

FISHERIES — WESTERN ROCK LOBSTERS

1615. Mr D.J. Kelly to the minister representing the Minister for Fisheries:

I refer to the *Western Rock Lobster Low Puerulus Risk Assessment* report produced following the two day workshop of 1 and 2 April 2009, held at the Western Australian Fisheries and Marine Research Laboratories, Hillarys, which states that low puerulus settlement numbers during the 2007–2008 and 2008–2009 seasons were due to environmental factors at all settlement sites. In relation to this I ask, are these environmental factors in question an anomaly, or can they be reasonably explained by normal environmental cycles?

**Mr T.R. Buswell replied:**

Puerulus settlement for western rock lobsters was below average for seven years (2006/07 to 2012/13) with the settlement in 2008/09 the lowest recorded in the 40 years of monitoring. This issue has been the subject of intensive research by scientists from the Department of Fisheries in collaboration with CSIRO. Since 2008, they have been examining what factors may have negatively affected the complex 12-month spawning and larval phase that occurs prior to the settlement of puerulus.

This research has already been successful in identifying that the period of these low puerulus settlements coincided with an earlier start to the spawning cycle (possibly due to warmer water temperatures) and reduced numbers of winter storms. Consistent with these environmental factors being associated with periods of low settlement, with the return to more typical environmental conditions experienced during the 2012/13 spawning and larval season, for the first time in 8 years, the resultant pattern of puerulus settlement in the current settlement season (2013/14) has so far also returned to more typical levels.

The long-term trends for climate in the lower west coast of Western Australia are that average water temperatures are likely to increase and winter storms decline. It is therefore important that the timing of the spawning cycle, the level of puerulus settlement and other environmental conditions that may influence the juvenile and adult life stages of the western rock lobster continue to be closely monitored.