

As there appears to be increasing fishing pressure and as recreational fishermen appear to take the majority of the catch, there appears to be a need to contain the recreational reef fish catch. Ways in which this might be achieved include:

- i) making sales of fish by amateurs illegal and enforcing such a provision.
- ii) educating park users that recreational fishing is exactly that
- iii) limited entry fisheries, e.g. resident and non-resident recreational fishermen are treated differently
- iv) closing some reefs to recreational fishermen
- v) increasing the lower size limit of fish retained
- vi) imposing an upper limit on size of fish of some species retained
- vii) reducing the number of trips
- viii) use of barbless hooks
- ix) introducing a bag limit on reef fish.

Detailed comments on the options above follow, but because of current interest, bag limits are considered in greatest detail.

- i) Making sales of fish by amateurs illegal

Recently changes to Queensland legislation resulted in restricting sales of fish by amateurs to 50kg per permit and an amateur is restricted to 12 permits a year.

Complete prosecution of this approach may well have the desired effect of reducing the "recreational" catch. If the provision cannot be enforced, taxes on landings may have a similar effect; however, the enforcement problems are comparable. Options related to sales of fish are beyond GBRMPA control. In 1988, s.35 of the Fishing Industry Organisation and Marketing Act was amended to limit sales of fish by amateurs to 50kg (whole, headed and gutted only) per permit and permits were limited to 12 per year per person.

Arguments and factors for and against sales of fish by amateurs are as follows:

In favour

Removes "commercial" aspect from recreational activity.

May reduce "recreational" catch to lower levels.

May give commercial fishermen more scope to diversify.

Queensland Sports and Recreational Fishing Council, Queensland Commercial Fishermen's Organisation appear to support this approach.

QFMA have tightened up s.35 which allow amateurs to sell surplus catch.

Against

Number of landing and sale points high i.e. logistic difficulties.

Education program preferable.

Current numbers of commercial fishermen may not be able to fill the gap in the market left by the removal of "recreational" fishing.

ii) Educating park users

This appears to be a desirable option which should be pursued whether or not regulations are introduced. Voluntary acceptance of a style of behaviour will - in the long term - be more successful than regulation. Regulations may act as educative tools in themselves e.g.. a regulated bag limit could reduce the current "target" of amateur fishermen. Comparisons of recreational reef fishing costs with other expensive non-profit recreations are needed (e.g. marlin fishing, skiing). This option is within GBRMPA's powers.

iii) Limited entry fisheries

This option, which would discriminate in some way between types of recreational fishermen, appears to be largely impractical, for enforcement, logistic and political reasons. Any logical basis for restricting entry is not obvious.

iv) Closing some reefs to recreational fishermen only.

Zoning plans currently in force do not discriminate against recreational fishermen - line fishing closures also apply to commercial fishermen. However, the reverse (closing reefs to commercial fishermen) was implemented in the Capricornia Section Zoning Plan.

This option is within GBRMPA's capabilities and has been suggested by commercial fishermen e.g. for the Hardline Reef complex. It would be most unpopular with recreational fishermen.

- v) Increasing the lower size limit of fish retained, and
- vi) Imposing an upper limit on size of fish of some species retained.

Options (v) and (vi) relating to size limits may improve the reproductive capacity of species (and therefore possibly recruitment to the fishery) and are again within GBRMPA capabilities. The complications that sex changes add to reef fisheries management mean that each species would need individual consideration and such sizes may well be different. An increase in minimum size limit above the minimum sex change size for some species would seem desirable.

- vii) Reducing the number of trips.

This option would reduce total catch if fishing habits did not alter. Means of achieving this are hard to determine.

- viii) Use of barbless hooks.

This option perhaps in conjunction with size limits may reduce the mortality of released fish and put more "sport" back into fishing. Its acceptability may be doubtful, and it prevents management problems.

- ix) Introducing a bag limit on reef fish.

This option could be the basis for a considerable reduction in the recreational reef fish catch, while inconveniencing a minimal number of anglers. Logistic difficulties are, however, great.

Bag limits are considered in detail in Appendix 1.

While bag limits are conceptually attractive there seems to be potentially enormous problems in their implementation. In spite of their conceptual attractiveness, like many fisheries management measures, their effectiveness in the marine environment does not appear to have been demonstrated. Any proposed introduction of bag limits should be preceded by a clear statement of how bag limits relate to the management objective and how their effectiveness will be evaluated.