

Indigenous Fisheries Data



Why Collect Indigenous Fisheries Data

- Australia's Indigenous population is relatively small (3.3% of total population)
- Importance of fishing to Indigenous Australian's is greater than their numbers because:
 - · one of the oldest continuous cultures in the world
 - fishing is deeply rooted in Indigenous Australian culture
- It is important to collect information of Indigenous fishing to ensure
 - fisheries resources of importance to Indigenous communities are well managed
 - development of policies to effectively address socio-economic problems
 - more / better data will result in greater security and access for community

- Early surveys of Indigenous fishing in Australia were community or regional based (e.g. Torres Strait)
- Data collected included
 - Catch by harvest method (1991-1995)
 - Demographic data of participants (including families, culture, health, housing, education, employment, law and justice) (1994-1995)
- An Indigenous subsistence fishing kit produced to collect catch and effort data in northern Qld (1998)

The National Recreational and Indigenous Fishing survey (2003)

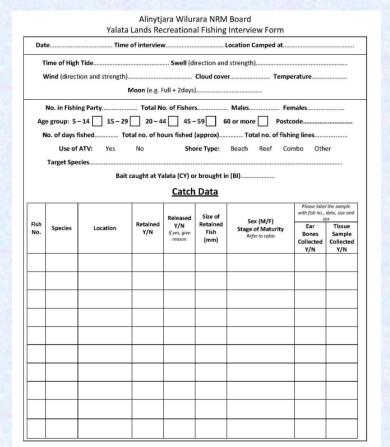
- Aims included
 - To quantify fishing activity by indigenous fishing communities in northern Australia
- Results
 - Estimated 37,000 Indigenous fishers in northern Australia on about 420,000 days during the year
 - This was a participation rate of 91.7%
 - Line fishing and hand collection most common methods
 - About 3 million aquatic animals caught, mostly
 - Shellfish (mussels, oysters)
 - Finfish (mullet, catfish, seaperch/snappers, bream, barramundi)

- A survey of customary fishing of sharks and stingrays Groote Eyland (Saunders and Carne, 2010)
- In partnership with the Anindilyakwa Sea Rangers and the Anindilyakwa Land Council
- Culturally sensitive post for data collection with local names
- Incorporated into weekly school curriculum



- Aboriginal fisheries in New South Wales (Schnierer, 2011)
- Focused on the Tweed River catchment and the Minjungbal people
- Aimed to
 - Species of cultural significance
 - Quantify catch and effort by species
 - Develop capacity for ongoing monitoring and other fisheries research
- Method
 - Face to face questionnaire (recall over 12 months)
 - Logbook to validate recall
 - Focus group and individual interviews for info on cultural fishing practices, fishing values and community aspirations.

- Recreational fishing survey for Mulloway in the Yalata IPA (Rogers et. al., 2014)
- In partnership with Natural Resources Alinytjara Wilurara and Yalata Land Management staff and volunteers
- Demographics, catch, effort, area fished, species, fate, size, sex, otoliths, tissue samples



Australian Indigenous Fishing Surveys

- A mobile App being developed by Narungga Nation under the Buthera Agreement (current)
- Collects data on priorities and issues of importance
- Ensures compliance with terms of Buthera Agreement
- Allows self management of their own Sea Country in a sustainable manner

Issues with Collecting Indigenous Fisheries Data

- Scarcity / remoteness of participants and diversity of access points
 - Many surveys are targeted at focal points such as boat ramps
- Lack of licence / register of fishers
 - Many surveys rely on a register of fishers contact details
- Lack of technology / internet/ phone network access
 - Collection of real time data could be limited
- Cultural responsibilities can bias data
 - e.g. collections of large numbers of abalone for cultural event
- Distrust in collecting and providing data
 - What will happen to the information collected

Indigenous Fisheries Data Collection Framework – The importance of data

- The benefits in collecting data must be made clear. Examples include:
 - A tool for self-managing Sea or River Country
 - As leverage with other stakeholders to gain a return for the community
 - To underpin consultation with management on issues, such as access and allocation
- The benefits to management agencies include:
 - For stock assessments, to set quotas and to inform policy decisions
 - Allow an understanding of the needs of Indigenous communities
 - Allow managers to make informed and culturally appropriate management decisions
- The benefits to researchers include:
 - Improved ecosystem modelling

Indigenous Fisheries Data Collection Framework – Foundational Steps

1. Define the purpose

- Define the purpose for the engagement and data collection
- 2. Capability and capacity assessment
 - Resource requirements, gaps, roles, skills
 - Goals, objectives and desired benefits
 - Research stakeholder groups

3. Develop documents

- Contracts, roles and responsibilities, contact details, precesses
- Extension material

4. Implement strategy

Implement Engagement Capability and Capacity Building Strategys

Indigenous Fisheries Data Collection Framework – Foundational Steps

5. Make contact

- Identify stakeholders and contact the appropriate person(s) with authority
- Identify existing protocols

6. Stakeholder meetings

- Cultural induction
- Shared goals, purpose, priorities and desired outcomes
- Two-way education
- Identify extension and educational materials

7. Co-develop documents

- Engagement protocols, education and extension materials
- How will goals, purpose, priorities and outcomes be achieved

8. Form a partnership

- Terms of reference
- Investigate guides for building relationships and developing partnerships with Indigenous communities

Indigenous Fisheries Data Collection Framework – Develop methods

- Co-develop the following processes and materials
- Clearly define objectives and outcomes
- Data collection method
- Data management and sharing
- Process for data and information use.
- An extension and communication strategy for communicating:
 - Project intent (objectives and outcomes)
 - · Data collection, management and sharing
 - Results / use of data
 - Monitoring and evaluation of the data collection process
- A Management and Evaluation Plan for the data collection approach and outcomes.
- A formal Agreement that incorporates all the above steps

Indigenous Fisheries Data Collection Framework – Data required by fisheries managers

Catch

- For species with competing pressures
 - Species and number caught
- For species without competing pressures
 - Species could be grouped (depending for example of SOCI) and number caught

Effort and participation

- Hours spent fishing
- Number of people
- Gear what, how many, for how long

Location

- Management area or area of water relevant to community
- Some areas might be culturally sensitive/important and so not recorded

Indigenous Fisheries Data Collection Framework – Data required by fisheries managers

- Date/time
- For cultural events
 - Broad purpose (e.g. ceremony)
 - Number of people fed
- Management information / triggers
 - Access issues
 - Ability to provide for your family and community
 - Ability to provide for your cultural events
 - Are other management issues triggered



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