

## In the news

### MELANOMA: SOMETHING FISHY?

Skin cancer has been observed in wild marine fish for the first time, report researchers in the United Kingdom and Australia. Of the 136 coral trout (*Plectropomus leopardus*) sampled from the Great Barrier Reef, Australia, 15% had dark skin lesions. These lesions appeared to be histologically similar to human melanoma, and coverage ranged from 5% of the skin surface to an almost completely black appearance. A team led by Dr Michael Sweet, of Newcastle University, UK, ruled out microbial pathogens and carcinogenic pollutants as potential causes of the lesions and concluded that “UV [ultraviolet] radiation appears to be the most likely cause” (*Herald Sun*, 2 Aug 2012), and this could be linked to the thinning of the ozone layer above Australia.

Although the sampled fish were otherwise healthy, as the stage I/II melanomas had not metastasized, Dr Sweet cautioned that behavioural changes in fish suffering from advanced stages of the disease might result in these fish being less likely to be caught and thus “the actual percentage [of fish] affected by the cancer is likely to be higher than observed in this study” (*HuffingtonPost.com*, 2 Aug 2012).

Prior to this study, UV-induced melanoma had been observed only under laboratory conditions. *P. leopardus* is a commercially (and culturally) important fish species, and Dr Michelle Heupel, of the Australian Institute of Marine Science, said: “given climate change scenarios ... understanding the cause of this disease is important to continued conservation and management of reefs and their inhabitants” (*The Independent*, 2 Aug 2012).

Further studies of larger samples from different locations are needed in order to establish the exact aetiology of the melanoma, disease progression and the extent of disease occurrence in fish populations.

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