A list of data inputs to the west coast rock lobster assessment

S.J. Johnston and D.S. Butterworth

MARAM Department of Mathematics and Applied Mathematics University of Cape Town Rondebosch, Cape Town

The following data are available as inputs into the west coast rock lobster assessment.

1. Commercial Catch Data

For area-aggregated and area-disaggregated cases, there are commercial catch input data from 1870-2005. (See RLWS/DEC05/ASS/7/1/1 for further details.)

2. Recreational catch data

Area-aggregated data are available for 1992¹ onwards. See RLWS/DEC05/ASS/7/1/1 for further information.

3. Poaching data

No direct data are available. See RLWS/DEC05/7/1/1 for assumptions made in the assessments.

4. Trap:hoopnet ratio for source of catches

These data are available from the MCM catch records for 1969-2005 for all areas. The fishery was entirely a hoop fishery until 1969, when traps were introduced. Area 1-2 has remained a hoop-only fishery.

5. CPUE

a) Trap CPUE

These data are available for 1981-2004 for all areas (except Area 1-2 – hoop only fishery).

b) Hoop CPUE

These data are available for 1981-2004 for all areas.

c) FIMS CPUE

These data are available for 1992-2004. These data are collected from Area 3-4, Area 7 and Area 8 only.

¹ 1992 refers to the 1991/92 season

6. Catch Size Structure

All catch size structure information is available for males and females separately, and by 5mm size classes for the legal portion of the catch.

a) Trap catch size structure

These data are available for each area from 1976-2004 (except Area 1-2 – hoop only fishery). The following lists the number of years for each area for which data are missing:

Area	# years missing data
Area-aggregated	3
Area 8	4
Area 7	3
Area 3-6	4
Area 3-4	4
Area 5-6	5

b) Hoop catch size structure

These data are available for each area from 1976-2004. Data are available for Area 1-2 for 1985-2004. The following lists the number of years for each area for which data are missing:

Area	# years missing data
Area-aggregated	3
Area 8	13
Area 7	21
Area 3-6	3
Area 3-4	3
Area 5-6	6
Area 1-2	2

c) FIMS catch size structure

These data are available for Area 8, Area 7 and Area 3-4 only for 1992-2004. No data are available for 1999.

d) Commercial trap sublegal catch size structure

These data were collected in Area 8 for the 1994-1998 period and provide data for the sublegal portion of the catch.

7. Percent females in catch (F%)

These data are calculated from the catch at size data and are thus available for the same period as for the catch size structure data described above. They relate to the percentage females (by number) in the catch.

- a) Trap F%
- b) Hoop F%
- c) FIMS F%

8. Minimum legal carapace length

The minimum legal carapace length has changed over time. The minimum legal carapace length for the recreational sector is different from that for the commercial sector (for more recent years). These size limits are the same for all areas, except for Area 1-2. See RLWS/DEC05/DAT/6/1/3/1 for details.

9. Somatic growth data

These data are available from 1968-2004 for all areas – although there are data gaps for some areas. The data relate to adult male lobsters. See

RLWS/DEC05/DAT/6/1/3/1, RLWS/DEC05/DAT/6/1/3/3, and

RLWS/DEC05/DAT/6/1/3/4 for further details of the data and the data analyses, and RLWS/DEC05/ASS/7/1/2 for model assumptions regarding somatic growth rate of female lobsters and juveniles.