



tasmanian conservation trust inc

The Secretary
Rock Lobster Fishery Management Plan
Department of Primary Industries, Parks, Water and Environment
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**Comments on Rock Lobster Fishery Draft Management Plan
Proposed Changes – April 2011**

The rock lobster fishery is currently in crisis. Despite having an excellent management framework and relatively well-resourced research and management support, major problems have been ignored for too long. Excessive commercial inshore fishing pressure, localised overfishing, habitat change associated with over fishing of large rock lobster and consequent expanding urchin populations are all issues that have been recognised for years, but have not yet been addressed by any meaningful changes to management. Since 2006, poor recruitment has added to these already serious problems. Biomass, which had begun to recover and approximately doubled since quota was introduced, began to fall again and is now more or less where it was at the time quota was introduced. Habitat change due to the rock lobster fishing and overfishing are now major concerns along the east and southeast regions that pose a serious threat to both the rock lobster and abalone fisheries as well as the environment, and can no longer be ignored.

The current review process has recognised most of the major problems and makes some useful suggestions. However, it is clear that the changes proposed by the Department of Primary Industries, Parks, Water and Environment, (DPIPWE) will not solve any of the major problems associated with this fishery.

Below are general comments from the Tasmanian Conservation Trust (TCT) on the management of the Tasmanian rock lobster fishery, followed by more specific comments on the *Rock Lobster Fishery Draft Management Plan Summary of Proposed Changes – April 2011*.

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Reduced Commercial TAC

It is generally accepted that a Total Allowable Catch (TAC) that cannot be caught is not only a meaningless management tool, it is an indication of a fishery in trouble.

While modelling suggests that the recent cuts in the Total Allowable Commercial Catch (TACC) will be useful, that modelling is based on the assumption that future recruitment will be similar to that experienced over the last 10 years. This is probably an over optimistic assumption, given that the current biomass is now greatly reduced and presumably producing fewer eggs, and the possibility that environmental conditions that likely resulted in the decline may persist. There is a real possibility that the TACC cuts that have already been made will not be large enough to have a useful outcome. Unless recruitment greatly improves, a larger cut in the commercial TAC will be required and should be considered.

The incremental reductions in TACC that have occurred in recent years have not been enough to counter the reduction in recruitment and halt the decline in biomass and Catch Per Unit Effort (CPUE). So far, it appears that the TACC reduction is simply following the decline in recruitment and biomass. This cycle needs to be broken and a major cut in TACC is required. The TCT suggest that annual TACC is cut to 800 t until a significant increase in biomass is identified. Further cuts may be required if recovery is not apparent within 3 years.

Failure in Fishery Modelling

For many years the management of the Tasmania Rock lobster fishery has relied heavily on fisheries modelling. While it is recognised that modelling can be very useful in fisheries management, it is also clear that modelling is limited by the quality of the data and, in particular, the modelling of the Tasmanian rock lobster fishery has not adequately taken into account environmental variability from year to year or recruitment variability. Data appears to be lacking in some areas, for example with regards to the inshore versus offshore fishery on the east coast, limiting the applicability of modelling to considerations of things such as maximum size limits or area management. Recruitment failure, presumably due to environmental variables, has also not been adequately accounted for by modelling, and as pointed out above, predictions based on modelling that the current TACC will lead to improved biomass may be optimistic.

Recreational Fishery

Recently, the survey based method for estimating the size of the recreational catch has been validated. However, a recreational tagging system should still be introduced. A set number of tags should be issued with each licence. This will cap effort by individuals in this sector and could be used to provide intelligence about fishing activities that would assist enforcement. An option to allow fishers access to additional tags might be considered if there was concern that fishing activities would be too limited. The cost of implementing this system should be borne by the users. Given the costs of participating in this fishery associated with travel and equipment, the small additional cost of tags and associated administration would be insignificant. Tags could also be used as a management tool to direct effort away from overfished areas. They will clearly assist with compliance and enforcement.

While the recreational catch makes up a relatively small proportion of the overall fishery, it does make up a large part of the catch in certain areas, particularly in more accessible localities and in inshore waters along the east and southeast

coastline. Reduced bag limits are entirely appropriate. The TCT suggests that in highly targeted areas tags are used to limit catch. A bag limit of two should be set, except in more heavily targeted areas, where a bag limit of one would be more appropriate. In areas that are all but fished out, such as at Bicheno or Fortescue Bay fishing should be stopped.

Localised Overfishing

A growing number of once productive areas that are now all but completely fished out. It is common knowledge that many areas that were once accessible and popular locations for recreational fishers no longer provide access to rock lobster. Fortescue Bay, Spring Beach and Bicheno provide examples of this kind of degradation. There needs to be a strategy to address this problem. These areas are of no use to either the recreational or commercial fishery in their current state and should be rehabilitated if biodiversity values are to be protected, habitat change is to be halted and recreational fishing values are to be maintained. The TCT suggests that areas where severe overfishing has occurred should be identified and that these areas are temporarily closed until stocks recover. Once recovery has occurred, access should be limited to recreational fishers and both annual and daily bag limits should be imposed, using tags, so that rock lobster populations are maintained, and catch is distributed equitably.

Maximum Size Limit and *Centrostephanus* Urchin Barrens

It is clear that overfishing of rock lobster, and in particular, the removal of almost all rock lobster large enough to feed on *Centrostephanus* urchins, has directly resulted in the formation of *Centrostephanus* urchin barrens. A maximum size limit of 140 mm is a useful management tool, as it protects rock lobsters that are large enough to predate on *Centrostephanus*. As a minimum, this size limit should be applied to all inshore waters shallower than 30 m from north of Eddystone Point to South East Cape at least. A better option would be to apply this size limit to all Tasmanian waters and to both commercial and recreational fishers. This would simplify enforcement and provide better protection against the development of further urchin barrens.

A maximum size limit alone will be unlikely to allow rock lobster populations to increase fast enough to control urchin numbers in any useful period of time in many areas, if at all. At the current level of fishing, it is clear that few animals ever survive to reach the maximum size limit in the critical areas in the east and southeast regions. The TCT suggests that much more needs to be done if there is to be any meaningful impact on urchin numbers and urchin barrens. Translocation of larger rock lobster may be an option. Commercial harvesting or culling urchins may be useful in small areas, but seems to be an impractical solution to the large areas that is already effected, and it is not practical to carry out diving operations in water deeper than 15 to 20 m. Perhaps the most cost effective mechanism would be to close areas at risk from urchin barren to all forms of fishing until the population density of large rock lobster increases to the point where urchin numbers and barrens can be controlled.

Urchin barrens formed by *Centrostephanus* urchins are a major problem for the fishing industry and the environment. Reef areas that become urchin barrens no longer support useful numbers of rock lobster or abalone. All evidence suggests that knife-edge fishing and overfishing by the rock lobster fishery are the primary causes of the loss of large rock lobster that control urchin numbers and the habitat change due to *Centrostephanus* barrens. This means that the current management of the rock lobster fishery is not working. The fishery is not only

unsustainable in many areas, but also threatens ecological processes and the abalone fishery. It is the view of the Tasmanian Conservation Trust that this places the commercial rock lobster fishery at risk of losing its export accreditation under the *Environment Protection and Biodiversity Conservation (EPBC) Act*.

MPA Reference Areas

A major difficulty associated with managing this fishery is identifying the variables that determine the rock lobster population and habitat change, and separating effects of climate change, fishing effort and management changes.

No take Marine Protected Areas (MPAs) offer the best way to differentiate between the impacts of climate change and other variables. Such reference areas are also vital for properly assessing the impacts of fishing itself. The Tasmanian Marine Protected Area Strategy provides a process that can create a system of representative MPAs throughout Tasmania's marine bioregions. If this strategy were to be implemented it would create a system of reference areas that would enable a much better assessment of the effects of this fishery as well as the variations due to climate change or other environmental factors.

MPAs for Egg Production

While it is usually impossible to make a direct link between egg production and recruitment success in target species such as rock lobster, it certainly would not hurt to ensure that a significant proportion of reproductive animals are fully protected from fishing activity. This is, after all, one justification for having a size limit that allows a large part of the population to reproduce. The TCT suggests that given the potential for self-recruitment by Tasmanian rock lobster, and recurrent recruitment failure in recent years, more should be done to protect brood stock in MPAs. It is clear that MPAs allow rock lobster to survive to grow to a large size, and that large individual female rock lobster are particularly good egg producers. It is also obvious that much remains unknown about the factors associated with recruitment success. A series of no-take MPAs in each of Tasmania's marine bioregions should be of some benefit to egg production. As it is impossible to determine the ideal circumstances for egg production in terms of location timing, having a series of protected areas across all of Tasmania's marine bioregions could increase the probability that fertile eggs would survive and mature through to settlement.

Inshore Fishing and Bag Limits

Excessive inshore fishing pressure by both commercial and recreational fishers continues to be a problem. This is due to considerations of accessibility in the case of recreational fishers and market forces and economics by commercial fishers. Limitations on catch/possession limits need to be considered to address this problem. The suggested reductions in bag and possession limits for recreational fishers do not go far enough to protect the most highly overfished areas along the east and southeast coastlines.

The Tasmanian Conservation Trust suggests that the overriding principle guiding bag limits for recreational fishers should be to provide enough fish for a meal. A daily bag limit of two rock lobsters would seem to be appropriate. Possession limits for fishers should be reduced to two, with a house limit of four, without a sales tax invoice. There should be no possession of rock lobster permitted for individuals less than 10 years of age.

Area Management

Variations in growth rates, size at maturity and fishing pressure means that standardising fishery management procedures across the State is inappropriate. Area based management that is sensitive to biological factors and fishing pressure needs to be introduced urgently.

A reduction in the recreational bag limit alone will not ensure that any fish left in the water as a result will not be taken by the commercial fishery, or that recreational fishers will not compensate by making more fishing trips and therefore maintain current levels of catch. Area based management needs to be part of the solution.

Bag limits, possession limits and size limits should be determined on a region by region basis, and access to these areas by both commercial and recreational fishers managed accordingly.

Area management of rock lobster at a scale that would enable the management of this fishery to deal with *Centrostephanus*, inshore fishing pressure and localised overfishing is essential, and this requires a management system that can direct fishing effort appropriately. As a minimum, management of the commercial fleet must be able to direct effort away from inshore waters and local overfished area. If no better option can be devised by DPIPWE, the abalone fishery provides a model that could be successfully used by the rock lobster fishery. The management system should be able to direct fishing effort to within 1 km along the coast and inside and to either side of the 30 m depth contour.

Living Marine Resources Management Act

Currently, the management of the Tasmanian rock lobster fishery does not appear to comply with the objectives of the *Living Marine Resources Management Act, 1995* which, amongst other things, aims to “achieve sustainable development of living marine resources having regard to

- increase the community’s understanding of the integrity of the ecosystem upon which fisheries depend; and
- provide and maintain sustainability of living marine resources; and
- take account of the community’s needs in respect of living marine resources; and
- take account of the community’s interests in living marine resources.”

The management of the current fishery does not appear to comply with this Act. The TCT suggests that if DPIPWE implemented our suggestions, it would be likely that the management of this fishery would comply with the Act.

Carryover

While carry over has some practical use as a way for fishing operations to deal with economic costs of unforeseen circumstances, it also provides a mechanism by which the commercial TAC can be undermined. With recruitment failure becoming more of an issue, and the increasing need to ensure there are real reductions in catch, carryover should be eliminated altogether.

Quota Year

In many ways it would seem that having no closed season for the commercial fishery would provide multiple advantages. However, there appears to be a need to close the season to protect soft shelled rock lobster over the September/October period. This would seem to be a logical time to start and stop

the season. The current season closure seems to interfere with marketing opportunities associated with Chinese New Year and should be changed.

Standardisation of Marking of Buoys

The marking of buoys should be standardised and vessels should only be permitted to carry marked buoys for those fishers on board. Some consideration might be given to allow exceptions to this rule, with prior reporting, to allow the collection of gear under special circumstances, such as in the case of illness or boat breakdown.

Specific Comments

Below are specific comments on the *Rock Lobster Fishery Draft Management Plan Summary of Proposed Changes – April 2011*.

Maximum size limits - To introduce a 160mm maximum size limit for rock lobster on the east coast/south east between Eddystone Point and Whale Head.

Comment The TCT supports this with a different size and boundary. A size limit of 140 mm is a better size as it will protect more rock lobster capable of killing *Centrostephanus* urchins, and increase the likelihood of rock lobster actually reaching the protected size.

This size limit should be applied across all state waters to simplify enforcement and management and help protect all waters from the spread of *Centrostephanus* urchin barrens.

Bag and possession limits - To have a bag limit of 3 rock lobsters and an on water possession limit of 6 lobsters on extended trips in the Eastern Region (East of Port Sorell to Whale Head).

Comment The TCT supports this, but with a lower possession limit. Bag limit and possession limit should be the same to simplify enforcement. The recreational bag/possession limit should be 2 per day.

Seasons for the Recreational Fishery - Consider options for setting the recreational season dates and delaying the start of the recreational season from the current first Saturday in November by around two weeks. The third Saturday in November or a closely aligned calendar date has been suggested.

Intent - Delay the recreational season to assist with stock rebuilding and limit the risk of handling soft shelled rock lobster in the south.

Comment There is no reason to think that minor changes to the season opening date will have any significant impact on stock rebuilding. Fishing effort will simply adjust to the season. Bag limits, area closures, area based catch restrictions and restricting the commercial TAC are all more effective ways to rebuild stock.

A closure to protect soft shelled animals is reasonable and should be implemented.

Catch limits close to Victoria - To introduce a possession limit of 4 lobsters in State waters in Bass Strait north of the line of latitude 39°30' South (~ North of Deal Island).

Intent - To align Victoria and Tasmanian possession limits in waters in close proximity to Victoria where vessels return to Victoria after fishing in Tasmania.

Comment Catch and Bag limits for recreational fishers should not be increased simply because of proximity to Victorian waters. Bag/possession limits in these waters should be 2.

Boat limits - To introduce a boat gear limit of a maximum of: 5 rock lobster pots and 20 rock lobster rings; and a boat catch limit of a maximum of: 5 times the bag limit for fishing trips less than a day, and a 5 times the possession limit for fishing trips longer than a day. Note: the catch limits are the Eastern Region and Western Region Bag and Possession Limits mentioned in the information paper. Individual limits apply.

Intent - To limit fishing activity to reflect a non-commercial scale of operation and reduce the opportunities for illegal fishing and marketing.

Comment Recreational catch should be reduced and illegal fishing for sale should be discouraged. There should be a limit of 2 pots or rings per boat and possession limits as per 2 fishers. Stocks of rock lobster are declining and fishing needs to be restricted to protect stocks.

Possession limits by persons who do not undertake fishing - The possession limit for unlicensed fishers and persons not engaged in aboriginal fishing will be reduced from 5 to 2.

Comment The TCT supports this proposal that the possession limit for unlicensed fishers and persons not engaged in aboriginal fishing will be reduced from 5 to 2 to assist with compliance.

Possession by children less than 10 years - Any lobsters in a child (under the age of 10) possession will be attributed to the supervising adult (i.e. children under ten have a zero possession limit).

Intent - To reduce the compliance risks

Comment The TCT supports this proposal.

Improve compliance for divers to only take rock lobster with bare or gloved hand - The possession of a noose either on a vessel or while diving will be prohibited, and the possession of a crook while diving is prohibited.

Intent - To improve compliance with the prohibition of illegal devices that assist in taking lobsters by diving.

Restriction of Certain Apparatus on Recreational Vessels

The TCT supports this proposal, but as well as the prohibition of snoods and nooses on vessels that have diving equipment on board, shark pods should also be banned on vessels used for recreational rock lobster fishing while they are engaged in that activity. There is anecdotal evidence that the electric fields generated by these devices are being used to drive rock lobster out from otherwise inaccessible dens, greatly increasing fishing effectiveness.

Conclusion

The future of the Tasmanian rock lobster fishery will be guided by the outcome of this review. Major problems in the Tasmanian rock lobster fishery have been ignored for too long. Habitat changes that are caused by this fishery threaten the environment upon which this fishery is based. It is likely that difficult and unpopular decisions will have to be made to solve the problems created largely by the recreational and commercial fisheries. Climate change and recruitment failure make the situation even more difficult. The choice, however, is clear. Either the problems are dealt with now, or we will have continued decline in the recreational and commercial fisheries, and increasing habitat degradation that undermines the local marine ecosystem and other fisheries, particularly the abalone fishery, as well as the rock lobster fishery itself. Either the problems are solved now or we can expect the devastation of major commercial and recreational fisheries and the ongoing destruction of the rocky reef ecosystem along much of Tasmania's coastline.

There is an urgent need to implement a system of area management to deal with localized overfishing, inshore fishing pressure and *Centrostephanus* urchin barrens. The area management system needs to be able to direct fishing activities to within hundreds of metres and discriminate between shallow and deep water at the 30 m depth contour to be effective. If no better model can be developed then the system used by the Tasmanian abalone fishery should be used.

Tagging of rock lobster taken by the recreational sector should be introduced. This would add to certainty about the level of recreational catch (a minor point now that the existing system has been validated) but more importantly could be used to cap catch by individuals (limiting illegal sales) or cap effort in different areas of Tasmania. Recreational tags would help reduce illegal fishing for commercial gain. Tagging could be made self funding at an insignificant cost to the fisher.

The Total Allowable Commercial Catch needs to be limiting for it to have any relevance. A TARC of 800 tonnes should be a maximum until biomass starts to recover, and this may need to be reduced even further if this does not happen quickly. Areas on the east coast and south east with urchin barrens should be closed until rock lobster stocks recover.

Centrostephanus urchin barrens pose a major threat to Tasmania's rock lobster and abalone fisheries, as well as the marine environment. It is clear that these barrens are a direct result of overfishing of rock lobster. Intensive fishing has resulted in the removal of almost all rock lobsters large enough to prey on *Centrostephanus* urchins from much of Tasmania's marine environment. A practical solution to the *Centrostephanus* problem needs to involve changes in the way Tasmania's commercial and recreational rock lobster fisheries are managed. It is outside the scope of this submission to deal with the *Centrostephanus* urchin barren issue in any detail, but it is certain that area management as outlined above will be an essential tool for dealing with this problem. Effective mechanisms that allow area management of the Tasmanian rock lobster fishery must be developed as part of this current review.

A comprehensive, adequate and representative system of marine protected areas should be put in place to create baseline reference areas and allow the determination of fishing impacts and differentiate between fishing impacts and climate change so that the fishery can be managed more effectively.

Approval under the *EPBC Act* is required for the export of Tasmanian rock lobster into this fishery's main market. *EPBC* approval is supposed to ensure fisheries are environmentally sustainable. Right now, the commercial Tasmanian rock lobster is not sustainable due to declining biomass and expanding habitat destruction. It is hard to see how this fishery will be able to renew approval under the *EPBC Act* and export its product overseas unless a more than token attempt is made to deal with the serious issues that face this.

The Tasmanian rock lobster fishery is in crisis with falling biomass and declining CPUE. It is the cause of major habitat destruction that is already widespread and continues to threaten rocky reef ecosystems and the abalone fishery. None of the major problems associated with this fishery are new or should come as a surprise, but it is clearly time for them to be fixed. The proposals made by DIPIPWE so far will not make any significant difference.

Yours sincerely

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