

Case studies

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The participants broke into two groups to discuss the case studies under the following headings:

- History
- Approach
- The plan
- Outstanding issues
- Relevance to other fisheries.

On returning to the session the facilitators of each group were asked to briefly summarise the discussion.

Case study 1: Developing a bycatch action plan for the the Northern Prawn Fishery – Ian Poiner (facilitator)

The group considered three questions:

1. What are the targets, if any?
2. What are the outstanding issues and where to next?
3. What is the relevance to other fisheries?

In addition to discussion of these questions the group highlighted two matters of overall importance. Firstly, that the new Environmental Protection and Biodiversity Bill was possibly going to have a significant impact on bycatch policy and resultant action plans. Consequently, any consideration of bycatch issues and action

plans should be done bearing the content of this Bill in mind. Secondly, the group came to the conclusion that the role of non-fisheries stakeholders in the bycatch debate was growing and there was a real need to engage these stakeholders and to include them as part of the process.

What are the targets, if any?

In dealing with the development of any bycatch action plan it was important that the plan made an explicit statement of what the problems were. This has been a recurrent theme over the past couple of days because of the alternatives that the issue may be one of

- public perception; or
- an issue with a strong biological/ecological base; or
- some scenario in between these.

Based on a suggestion by Malcolm Haddon, the group thought that the process of target setting required several components to be in place if it was going to be effective. Associated with the target itself, there needed to be:

- measureable performance indicators;
- an appropriate monitoring program; and
- a review process.

It was also noted that there should be some flexibility in terms of setting and measuring performance with respect to target setting. Importantly, a target may not be a single fixed number but may be a trend.

Outstanding issues

In the NPF a number of outstanding issues were identified that mitigated against the effective establishment and implementation of bycatch targets. These included:

1. *Compliance and monitoring.* In relation to the scale of this fishery and the logistics of a compliance/monitoring program, one could argue that the probability of actually mounting a successful program with any guarantee of success was fairly low. It was considered that some things could probably not be monitored.
2. *The approach to reducing fish bycatch.* This component of the bycatch was particularly vexatious and the group questioned whether it was realistically possible to set targets for fish bycatch in this fishery. Several different options were possible depending on the approach taken. It was uncertain which of these options, for example, a gear solution or a sustainable bycatch solution, was most desirable. The group agreed that this needs further work.
3. *Definition and certification.* Given the nature of the plan – agreements in terms of uptake of different devices by specific years, for example, TEDs by the year 2000, the question of definition and certification is an outstanding issue. The approach to this problem was uncertain and needed clarification.
4. *Comprehensiveness.* It was recognised that the current plan only addressed one aspect

of the three key issues in the Commonwealth Bycatch Policy: the material landed on the deck. It did not address the 'scavenger' or 'sea-bed' issues. These were acknowledged in the action plan but it was not clear when these issues would become part of the plan, what would trigger their inclusion and the process under which this would take place.

5. *Other fishing-induced mortality.* The group noted that BRDs could be put into nets that allowed fish to escape, but there was no appreciation of how many were dying as a result of passing through the BRD. Under this scenario it was recognised that BRDs were camouflaging the issue rather than doing anything about it.

Relevance to other fisheries

The diversity in prawn fisheries, from tropical to temperate, north coast to east coast, shallow beam trawl to offshore trawl, meant it was unlikely that there would be generic problems or solutions that applied to all fisheries. These were most likely to be fishery specific. Hence, each action plan would need to address those specific problems within a fishery. They would be different because of different ecologies, nature of bycatches and nature of the fisheries.

However, there were probably some shared issues that were across fisheries. Included were:

1. Some of the approaches documented in the NPF plan (definition of problems; staged approach) probably had relevance to other trawl fisheries and possibly other fisheries in general.
2. TED/BRD certification (if a fishery went down that route) was probably a general problem across all prawn fisheries.

3. Issues relating to physical impacts of trawls going across the bottom, unobserved mortality and the related issue of responding to IMCRA (identifying a national system of representative marine protected areas).

In conclusion, the group noted that the SEF, apart from the issue of physical impacts, had very different problems. Because it is so fundamentally different to prawn fisheries, the approaches outlined would be of limited value.

Case study 2: Developing a threat abatement plan for the incidental catch (or bycatch) of seabirds during oceanic longline fishing operations – Andrew McNee (facilitator)

This case study concerned the threat abatement plan (TAP) for the incidental catch of seabirds by oceanic longline fisheries. Clearly the subject was unfamiliar territory for most of the participants. The group was given a presentation covering background material which emphasised the following:

- the TAP was a published document;
- there was a statutory framework; and
- there was a target of 0.05 birds per 1,000 hooks.

Discussion proceeded immediately to the target value. The group identified a variety of issues with respect to the TAP and subsequently discussed in more detail:

- the role of science in target setting at two levels (technically-oriented targets; in contrast to versus more general targets that fulfil some social agenda); and
- industry involvement.

Outcomes of the discussions

Some participants were uncomfortable with the target that is in the TAP and considered that it did not have the characteristics they considered

necessary or desirable. The group considered what the desirable characteristics for targets might be against the key issue – Why does one have targets?

There seemed to be two approaches to target setting, associated with ‘specific’ versus ‘general’ targets:

- seeking a conservation type objective that was a specific objective relating to a given species; and
- a more general target to fulfill some social desire to see something done (under this scenario a technical specificity was absent).

Depending on which type of target is adopted, there were implications for progressing the plan. It was suggested that the albatross TAP tended towards the second option. It was even possible that the TAP target may be achieved but that albatrosses may still become extinct.

Discussions then moved to the role of science at these two levels, namely specific versus general targets. If the TAP contained a ‘specific’ target that dealt with the conservation of albatrosses, science could provide a number of things:

- measurement of the risk or uncertainty of achieving particular aims;
- what is unknowable (the broad expectation ‘out there’ is that anything can be answered if enough time and expertise is thrown at it); and
- the stock assessment approach. This captures whole suite of particular actions and the group noted that, outside fisheries, this approach was probably not well understood. In conservation science circles there was probably not a strong understanding of this process. It delivers a capacity for technical status assessments; impacts of bycatch on species of interest; evaluation of mitigation in terms of effectiveness of devices and the