

A Changing Climate for Maritime Biodiversity: linking science to practice – Case Study

Climate change and the sea breams - bringing the tropics to the table

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The Issue

- Climate change will raise sea temperatures.
- This will affect the fish fauna of the British Isles, and some of these changes will be seen first in the South West.
- Lusitanian “range extension” species are best suited to utilise these opportunities.
- The Sea Breams of the family Sparidae are a widespread group that includes many important game and food fishes. They are most abundant in tropical and warm temperate waters. These sea breams are increasing their numbers and spreading their distribution.
- What are the consequences of the spread these and other southerly species?
- What actions are needed?

Case study from 'A Changing Climate for Maritime Biodiversity' conference, November 2009



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Climate change impacts and adaptation

- Worldwide, there are 33 genera with some 115 species. Fourteen species have been reported in British and Irish waters, but only two are at all common.
- These two species are long established British residents, but have shown fluctuating abundance and changes in distribution. Three southern species, which were rare, are becoming increasingly common, and one is now quite widespread.
- These “range extension” species have the potential to become valued commercial species, holding their own with imported farmed fish.
- Amberjacks may have a similar potential; and could be an ethical alternative to tuna.

Challenges

- These are potentially valuable fisheries, but effective management may be needed to obtain the maximum benefit.
- There may be unforeseen impacts to services and the environment; such as damage to mariculture.
- Sea Bream will have to compete in the market with farmed fish, BUT environmental, welfare, and possibly health issues should favour the wild-caught bream.

Additional information

- At least 50 Amberjacks (*Seriola* spp., Carangidae) have also been recorded in the British Isles. These fish may be promoted as the ethical alternative to tuna.

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