Wkirish: Harnessing Fisher Knowledge. an Example of Positive Collaborative Research

Dave Reid, Debbi Pedreschi, Paul Bouch: Marine Institute, Galway, Ireland

Francis O'Donnell: Irish Fish Producers Organisation

Jacob Bentley: Scottish Association for Marine Science, Scotland

Sheila Heymans: European Marine Board, Belgium

Robert Thorpe: CEFAS, UK
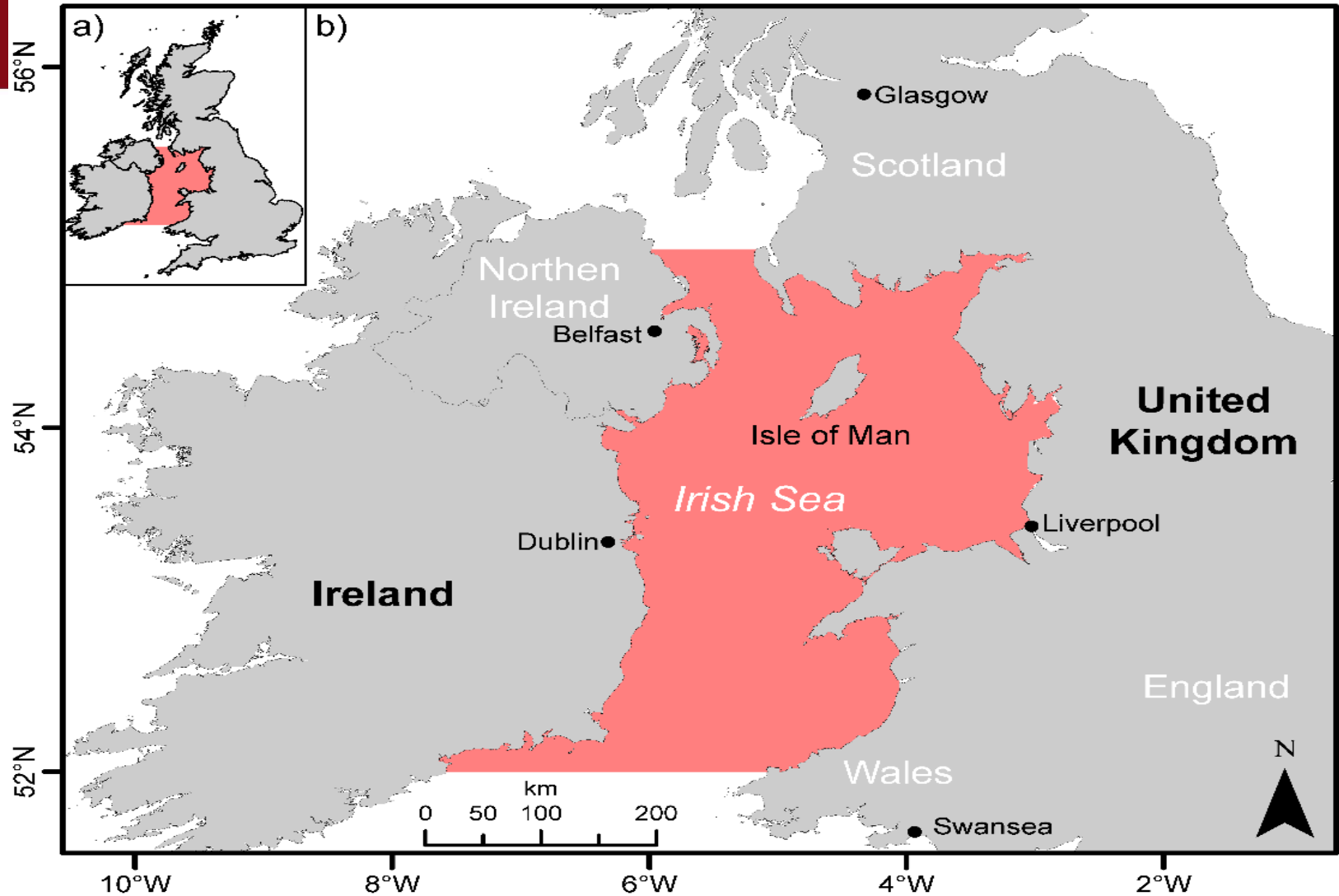
Steven Beggs & Pia Schuchert AFBI, N. Ireland, UK

IRISH SEA
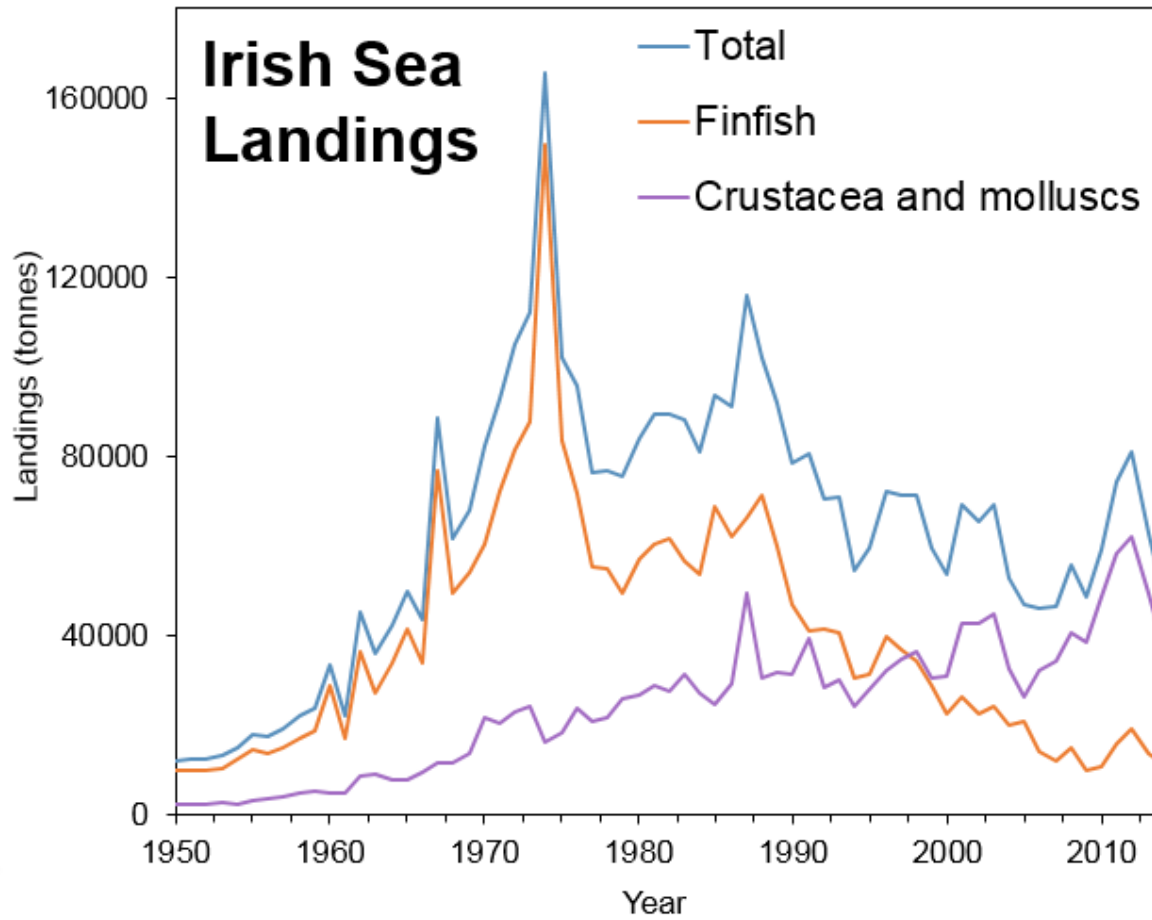
The problem

The problem

WKIrish

1 Information sharing and project scoping

Sep. 2015

2 Data evaluation workshop

Sep. 2016

ICES CIEM

http://www.ices.dk/community/groups/Pages/WKIrish.aspx

4 **Ecosystem model stakeholder workshop**

3 Stock assessment benchmark

Oct. 2017

Jan. 2017

5 Integrated ecosystem assessment and advice

6 Test the model and deliver MSY range advice

We are here

Nov. 2018

Nov. 2019

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Ecopath with Ecosim

Including environmental drivers

NAO winter

AMO
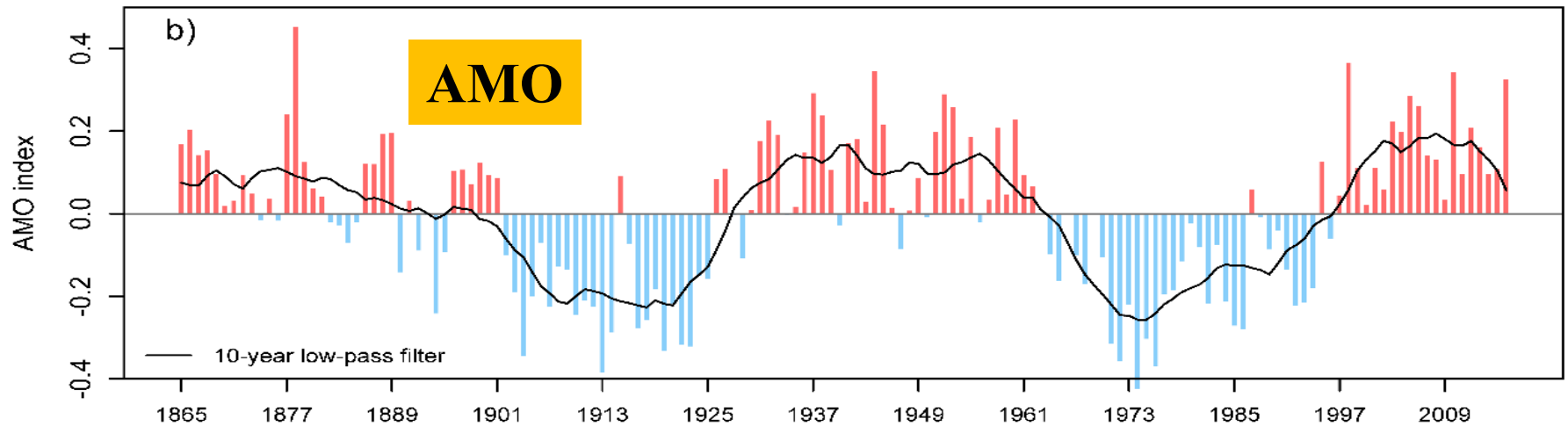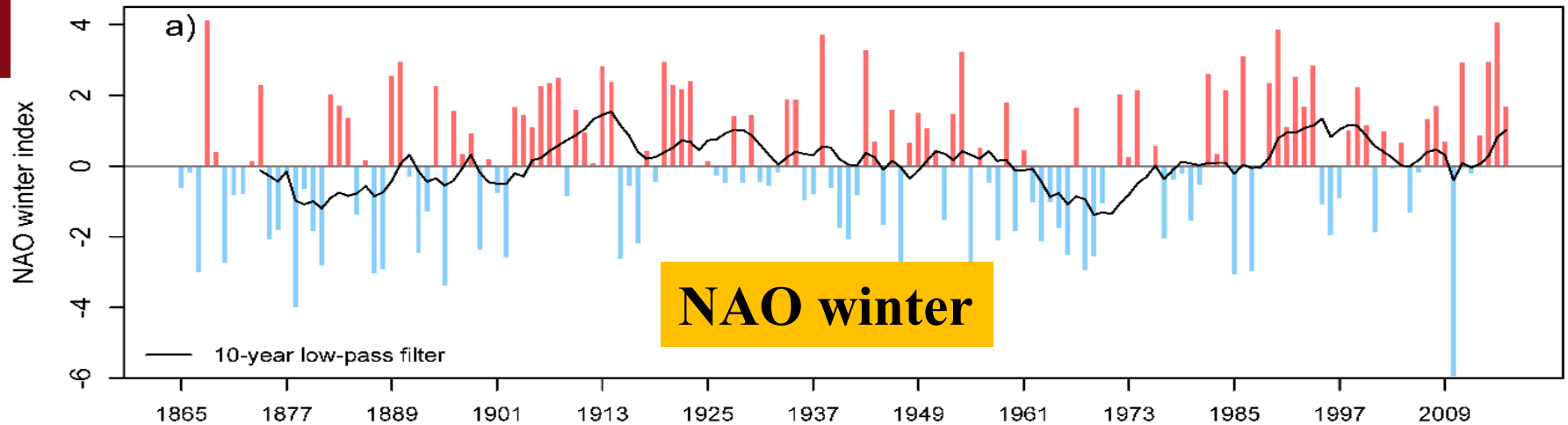
Including environmental drivers

SST

Greenness
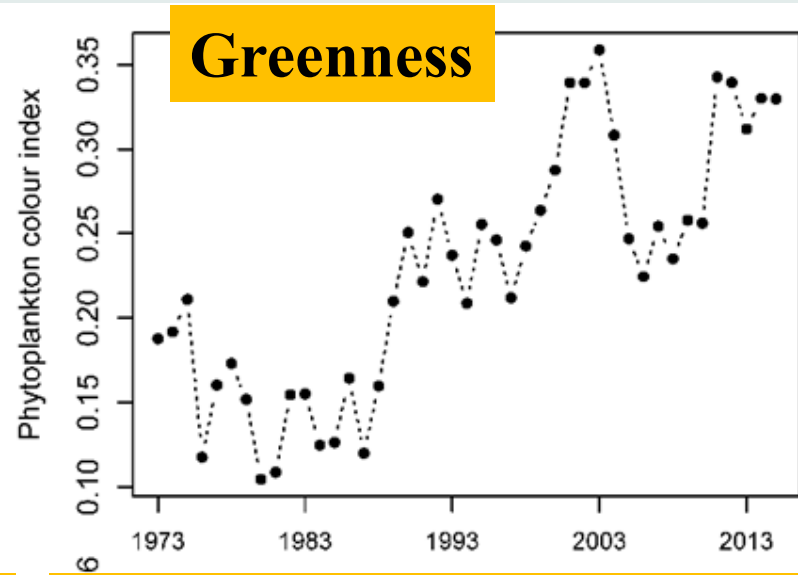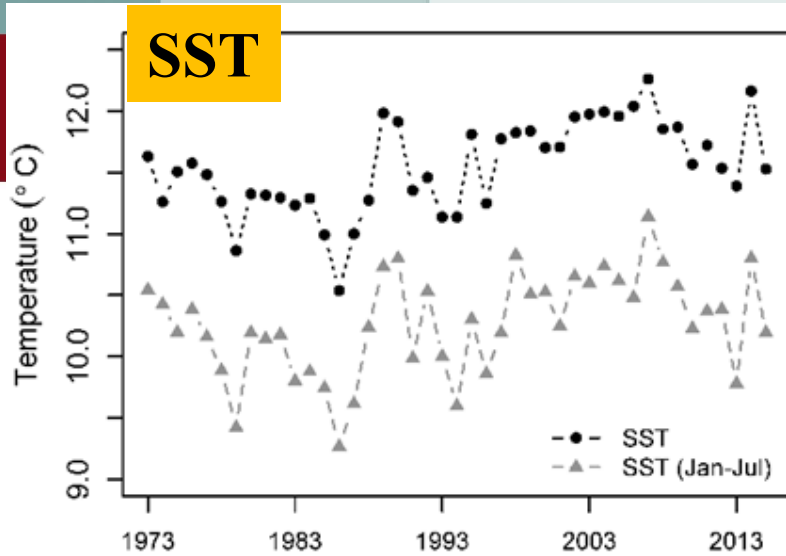
Small Zooplankton anomaly
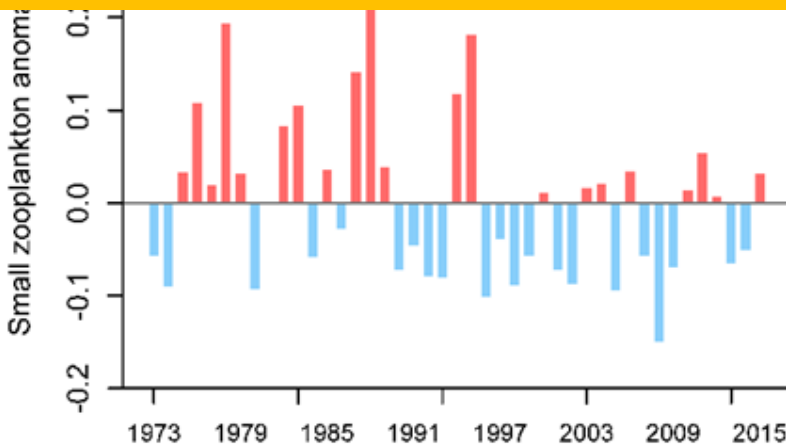
large Zooplankton anomaly
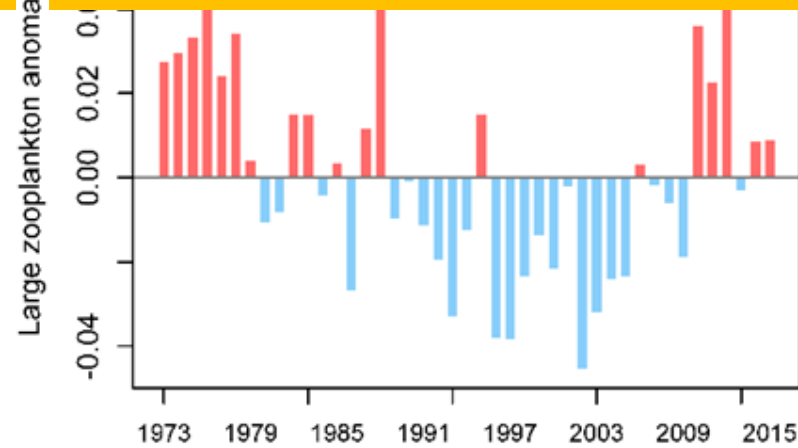
Stakeholder and Stomach sample based foodweb
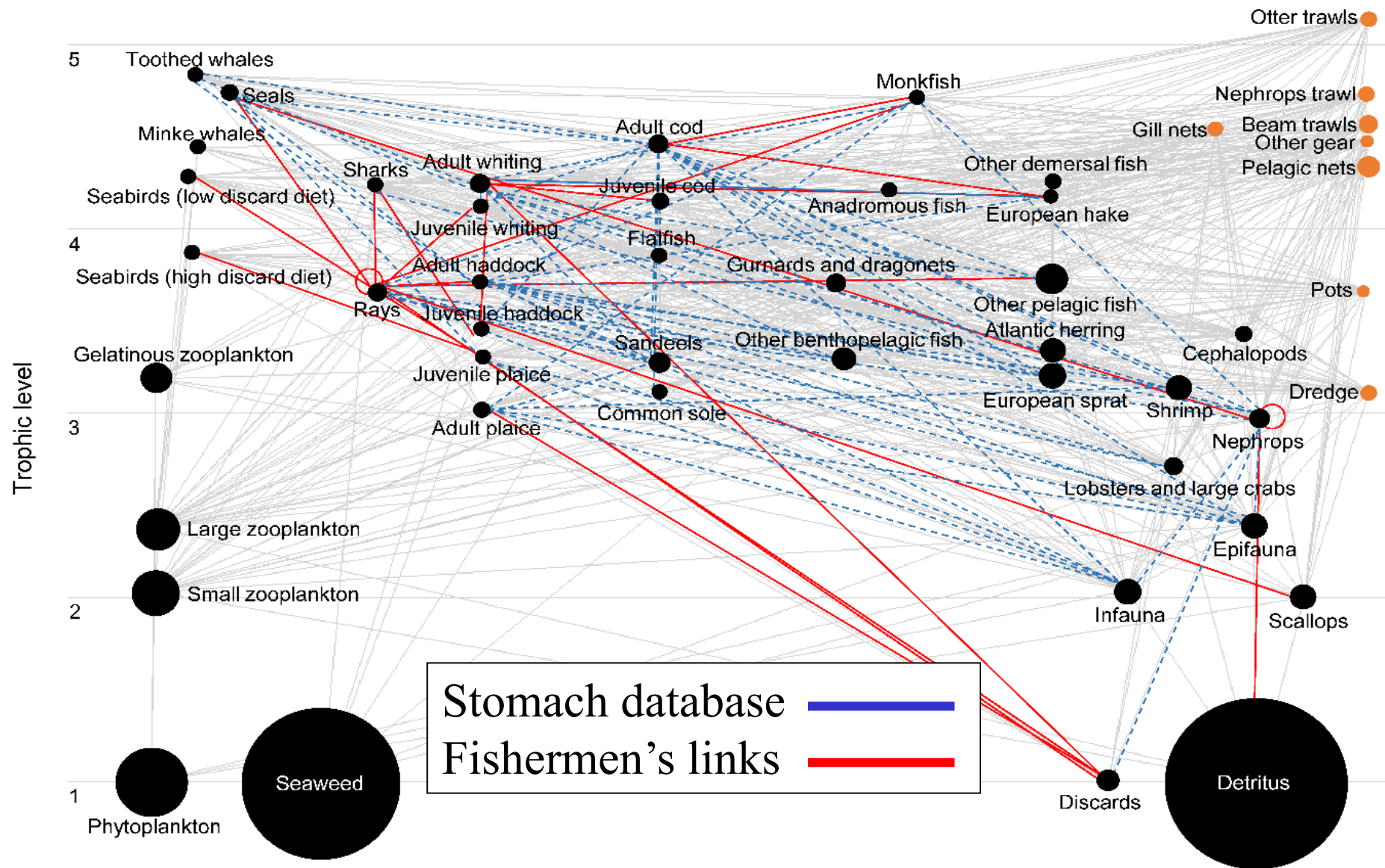
Adding ecosystem targets to F_{MSY} ranges

Indicator is in a **low** phase relative to simulated period
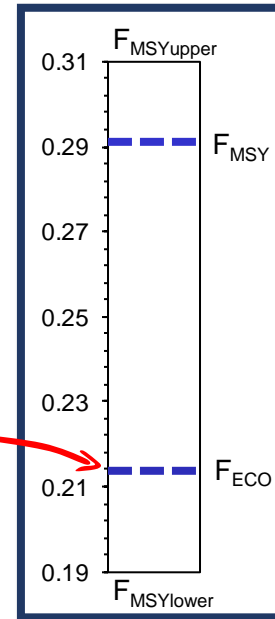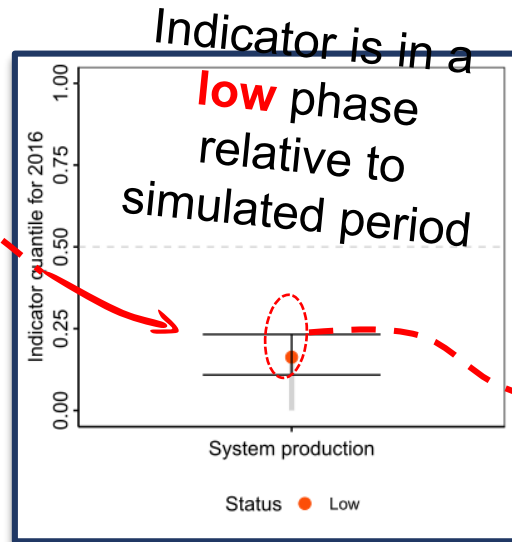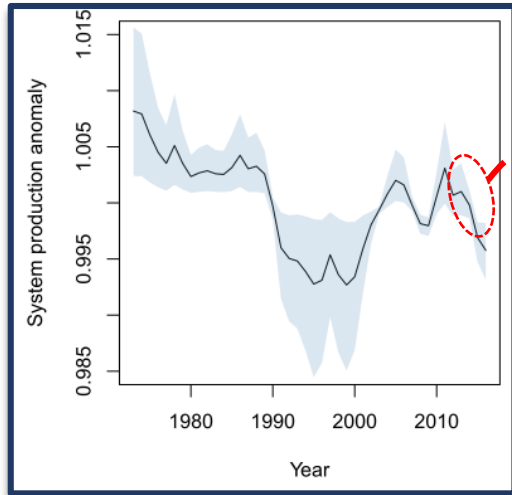
Benefits:
1. Advice remains precautionary
2. Advice abides by EU legislation
3. This can be applied NOW
4. Ecosystem drivers are recognised
5. The EBFM foot is in the door

Indicators for Irish Sea catch advice

The Irish Sea EwE key-run was used in two ways to provide ecosystem information:
1) Model results were used to recommend important indicators (i.e. SST, zooplankton biomass)
2) Model products were used as indicators (i.e. predation mortality).

COD
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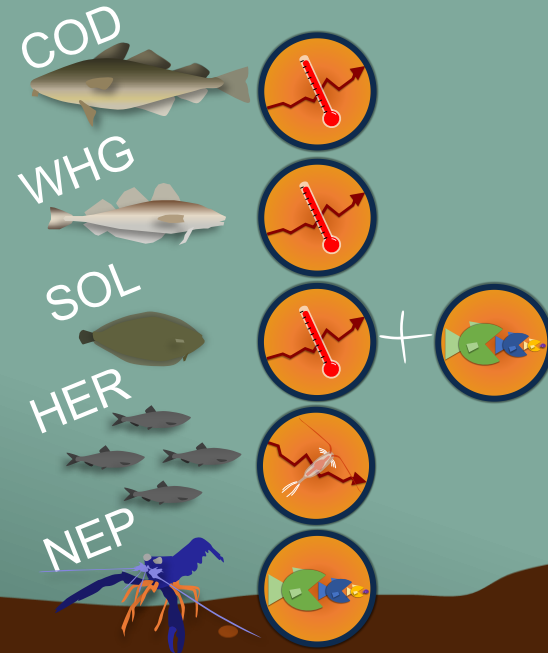
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St. Petersburg, FL 2019

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agus nan Eilean

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a) Biomass reference points (her.27.nirs)

b) Fishing reference points (her.27.nirs)
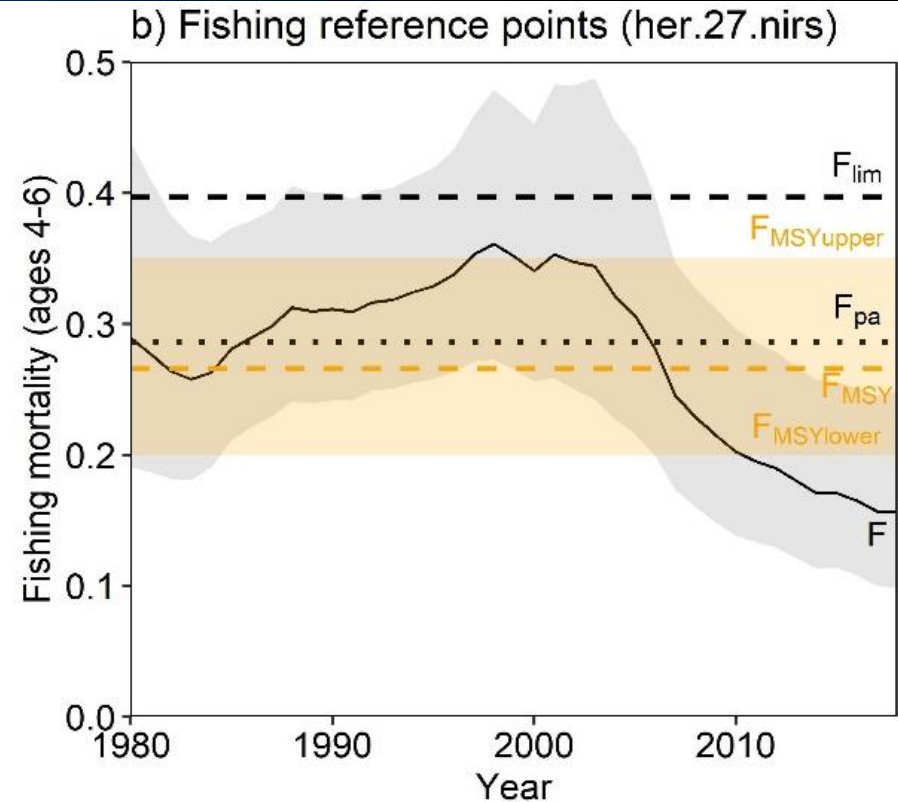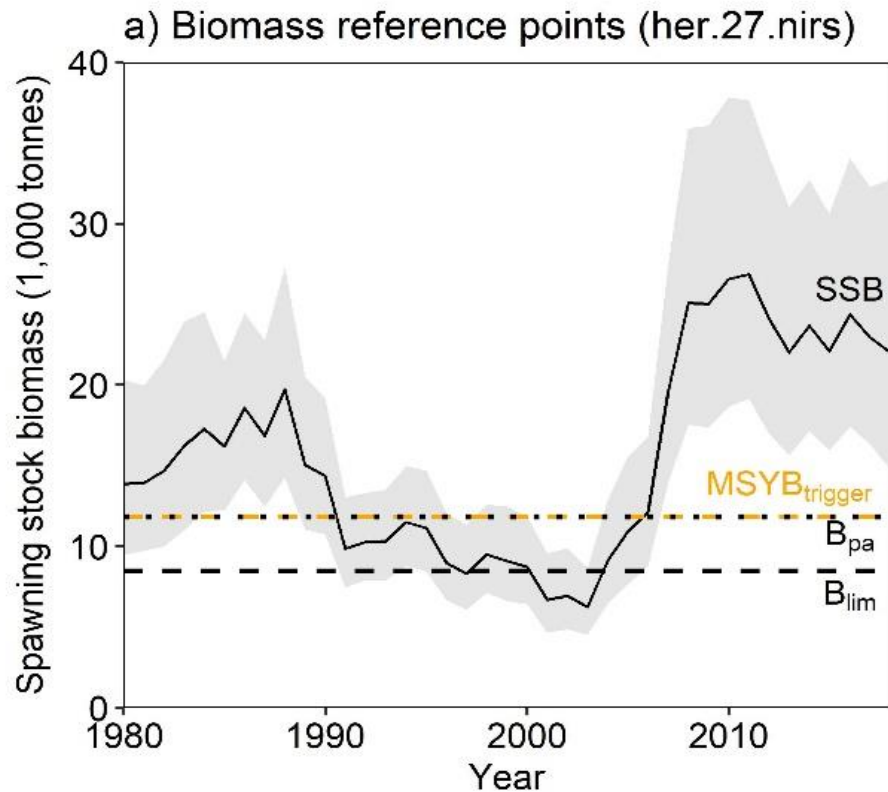
Relationship between large zooplankton biomass and Irish Sea herring production

a) Current indicator status (I_S)

b) F_{ECO} placement (her.27.nirs)
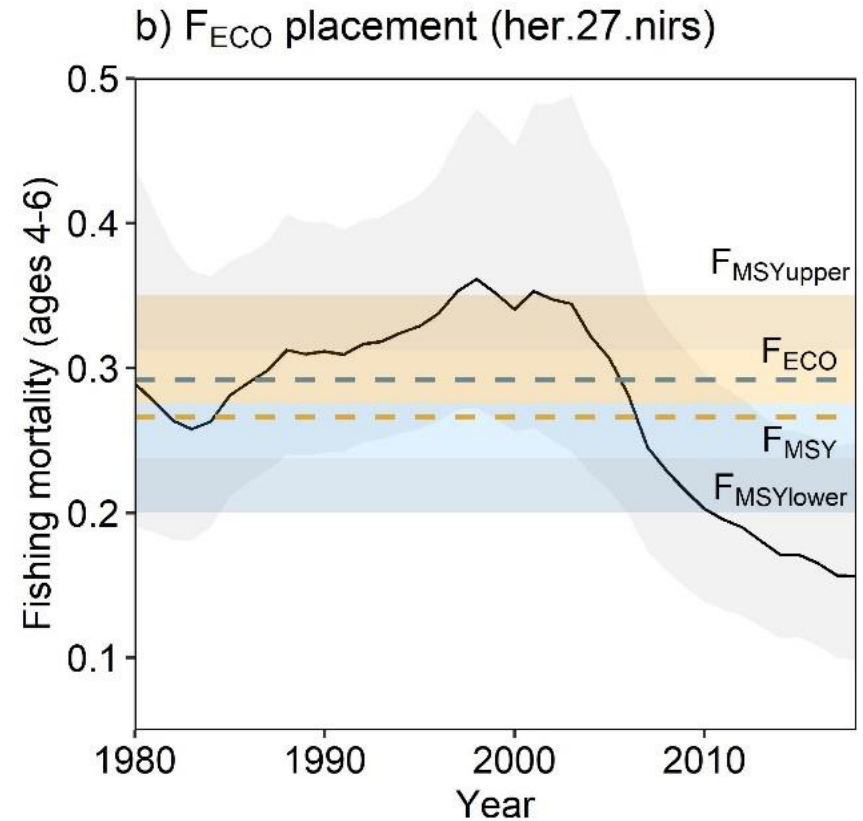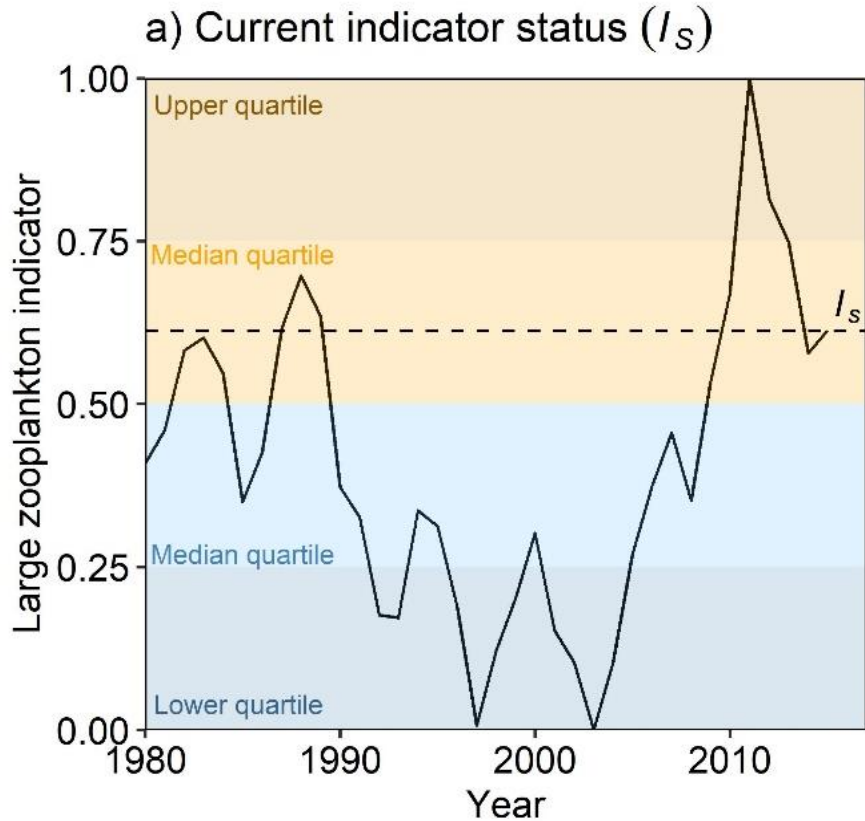
Retrospective application of F_{ECO}
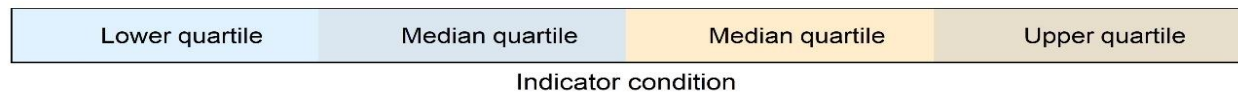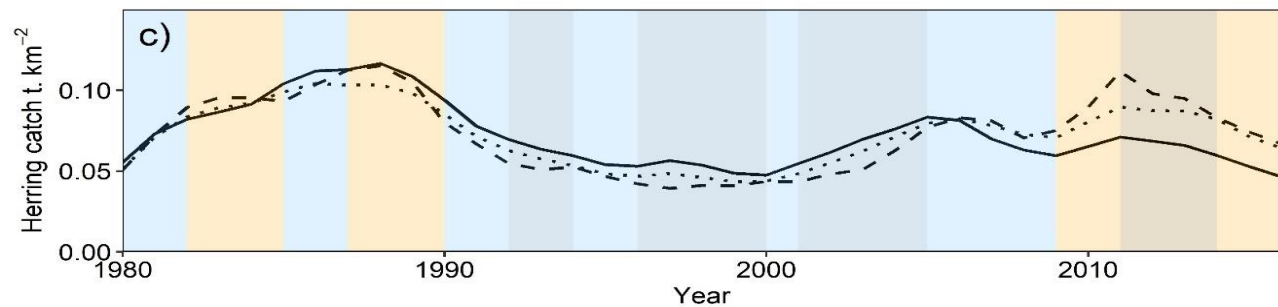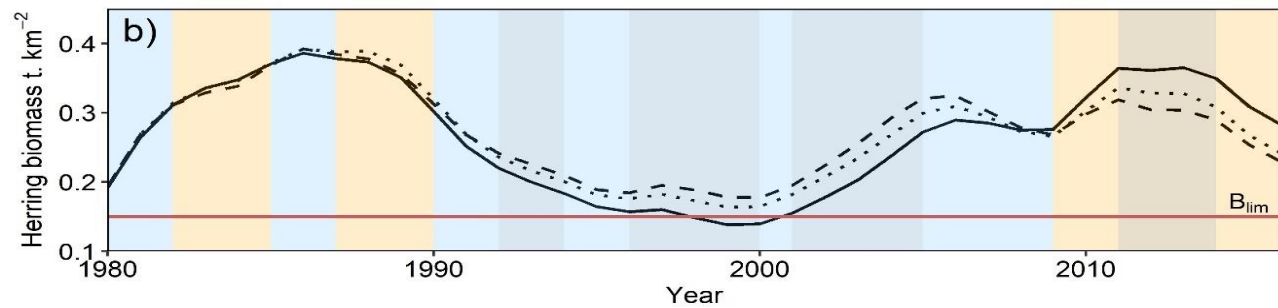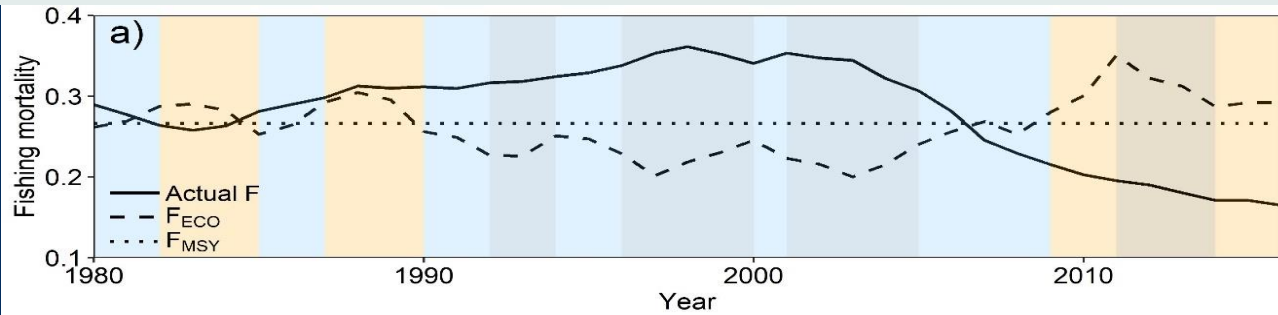
Conclusion

- **We have found key links to species productivity**

- **We can identify Feco values for most species**

- **ICES is keen to incorporate in advice**

- **All thanks to you!!!!**

- **IFISH** is a new project investigating the potential use of information sharing networks in Irish fisheries as a tool to avoid unwanted catches.

- The aim is to produce tools, for voluntary use, to identify areas in near real time that might be best avoided to reduce catches of undersize of unmarketable fish.

- Industry input is vital to ensure any tools developed best suit industry needs to assist in optimising catches.

- We are currently looking to conduct informal discussions and interviews with as many industry stakeholders as possible to collect information on tactics used to avoid unwanted catches and on the potential of sharing information to reduce unwanted catches.

- Please contact **Julia.Calderwood@marine.ie** if you would like more information or would be willing to answer a few of our questions!

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