

Title: Cairns Sportfishing Club – Trinity Bay Net Free Area Monitoring Program

Q1: What do you intend to monitor?

Within the listed target species monitoring will primarily include, but not be limited to;

- aggregation patterns
- movement patterns
- population changes
- post-capture survival rates

Primary target species (directly impacted by previous commercial netting)

Barramundi, Lates calcariferhttp://fishesofaustralia.net.au/home/species/4643King Threadfin, Polydactylus macrochirhttp://fishesofaustralia.net.au/home/species/634Blue Threadfin, Eleutheronema tetradactylumhttp://fishesofaustralia.net.au/home/species/632Grey Mackerel, Scomberomorus semifasciatushttp://fishesofaustralia.net.au/home/species/729Queenfish, Scomberoides spp.http://fishesofaustralia.net.au/search?q=Scomberoides

Secondary target species (in-directly impacted by previous commercial netting effort; as by-catch or through increased effort from recreational anglers)

Barred Javelin, Pomadasys kaakanhttp://fishesofaustralia.net.au/home/species/465Silver Javelin, Pomadasys argenteushttp://fishesofaustralia.net.au/home/species/463Mangrove Jack, Lutjanus argentimaculatushttp://fishesofaustralia.net.au/home/species/548Golden Snapper, Lutjanus johniihttp://fishesofaustralia.net.au/home/species/558Goldspotted Rockcod, Epinephelus coioideshttp://fishesofaustralia.net.au/home/species/4512Blackspotted Rockcod, Epinephelus malabaricus http://fishesofaustralia.net.au/home/species/4675Spanish Mackerel, Scomberomorus commersonhttp://fishesofaustralia.net.au/home/species/728

Q2: Where will you monitor?

Trinity Bay net free area, Cairns North Queensland

Grid references: H16 – 12, 13, 14, 18, 19, 23, 24 H17 – 3, 4



Q3: Why is this species and area a priority for monitoring?

The Cairns Sportfishing Club is interested in monitoring the Trinity Bay net free area and the listed target species;

- to assess the rate of recovery of previously commercially targeted species
- to assess the effect on other popular recreational target species; with particular attention to bycatch susceptibility from commercial netting and/or increased recreational fishing pressure
- to assess the effect on multi-species populations (biodiversity) after the closure to commercial netting; in particular future impacts from increased recreational fishing pressure

Q4: Who will use your data?

- 1. Cairns Sportfishing Club
- 2. ANSA Qld
- 3. CAREFISH
- 4. Wider community
- 5. Third Party Researchers

Q5: How will the data be used?

Data will be quality checked, collated and archived to be available for ANSA members and third parties upon request.

The Cairns SFC, and ANSA Qld, will use the monitoring program and the data collected to,

- monitor the population and growth rates of previously commercially netted targeted species
- monitor populations and growth rates of popular recreationally targeted species to gain an understanding of potential impacts on whole of system biodiversity
- understand the impact and monitor growth rates and population of other non-commercial, recreational caught species
- promote sustainable fishing on a local, regional and state level
- provide evidence on the benefits to recreational fishing of establishing net free areas
- assess potential "spill-over" of target species into surrounding areas after the closure to commercial netting through recapturing of tagged target species

Q6: What data quality do you require?

The primary objective of this project is to allow anglers opportunity to collect fishery data as a means of citizen science participation. The idea is to value add to the fishing experience and in doing so, create greater awareness of the study species (population, growth & movement patterns)

Although the primary focus of the program is citizen science based, data collection methods will be as robust as possible to ensure data quality is as high as possible to allow for as many potential end uses as possible. Data Quality will be set at a level where the complexity of collection and data entry methods does not greatly inhibit participation.

The quality of data is likely to be of indicative quality (better than demonstrative but not analytical)



Q7: What is the proposed period of monitoring? When and how often will you monitor?

Monitoring is scheduled to commence in September 2016. This will coincide with a Cairns SFC/ANSA Qld interclub fishing weekend in the trinity Bay net free area. No end date has yet been set.

Regular monitoring by Cairns SFC club members will take place during both official and unofficial club outings on an "opportunistic" basis.

A second major monitoring event will take place during the 2017 ANSA Qld state conference, 12 months after the first interclub monitoring event. Following this second event there will be a review of the monitoring data captured.

After the 12 month review an assessment of the monitoring plan's effectiveness will take place with a reallocation of resources and/or effort if deemed necessary.

Q8: What methods will you use?

- All target and non-target species captured will be handled so as to cause as little stress as possible.
- Target species will be measured tagged and release as quickly as possible so as to maximise the chances of survival.
- Fish capture information as outlined in field of form: <u>http://www.ansaqld.com.au/awards/entry-form/</u> will be collected for target species.
- Members will fish according to the ANSA QLD code of Ethics (<u>http://www.ansaqld.com.au/code-of-ethics/</u>) and the National Code of Practice (<u>http://www.ansaqld.com.au/wp-content/uploads/2014/06/recfish_australia_ncop_brochure.pdf</u>) adopted by ANSA QLD.
- Fish destined for release will be released according to the ANSA Code of Practice for Releasing Fish (<u>http://www.ansaqld.com.au/code-of-practice-for-releasing-fish/</u>)
- Tagging will be conducted according to the AUSTAG Manual (<u>http://www.ansaqld.com.au/wp-content/uploads/2016/07/Austag-Manual-Complete-with-Work-Instructions.pdf</u>) noting that the manual will be updated during 2016-17. Tagging data is added directly by members who tag a part of the fish capture form. Any field sheets used reflect fields in this web-form.
- Location of fish will be recorded using Queensland Government Logbook Maps (<u>https://www.business.qld.gov.au/industry/fisheries/commercial-fishing/monitoring-and-reporting/reporting-commercial-fishers/queensland-logbook-maps</u>)
- Fishes of Australia (<u>http://fishesofaustralia.net.au/</u>) is used to identify fish species

Q9: Who will be involved and how?

Monitoring will be conducted primarily by the members of the Cairns SFC but will also be conducted by other ASNA Qld members who visit the designated monitoring area. Reporting of recaptures will be open to the general public.

ANSA QLD will provide fish capture database facility, tags and support to the Cairns SFC members.

Third party researchers will be involved as interested or required to assist in achieving the objectives of this monitoring program.



Q10: How will the data be managed and reported?

- Data will be added directly by members into the fish capture form; or via a multi-capture upload file
- When submitted this is logged in the ANSA QLD MySQL database.
- Results will be reported online using a series of codes that query the database and then visualise this data. Data will also be provided to third party researchers to report as required
- Records are maintained on ANSA QLD server using MySQL database. Database is regularly backed up.

Version

Version 1.1

08/08/2016

Author/s:

<u>Primary</u> Geoff Chapman - Cairns SFC Adam Royle - ANSA Qld

<u>Third Parties</u> Paul Aubin - CAREFISH

Contact

Primary Geoff Chapman President Cairns SFC geoffchappo@hotmail.com 0411804537

Secondary Adam Royle Vice President ANSA Qld nqfisho@live.com.au 0417610446

Paul Aubin CAREFISH paul@cairnsbednboat.com.au 0418772751



Background

Why do we need a plan like this?

ANSA Qld and our members have limited resources (money and time) to contribute to monitoring, so we need to make sure we are doing it for good reasons.

The plan is simply to help you think about why and where you want to direct your efforts. We should make sure that we are contributing to highest priority issues, not just tagging as many fish as we can. For this reason the ANSA Qld executive committee will seek input from Fisheries Queensland and other research institutions into highest priority species and locations to help refine monitoring effort.

It also demonstrates to others that we are professional in our approach to monitoring.

How is the revised ANSA Qld tagging program different to what we have previously done under Suntag?

Tagging will be conducted according to the AUSTAG Manual (<u>http://www.ansaqld.com.au/wp-content/uploads/2016/07/Austag-Manual-Complete-with-Work-Instructions.pdf</u>) noting that the manual will be updated during 2016-17. Specific revisions include:

- ANSA QLD Tagging is now the name of our state program for Queensland
- Tagging data is added directly by members who tag as part of the fish capture form. Any field sheets used reflect fields in this web-form.
- Tags use the web address <u>www.ansaqld.org.au</u> instead of a phone number for submission of recaptured fish information.
- Tag and recapture information is generated online at <u>www.ansaqld.org.au</u> and replaces letters and certificates. Recapture certificates will be emailed to anglers in the future when an automated facility for this function is developed
- Records are maintained on ANSA QLD server using MySQL database. Database is regularly backed up.
- Recreational Fishery Monitoring Plans are required for all ANSA QLD Research and Tagging projects. These documents provide detail on target species and other project related matters
- Tag purchase is currently through Floytag. ANSA QLD reserves the right to select any supplier based on access, price and customer service.
- Tag Register and Audit will be maintained on ANSA QLD server using MySQL database. Database is regularly backed up.
- Location of fish will be recorded using Queensland Government Logbook Maps (<u>https://www.business.qld.gov.au/industry/fisheries/commercial-fishing/monitoring-and-reporting/reporting-commercial-fishers/queensland-logbook-maps</u>)
- Fishes of Australia (<u>http://fishesofaustralia.net.au/</u>) is used to identify fish species