



Why Collect Recreational Fisheries Data

- Recreational fishing in Australia is an important leisure activity
 - Economic and social benefits
- Largest and most widely dispersed recreational activity that uses a natural resource in Australia
- Recreational data can be used to
 - Contribute to stock assessments to improve sustainable management
 - Ensures appropriate consideration of rec fishing in policy-making
 - Provide greater security and access
 - Help design effective and enforceable control measures



Issues with Collecting Recreational Fisheries Data

- Large number of participants and fishing access points
- Diversity of methods, locations, target species
- Lack of participant registry
- Distrust in collecting and providing data
- Lack of ongoing interest



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)

Tools available – Mail surveys

- Easy to role out across large area
- Data types
 - attitudinal
 - catch
 - effort
- Sample group from
 - Drivers licence
 - Obtained from onsite surveys
 - Fishing licence registry

Tools available – Angler diary

- Fishers self report
- Diaries, logbooks, questionnaires, mobile apps
- Data types
 - socio-economic
 - catch
 - effort
- Requires dedication from volunteers
- Focused on avid anglers
- Often done in conjunction with phone/mail surveys
- Can get long time series of data

Tools available – Telephone

- Sample group from
 - Phone book
 - Fishing licence registry
- Screening survey to get willing participants
- Data types
 - attitudinal
 - demographic
 - socio-economic
 - catch
 - effort
- Good for getting participation rates

Tools available – Internet

- Sample group from
 - advertising
 - opt-in
 - incentivesd
- Data types
 - attitudinal
 - demographic
 - socio-economic
 - catch
 - effort
- Good for getting participation rates



Tools available – Aerial

- Cost effective for fishing effort from boat and shore
- Data – only effort
- Often used in conjunction with other types of surveys
- Stratify by
 - Season/month
 - day type (weekday, weekend, public holiday)
 - time of day



Tools available – Access points

- Interviews on-site (e.g. boat ramp) at completion of fishing trip
- Trailer count
- Either single site or bus route survey (numerous sites)
- Data
 - catch
 - effort
 - length
 - attitudinal

Tools available – Roving

- For where there are many access points e.g. land based fishing or diving
- Travel in pre-determined routes
- Interviews during fishing
- Data
 - catch
 - effort
 - length
 - attitudinal
- Can stratify by
 - Season/month
 - day type (weekday, weekend, public holiday)
 - time of day

Tools available – Remote cameras

- Cameras at
 - choke points (e.g. boat ramp, marina entrance)
 - popular land-bases areas
- Count
 - number of launches and retrievals
 - number of fishers
- Does not usually monitor fishing activity
- Usually to supplement another survey

Sources of information

- http://www.fish.wa.gov.au/Documents/research_reports/frr301.pdf Conducted at the end of the survey



Ian Knuckey

ian@fishwell.com.au

www.fishwell.com.au

<http://www.youtube.com/user/FishwellConsulting>