

Plan to refine the existing Decision Rules for Zones E, F and G

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Introduction

This paper gives details of the necessary steps needed to be able to refine the Decision Rules for Zones E, F and G. It also gives a summary of what data are available for these Zones in order to be able to move forward in developing refined Decision Rules.

Methods

Table 1 gives a summary of the available data for Zones E, F and G.

The broad approach would need to mimic that used for OMP development:

- a) Some simple population model(s) will need to be developed for each Zone. The level of complexity depends on the data planned to be used in the Decision Rules. For example, if some size structure measure is to be used, an age-structured rather than a bulk-biomass model structure will be needed.
- b) The model(s) must then be further developed to be able to project into the future under extractions (legal and illegal), generating data of the type to be used in candidate Decision Rules and with the same level of error (noise) as evident from the model fits to past data.
- c) Candidate Decision Rules, which output TACs based on future simulated data generated by the model(s) in b) will then be tested against their ability to achieve an agreed mix of resource recovery and legal abalone utilisation.

This will not be a short/rapid process. A period of minimally one year is probably a realistic estimate.

Table 1. List of available data for Zones E-G.

Data	Zone E	Zone F	Zone G
Total annual catches	1984 to 1990/91 and 1997/98 to 2007/08 and 2009/10 to 2011/12	1983, 1985 to 2007/08 and 2009/10 to 2011/12	1983 to 1989/90 1997/98 to 2007/08 and 2009/10 to 2012/2013
CPUE	1984 to 1990/91 and 1997/98 to 2007/08 and 2009/10 to 2011/12	1983, 1985 to 2007/08 and 2009/10 to 2011/12	1983 to 1989/90 1997/98 to 2007/08 and 2009/10 to 2012/2013
Commercial catch-at-length/age	1982/83 to 2011/12	1985/86 to 2011/12	1987/88 to 2011/12
FIAS	—	1995 to 2013	—
FIAS catch-at-length/age	—	From 1996	—
Poaching trend	Zones combined		
Poaching catch-at-length/age	—	—	—