



Marine Climate Change Impacts Partnership

Dear MCCIP news subscriber,

MCCIP website has recently been updated with new marine climate change news and events. Below is a brief summary of the new items that have been added. For more details on all of the items listed below, simply go to www.mccip.org.uk and go to the relevant links in the 'news and events' box on our homepage. Please note that the material presented in MCCIP news does not necessarily reflect the views of MCCIP.

- **[Carbon dioxide concentration surges](#)**

The amount of greenhouse gases in the atmosphere reached a new record high in 2013, propelled by a surge in levels of carbon dioxide. This is according to the World Meteorological Organization's annual Greenhouse Gas Bulletin, which injected even greater urgency into the need for concerted international action against accelerating and potentially devastating climate change. In 2013, concentration of CO₂ in the atmosphere was 142% of the pre-industrial era (1750), and of methane and nitrous oxide 253% and 121% respectively.

- **[Updated climate change indicators for Europe](#)**

The European Environment Agency has recently published updates to a number of its climate change indicators for Europe. These include temperatures, precipitation, sea level rise and storm surges.

- **[New study highlights threatening changes to UK marine systems](#)**

Sustained observations of the sea by the Marine Biological Association of the UK highlight massive changes across UK marine systems and are the subject of a new paper published by The Royal Society. The new paper traces the history of these globally unique records from their origins at marine laboratories around the UK, and shows how they are key to understanding the ways that human activities damage our marine life. Marine biodiversity around the UK currently faces unprecedented threats from climate change, ocean acidification, exploitation of

commercial fish stocks and pollution. [Mieszkowska, N., et al. (2014) *Phil. Trans. R. Soc.* 372(205) doi: [10.1098/rsta.2013.0339](https://doi.org/10.1098/rsta.2013.0339)]

- **[Adaptation for the seafood business – MCCIP and Seafish](#)**

Seafish and the MCCIP are asking seafood businesses and organisations in the UK for their views on the impact of climate change on the seafood industry and how they might respond, in order to help the industry to adapt in the future. Climate change impacts on the seafood industry are being reviewed as part of a project to ensure the industry is prepared to respond. A number of workshops are being held to support industry in understanding these impacts and explore potential adaptation actions for industry, Seafish, and others. The work will result in a Climate Change Adaptation report for the UK seafood industry detailing ways in which it can respond to these developments.

- **[Chinese mitten crab invades Scotland, poses threat to salmon, trout](#)**

The Chinese mitten crab, recorded in Scotland for the first time, poses a serious potential threat to salmon and trout in Glasgow's River Clyde, according to researchers. The Chinese mitten crab, *Eriocheir sinensis*, is native to East Asia but is now found across NE Europe and the USA and featured in the 2013 MCCIP Report Card backing paper on non-native species. [Cook, E., et al. (2013) *MCCIP Science Review* 155-166 doi:[10.14465/2013.arc17.155-166](https://doi.org/10.14465/2013.arc17.155-166)]

- **[National Trust concern for habitat erosion](#)**

The heavy rainfall, the loss of foreshore due to the 5th December 2013 tidal surges that resulted in flooding was followed by the exceptionally high tides in mid June 2014, when the further loss produced an increasing further grave threat to UK's coastal wildlife sights. As another winter approaches, this report looks at how the coast has been affected and the huge challenges which were faced.

News stories: If there are any relevant news items or events that you would like to highlight on the MCCIP website please contact MCCIP Secretariat at office@mccip.org.uk.

Georgia Bayliss-Brown BSc (Hons) MSc
MCCIP Secretariat

The Centre for Environment, Fisheries and Aquaculture Science
Pakefield Road, Lowestoft, Suffolk, NR33 0HT