

## **Decisions required for the updated stock assessments for South Coast Rock Lobster 2012**

S.J. Johnston

---

A number of decisions need to be made w.r.t. the updated assessment of SCRL in 2012.

### **Area divisions**

Previous assessments have split the resource/assessment into three separate areas: Area 1, Area 2 and Area 3.

Suggestions for 2012: Area 1 East

Area 1 West

Area 2+3

At SWG meeting: need to look at catch and CPUE trends in these different areas before making final decision.

### **Input data**

Previous assessments involved fitting to:

- CPUE (separate for each area, 1977-2008)
- Catch-at-length data (1995-2008; male and female separate) – from observer programme

Catch data – split by area

- Previously 1973-2009

### *Suggestions for 2012 assessments*

- CPUE 1977-2009 – split by new areas
- Catch-at-length data 1995-2010 – standard observer programme data – split by new areas
- Catch-at-length data from pack category data:
  - i) all areas combined
  - ii) 1990-1997, 2005-2010
  - iii) OLRAC to provide the catch-at-size values
- Fit using these two catch-at-length data sets in separate assessments and then jointly in the same assessment

- Catch 1973-2009 – split by new areas

### **Growth rate estimates**

These will be updated (e.g. see by OLRAC -Fisheries/2011/OCT/SWG-SCRL/10)

OLRAC to provide further information at SWG meeting e.g. plots of the data

Use updated somatic growth data for each of the “new” areas selected (males and females separate).

### **Selectivity**

Previous assessments involved

- Time varying selectivity (1995-2008): extend to 2010
- Different selectivity for each area
- Males and females have separate selectivity functions
- OLRAC and MARAM “methods” of time varying selectivity

### **Other model details**

- Stock recruit residuals – were fitted for 1974-2000 (but constrained to average zero)
- Proportional split of recruitment between areas estimated for 1973-2001; variations allowed around this.
- Suggest that these periods above are now extended by X years, after that time deterministic relationship applies
- Effort saturation was examined in one OM
- Down-weighting of catch-at-length by 0.1 was examined in one OM
- Fixing  $h = 0.8$  (instead of estimating it) was examined in one OM