

SOMETHING IN THE WATER: FISH TUMOURS AND ECOSYSTEM HEALTH

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Have you ever wondered if fish get sick? Well, perhaps not surprisingly, fish can play host to a wide range of diseases from those caused by viruses, bacteria and parasites to non-infectious conditions such as cancer. For many years, scientists at CEFAS's Weymouth laboratory have been conducting research into such diseases and have been using this information to provide the UK Government with advice relating to the health status of our farmed and wild fish in rivers, estuaries and seas.

One specific aspect of this work relates to the presence of tumours and other pathologies in the liver of estuarine and marine flatfish species. As in some animal and human tumours, fish tumours are considered to be the end product of a cumulative effect of environmental disturbances such as pollution. Research at CEFAS is leading the way in attempts to classify these tumours in European flatfish species such as the dab (*Limanda limanda*) and the flounder (*Platichthys flesus*) and in applying this knowledge to the monitoring of fish health in estuarine and fully marine waters as part of the UK National Marine monitoring Programme (NMMP). This poster illustrates a typical sequence of events in the diagnosis of a flatfish liver tumour and describes ways in which we are using clues from human cancer pathology to further our diagnostic capabilities for similar pathologies in fish.

