

Marathon Dive – were you there?

During March, more than 75 divers and snorkellers took to the water to try to monitor the entire circumference of Port Noarlunga reef over a 12 hour period. The first divers hit the water at 7:30am, recording the presence and abundance of fish within a 100 metre transect. More than 3000 fish were counted during the day. The five most visually dominant species can be viewed in table one.

Table one: Comparison of fish data collected by recreational divers as part of the Marathon Dive and data collected by scientific divers as part of a report to the EPA (1998)

Marathon Dive Data (2000)	Max. abundance (per 50m transect)	Scientific Data (1996)	Max. abundance (per 50m transect)
Hula	11.9	Hula fish	19.8
Leather Jacket	7.9	Leather Jacket	6.9
Talma	2.4	Silver Drummer	3.4
Old Wife	1.8	Talma	1.5
Magpie Perch	1.5	Wrasse	1.2

*scientific data can be viewed as part of a report to the EPA: Cheshire *et al.* (1998) *Assessing the status of temperate reefs in Gulf St Vincent II: Survey results.*

In most cases, fish per transect were lower during the 2000 marathon fish count compared to 1996, however this could be related to the period of time over which the count was completed and that the marathon data was collated from the entire reef system. Several transects were replicated during the marathon dive which could also explain the lower readings. Since 1996 there has been a significant decline in the presence and abundance of large brown kelp (the presence of large brown algae are believed to signify a health reef) at Port Noarlunga reef (Cheshire *et al.* 1998). This could be correlated to the decline in abundance of several species (listed above). However as some species have increased over time, this is unlikely. The variability is likely to be related to the variable recruitment levels of juveniles from the pelagic larval phase to the reef system (Lincoln Smith *et al.* 1991, Cheshire *et al.* 1998).

Similarity in visually dominant species observed during 1996 and 2000 indicate that fish populations at Port Noarlunga reef are fairly stable. Each of these fish species are believed to be resident species of reef and thus the stability of populations suggests that fish presence and abundance could become a good indicator of reef health, if data is continued to be collected over a period of time. Subsequently, the similarity in data collected by recreational and scientific divers implies that community collected data is becoming and should become a significant tool to monitor populations.