Session 5: Adapting to a changing climate

SHOWCASING THE DECISION SUPPORT SOFTWARE

Parallel sessions





Group splitting

11:45-12:30 Parallel sessions

The Decision Support Software - presentations and showcase of the tool

Marine Fisheries in	Marine aquaculture	Hungarian pond		
West of Scotland	in Greece	aquaculture		
Chair: M. Norte	<i>Chair: R. Chapela</i>	Chair: J. Arias Hansen		
Iran room	Lebanon room	Mexico room		
A. Baudron,	N. Papandroulakis,	G. Gyalog,		
Marine Scotland	HCMR, Greece	HAKI, Hungary		





IRAN ROOM

- Mariola Norte, CETMAR
- Alan Baudron, Marine Scotland

West of Scotland marine fisheries





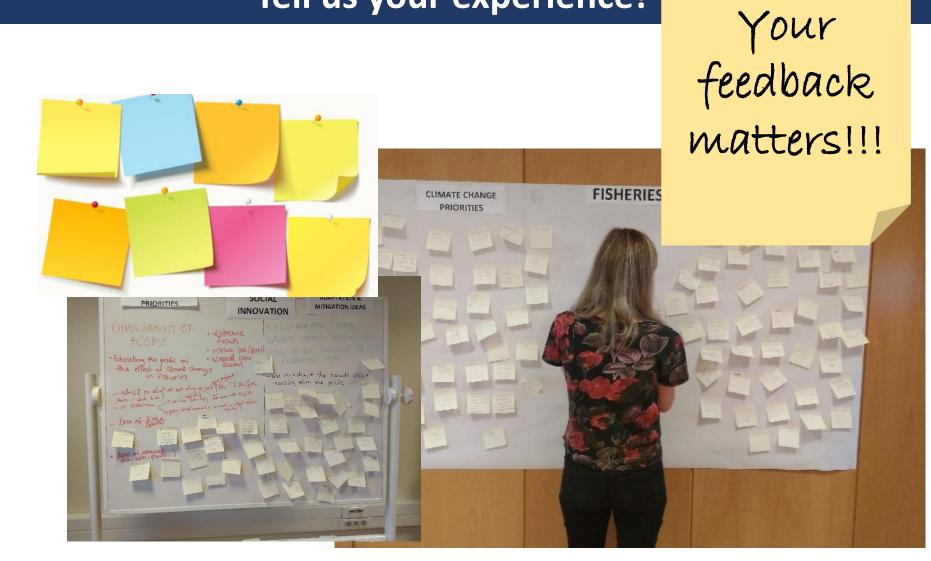
Today's plan

- Presentation of the Decision Support Software for the Greek marine aquaculture (Nikos)
- Showcase of the tool Split into groups (1-2 groups)
- Share your feedback (stick your post-it on the flipchart)





Tell us your experience!







Any ideas on...

- How was your experience with the tool?
- Improvement ideas
- Application in further projects
- Any other thoughts?





Thanks!









A Decision Support Software for the West Scotland demersal fishery

2020 International Forum on the Effects of Climate Change on Fisheries & Aquaculture 25-26 February 2020, Rome



Alan Baudron, Johanna Witt, Astrid Strum







ClimeFish: adapting to climate change Model simulations Risk assessment **Empirical analyses** Cod 30000 Stakeholder input

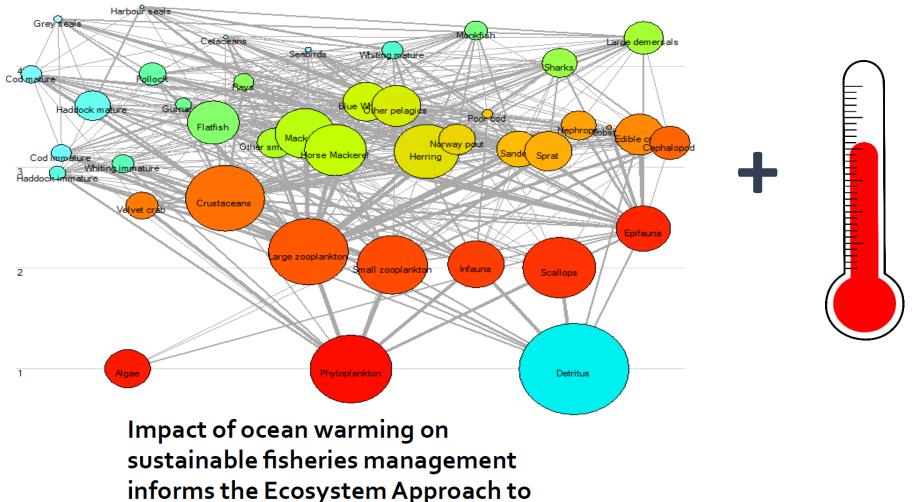
Decision Support Software

Tools to help stakeholders make decision to mitigate the impact of climate change





Modelling the future impact of climate change



Fisheries

N. Serpetti¹, A. R. Baudron², M. T. Burrows¹, B. L. Payne¹, P. Helaouët³, P. G. Fernandes² & J. J. Heymans¹

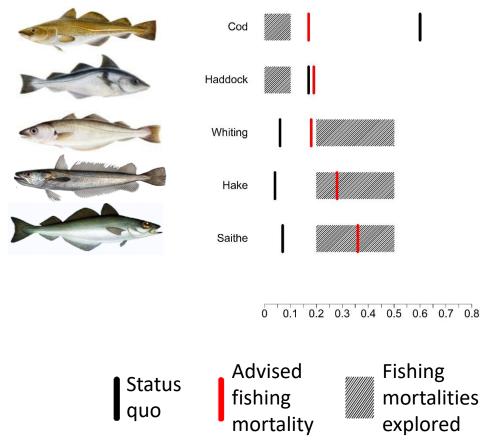
ClimeFish Serpetti et al., 2017



Explore climate scenarios & alternative fishing regimes

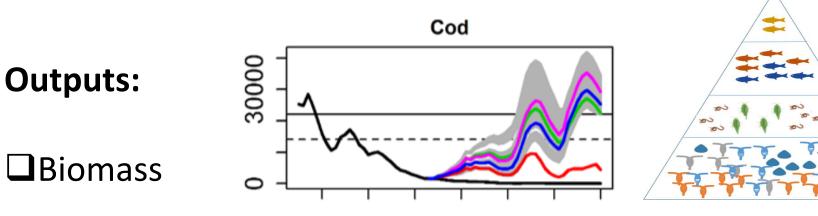
- Simulations from 2014 to 2050
- Two climate scenarios: medium & severe warming
- Two period with fixed
 fishing mortalities: 2014 to
 2030 & 2031 to 2050
- Model accounts for predator-prey interactions







Explore climate scenarios & alternative fishing regimes



Landings

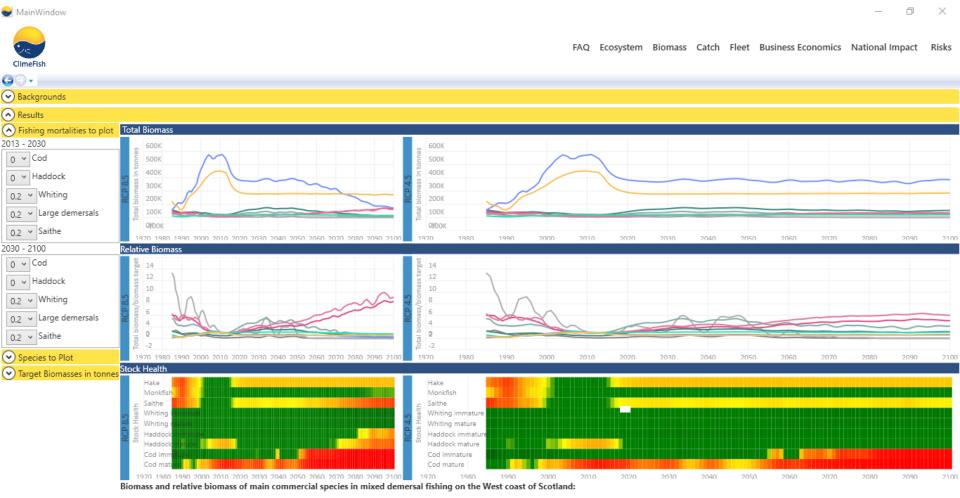
ClimeFish

Ecosystem indicators

Socio-economic indicators



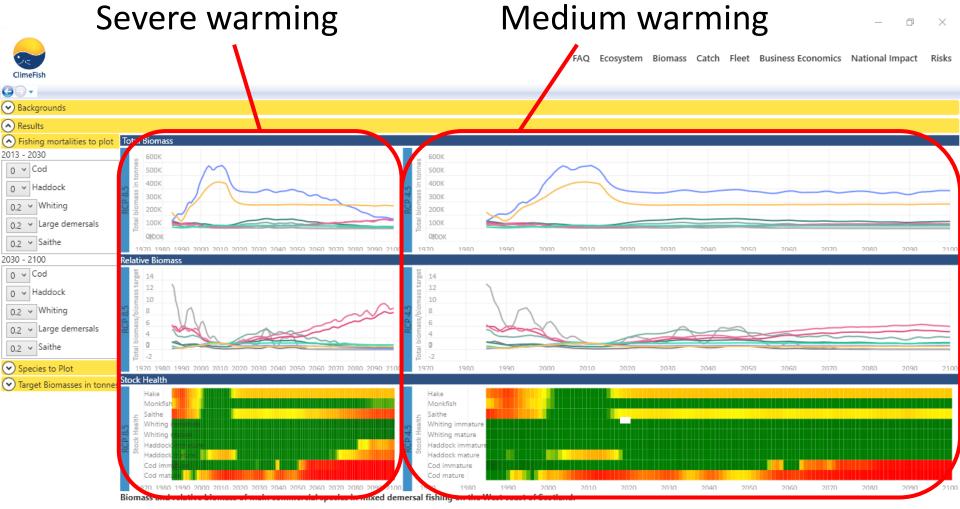




Conclusions



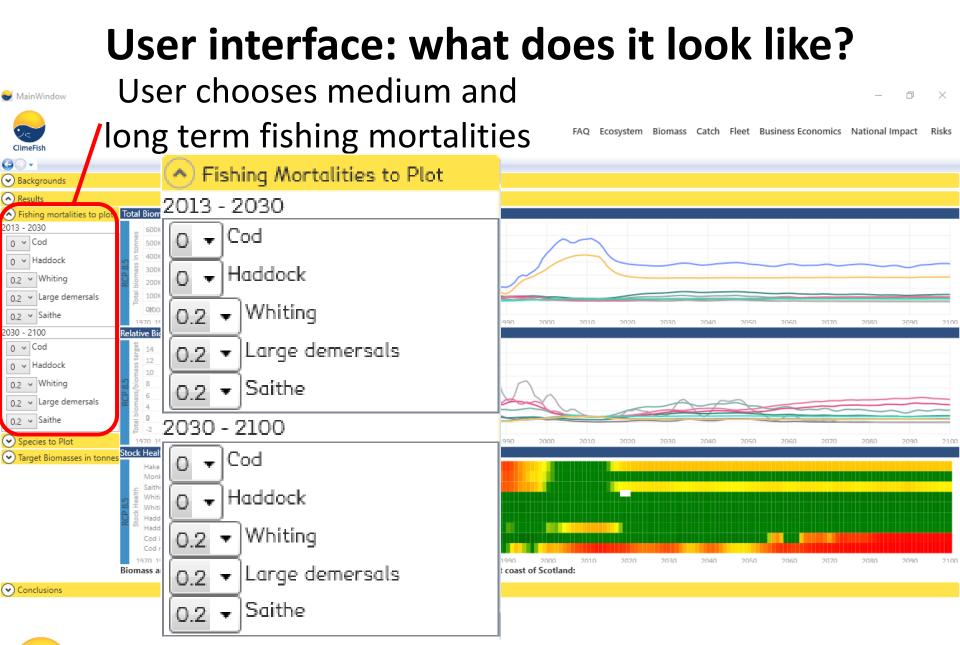




Conclusions







This project has received funding from the European Union's Horizon 2020 research and innovation action under grant agreement no. 677039



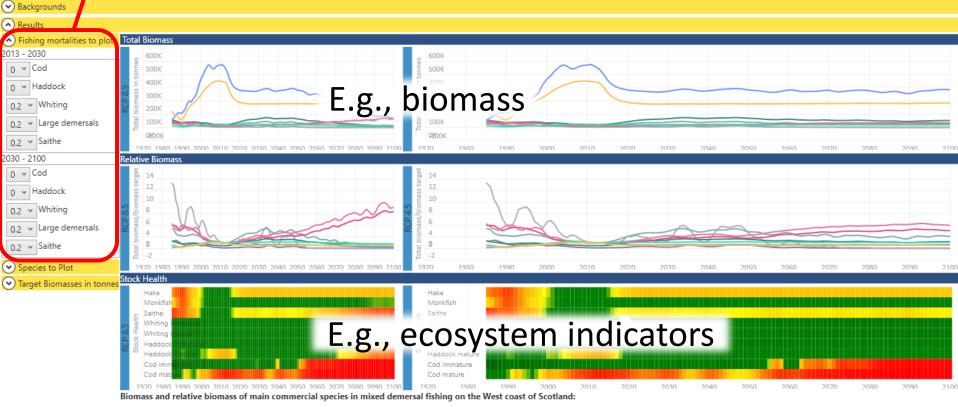
ClimeFish



曼 MainWindow



User chooses medium and – • × /long term fishing mortalities

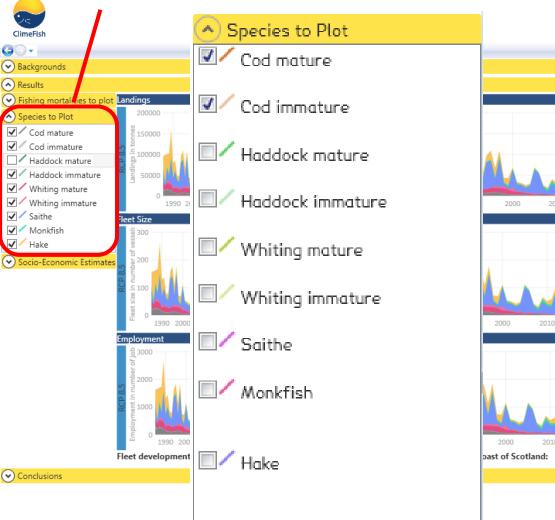


Conclusions





User chooses which species to plot



ClimeFish

MainWindow

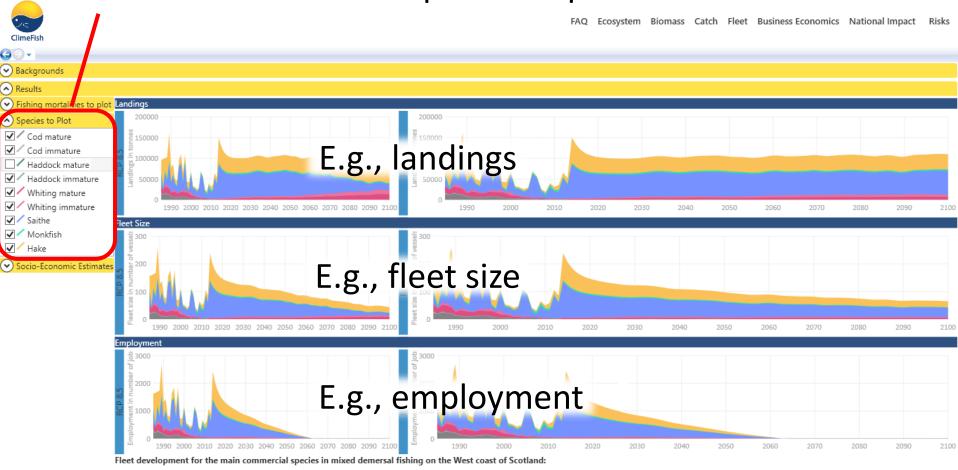
FAQ Ecosystem Biomass Catch Fleet Business Economics National Impact Risks

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User chooses which species to plot



Conclusions

曼 MainWindow





🚭 MainWindow

Fishing mortalities to plot

Landings

Fleet Size

1990

Employment

500

Fleet developn

1990

40000

10.4

0.02

0.27

0.21

0.29

95000

ClimeFish

GO-Backgrounds

Results

Species to Plot Cod mature

Saithe

Hake

10.4

0.02

0.27

0.21

0.29

Repair costs

Conclusions

95000

Monkfish

Cod immature ✓ ✓ Haddock mature

✓ Haddock immature Vhiting mature ✓ ✓ Whiting immature

Socio-Economic Estimates

Employment per vessel

Technical change, fleet

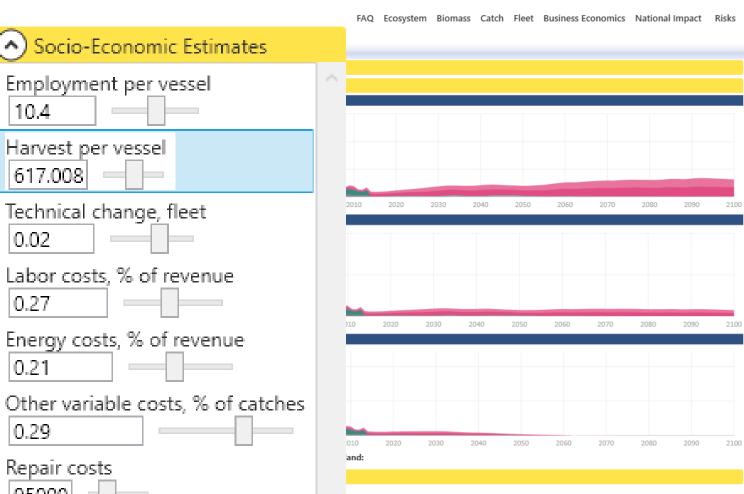
Labor costs, % of revenue

Energy costs, % of revenue

Other variable costs, % of catches

Harvest per vessel 617.008

User can adjust socio-economics

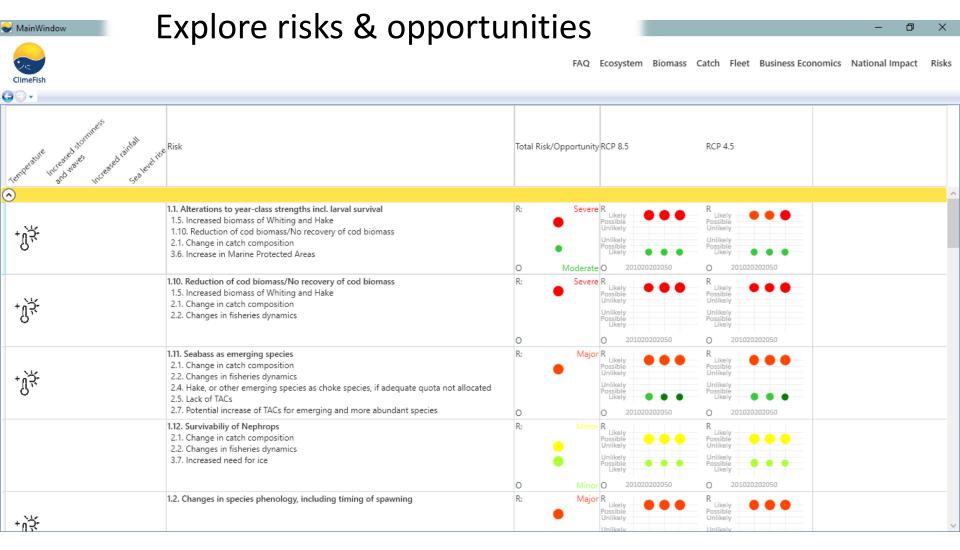




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Have a look for yourself!

•	MainWindow										
	ClimeFish	FAQ	Ecosystem	Biomass	Catch	Fleet	Business Economics	Employment	GVA	Risks	
G											

ClimeFish West Coast of Scotland

Welcome to the ClimeFish decission support software for mixed-demersal fisheries on the West coast of Scottland. Please navigate the documentation for different parts of the project with the buttons on the upper right.



This project was co-funded by the European Union under Horizon 2020 - Blue Growth.



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