cultural protocols, navigation, etc.).

• However, to interpret this as the ‘most valuable’ knowledge or ‘most widespread’ is both *inappropriate* and *wrong*. 
Limitations

- Indigenous knowledge cannot be separated from practices and beliefs.
  - “lived knowledge”
  - “doing”
  - “living our lives in the saltwater”
  - “part of liyarn burr”
  - “relationships”
  - “looking after saltwater Country”.

- A lot intentionally left out - not for the public.

- This knowledge needs to be recognised, supported and at the very least not threatened.

- **What KISSP talks about is only the tip of the iceberg!**
A Multiple Evidence Based Approach

• ‘Evidence-base’ = knowledge/information that can be used for decision-making, policy and management.

• Non-scientific knowledge is useful/useable.

• Each knowledge system speaks for itself.

• Requires empowerment and capacity development of all knowledge systems.

• Scientists are experts, but not the only ones!

## Applying the Multiple Evidence Based Approach

| Step 1 | Establish and maintain meaningful dialogue.  
|        | Assess capacities for collaboration.  
|        | Identify goals that are mutually beneficial.  
|        | Mobilise all knowledge systems.  
|        | Discuss the relevance of ‘larger-than-local’ scales. |
| Step 2 | Collaborative identification of approach.  
|        | Decide on a co-production or parallel integration approach.  
|        | Collaborative identification of methods. |
| Step 3 | Implementation of knowledge production in line with agreed plans.  
|        | ‘Stick to the plan!’  
|        | Collaborative analysis of results. |
| Step 4 | Collaborative interpretation of results from the perspective of all stakeholders.  
|        | Assess social, cultural, economic and environmental implications.  
|        | Identify similarities, complementarities and/or contradictions in research outcomes.  
|        | Collaboratively evaluate project performance.  
|        | Joint production of outputs and communication of results.  
|        | Celebrate success together. |
## Toolbox for Producing Knowledge Collaboratively

<table>
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<tr>
<th>Indigenous Knowledges</th>
<th>Participatory Research</th>
<th>Western Science</th>
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<tbody>
<tr>
<td>• Storytelling</td>
<td>• Interviews</td>
<td>• Mapping/GIS</td>
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<tr>
<td>• Yarning</td>
<td>• Focus group discussions</td>
<td>• Economic valuation</td>
</tr>
<tr>
<td>• Artwork</td>
<td>• Ranking</td>
<td>• Biology</td>
</tr>
<tr>
<td>• Dance</td>
<td>• Mapping</td>
<td>• Ecology</td>
</tr>
<tr>
<td>• Hunting &amp; harvesting</td>
<td>• Transect walks</td>
<td>• Chemistry</td>
</tr>
<tr>
<td>• Ceremony</td>
<td>• Questionnaires</td>
<td>• Anthropology</td>
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<tr>
<td>• Seasonal Calendars</td>
<td>• Timelines</td>
<td>• Archaeology</td>
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<tr>
<td>• Digital media</td>
<td>• Calendars</td>
<td>• Climatology</td>
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<td>• Video</td>
<td>• Scenarios</td>
<td>• Modelling</td>
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<td>• Photos</td>
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Indigenous Knowledge and the Regional Scale

Knowledge collaborations across large scales must proceed with significant caution, ensuring free prior and informed consent in every step of the process, as there is significant risk involved for Indigenous people.

- We can’t lose complexity of the local.
- Connections between Traditional Owners mean that some knowledges-practices-beliefs are shared, but not always...
- Relationship building exercises, shared project activities and knowledge exchanges (between Indigenous groups, as well as with their non-Indigenous partners).

“Trust is established through dialogue”, Paolo Freire
Thank you!
Collaborative Science on Kimberley Saltwater Country - A Guide for Researchers

Research is co-presented at conferences etc.

The contribution of TOs to research project are appropriately acknowledged

TOs check all reports before they are published

Present the research findings to Indigenous research partners in appropriate format

Enable some participating Rangers to assist with analysis

Facilitate TO and Ranger input into research findings

Provide any agreed in-kind support (e.g. Ranger Training)

Undertake fieldwork and associated payment for services as agreed

Undertake the local cultural Induction as agreed

Develop the research agreement between institution and PBC lawyers

Respond promptly to any questions arising

Research proposal is assessed at the PBC Director’s meeting and the right TOs are then consulted

Unsupported projects will be promptly notified

Learn about people and Country

Develop the research idea with local first point of contact (FPOC)

Arrange resourcing and any payments required for research partners

Fill in proposal form. Align research with local priorities or negotiate non-alignment

Keep in touch with the FPOC to discuss the proposal as needed

NOTE
Step numbers refer to steps in the Guide for Researchers*
Steps in black text are essential for all research projects
Steps in green text may be negotiated for some projects

* Kimberley Traditional Owners, 2003