

A snap-shot of the oceanography along the Maputaland shelf edge — habitat of the coelacanth (*Latimeria chalumnae*)

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The discovery by scuba divers in 2002 of five coelacanths living at a depth of 104 m in Jesser Canyon on the Maputaland Coast (Sodwana) was hailed as one of the great discoveries in marine science this decade. However, the existence of these animals at such a shallow depth relative to the Comoros Islands, ‘home’ of the coelacanth, as well as the fact that this narrow shelf is swept by the fast ($\sim 150\text{--}200\text{ cm s}^{-1}$), warm, Agulhas Current — one of the most powerful Western Boundary Currents (WBC) on the planet — suggested that this was probably an isolated group and was anomalous. However, observations obtained from four research cruises between 2002 and 2003, using the two-man submersible *Jago*, now indicate that this group comprises of at least 18 individuals located between Jesser Canyon and Wright Canyon. The depth range was between 104 and 140 m. Interestingly, CTD data indicate that the temperature range in this habitat is higher than that found in the Comoros Islands i.e. $18\text{--}22^\circ\text{C}$ cf. $15\text{--}19^\circ\text{C}$. Dissolved oxygen levels are lower i.e. $3.0\text{--}3.2\text{ ml l}^{-1}$ cf. 3.5 ml l^{-1} . These are controlled by the Shallow Oxygen Minima (SOM) which is exceptional shallow in this region. If this group of animals are not anomalous, then this data extends our knowledge of the coelacanth habitat. Moreover, current velocities in the depth range 100 – 140 m at Sodwana are also considerably higher than those found in the deeper coelacanth habitat in the Comoros i.e. $20\text{--}40\text{ cm s}^{-1}$ cf. $3\text{--}4\text{ cm s}^{-1}$. Also currents north of Sodwana (Jesser Canyon) appear to become weaker. This region may be better suited for coelacanth habitat, and hence it is possible that Jesser Canyon is the southern most limit of the ‘normal’ distribution range for coelacanths.