

## Climate change hits SE Australian fish species

**Significant changes in the distribution of about 30 per cent of coastal fish species in south-east Australia are being blamed on climate change.**



Credit: CSIRO.

‘Up to 19 species, or five per cent, of Tasmanian coastal fish fauna have undergone serious declines or are possibly extinct locally,’ according to Dr Peter Last, Curator of the Australian National Fish Collection. ‘At the same time, many warm temperate species have moved in and colonised the cool temperate Tasmanian region,’ he says.

Scientists from the CSIRO Climate Adaptation and Wealth from Oceans Flagships have identified shifts in 43 species. These include warm temperate surf zone species such as silver drummer and rock blackfish, which are breeding and have become more abundant, and range increases in snapper and rock flathead. Warm water tunas and billfishes are also more abundant, while Queensland groppers and tiger sharks are also visiting the region occasionally.

‘The problem is that in southern Tasmania, shallow cold water species have nowhere to escape the warmer conditions of the sea,’ says Dr Last. ‘Increased water temperatures in the Tasman Sea are likely to have a cascading effect through local marine ecosystems, [with the Bass Strait islands acting] as stepping stones or distributional paths south.

‘Already, we are seeing biological responses to these changes in the increased presence of [destructive] sea urchins and fishes from further north.’

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