

Final conference
26-28 November 2019
Brest, France

Variation of
perceptions across
stakeholders in
Europe, with regards
to mollusc disease
prevention



Coralie Lupo, Rebecca Moreira,
Katrina Campbell, Rob Christley

Objectives

- x **Evaluating the risk perception of stakeholders for a better commitment to disease management**
 - To evaluate the perceptions of the stakeholders about disease risk and the reasons why they implement (or not) key management measures, and the way they are practiced
 - To identify the facilitators and barriers to implementation of disease mitigation/control measures in EU



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A two step-approach

x Case studies and interviews

- Different stakeholder categories
- Northern Ireland & France



Disease prevention practices identified



x Participatory focus group discussions (FDG)

- Different stakeholder categories
- Different locations: **Northern Ireland** (N=1 FDG, 8 participants), **France** (N=8 FDG, 30 participants), **Italy** (N=1 FDG, 6 participants), **Spain** (N=18 participants)
- **Pilot study:** AQUA2018, workshop VIVALDI, Montpellier (France), 29th August 2018 (N=11 FDG, 46 participants)



13 preventive measures

Shellfish

- Developing genetic disease-resistant shellfish
- Using only hatchery produced shellfish
- Increasing the use of triploid shellfish/oysters

Seawater

- Monitoring water quality (e.g. detection of pathogens or algal blooms, faecal contamination, pollution, temperature, salinity...)

Farming places

- Moving farming zones in other areas/ finding other farming places
- Cleaning abandoned farming zones
- Grouping the farming zones by shellfish species/age

Farming practices & techniques

- Decreasing shellfish densities in farming areas
- Decreasing the manipulations of shellfish
- Decreasing the immersion time of shellfish (e.g. by farming oysters higher on the foreshore...)
- Managing shellfish transfers
- Increasing shellfish observation during farming
- Testing shellfish for pathogen presence/absence

Focus group discussion tool

SCORING

RANKING

1 Effectiveness:

To what extent can each strategy/measure prevent disease entering a farm?

(Ignore other factors such as feasibility, cost and acceptability)

Activity/Measure Ranked by EFFECTIVENESS	FEASIBILITY	COST	ACCEPTABILITY
Minimising / regulating / managing shellfish transfers	++	+++	+++
Monitoring water quality for a selection of pathogens (e.g. bacteria, faecal coliforms, vibrios, temperature, salinity...)	++++	++	++++
Testing shellfish for pathogen presence/absence	++++	++	++++
Cleaning abandoned farming sites	+++	+	+++
Increasing shellfish observation during farming	++++	+	+++
Using green sanctuary produce shellfish	+	++	+++
Decreasing shellfish densities in farming sites	+ x	++	++++
Decreasing the manipulations of shellfish	+++	+	++++
Developing genetic disease resistant varieties	+++	+++	++
Using green produce / high shellfish species / high	++++	++	++++
Using farming sites in other areas / finding other farming places	+++	+++	+
Decreasing the harvest time of shellfish (e.g. by farming systems, higher on the farmshore...)	+++	++	++++
Increasing the use of recycled shellfish/corals	+++	++	++++

2 Feasibility:

How easily can each strategy/measure be undertaken?

(Assume cost and acceptability are not a problem)

3 Cost:

How costly would it be to set up and to maintain each strategy/measure?

4 Acceptability:

- Can the measure be applied equitably regardless of scale of operation?
- Is it harmful to the environment?

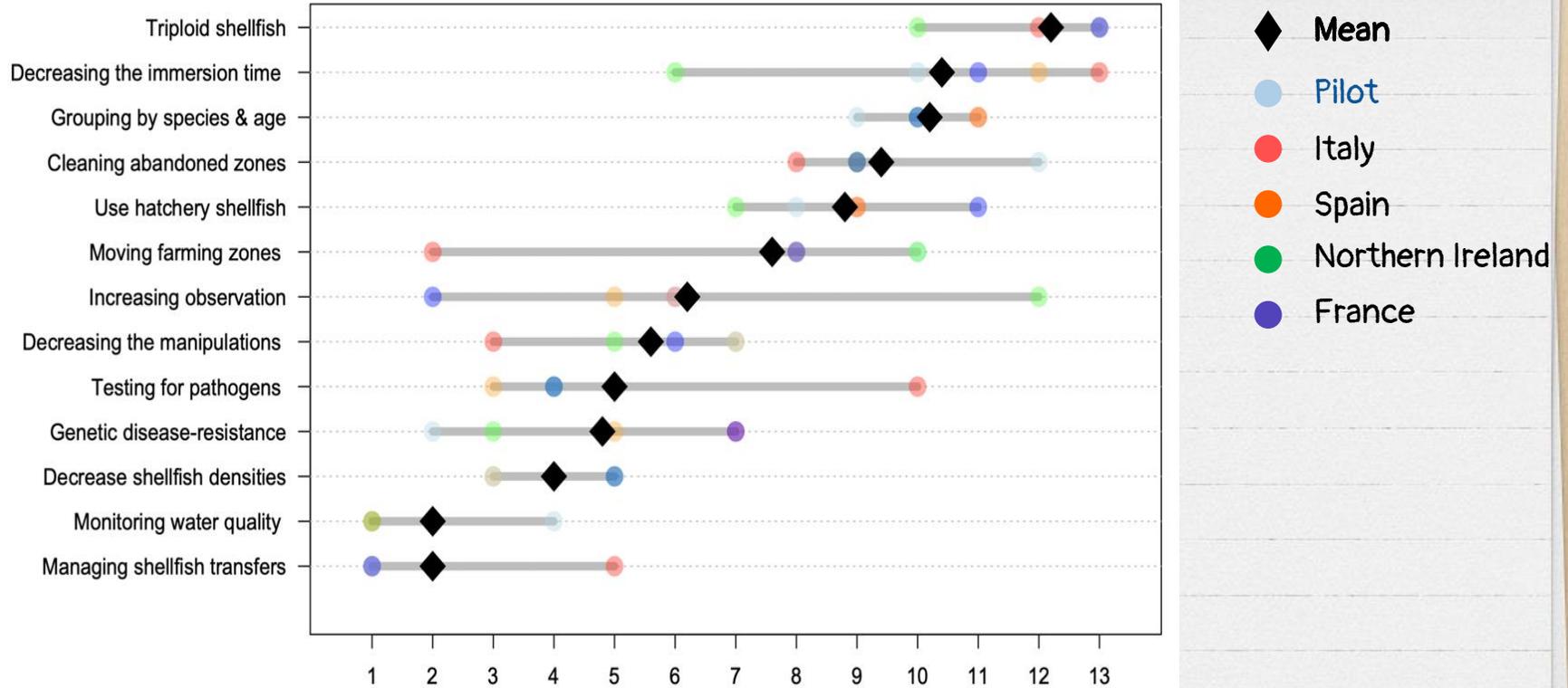


AQUA2018, Montpellier (France)

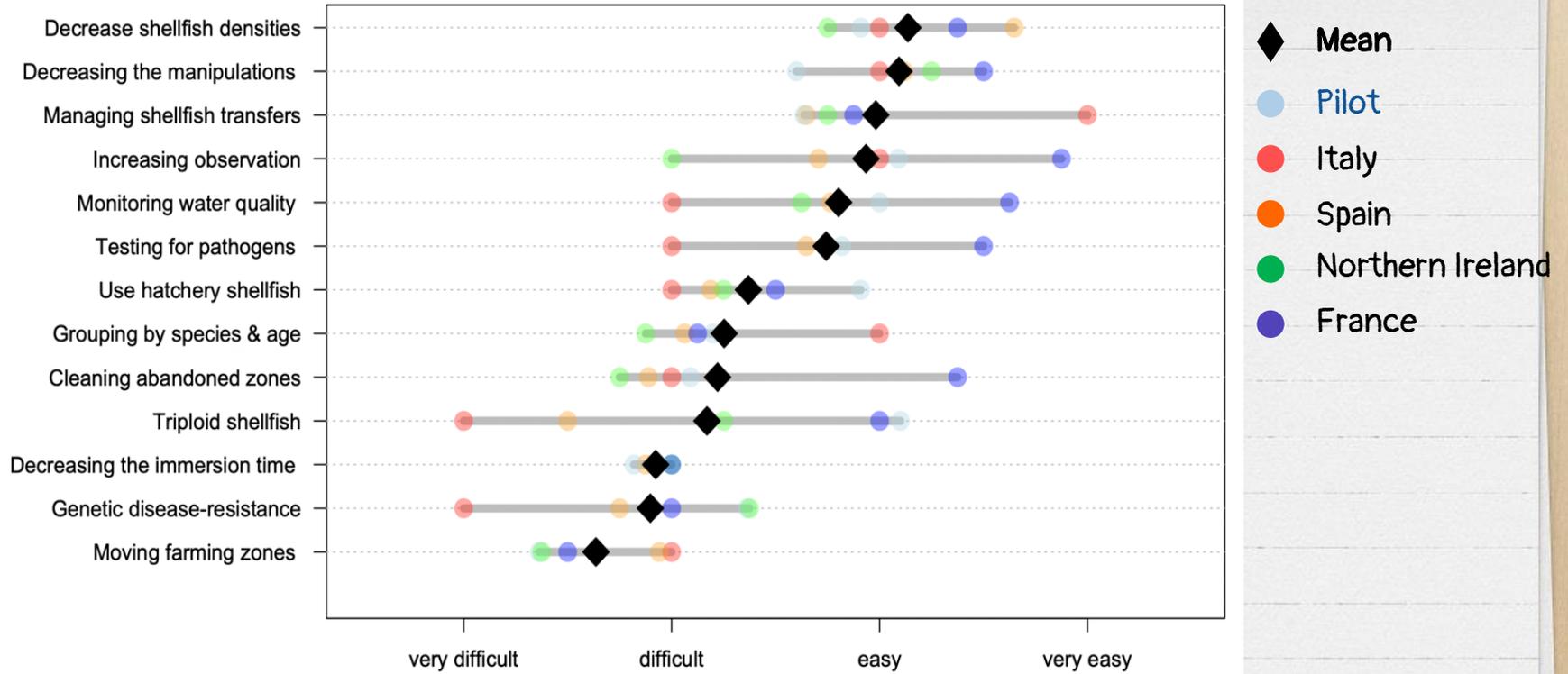


Summary across
locations

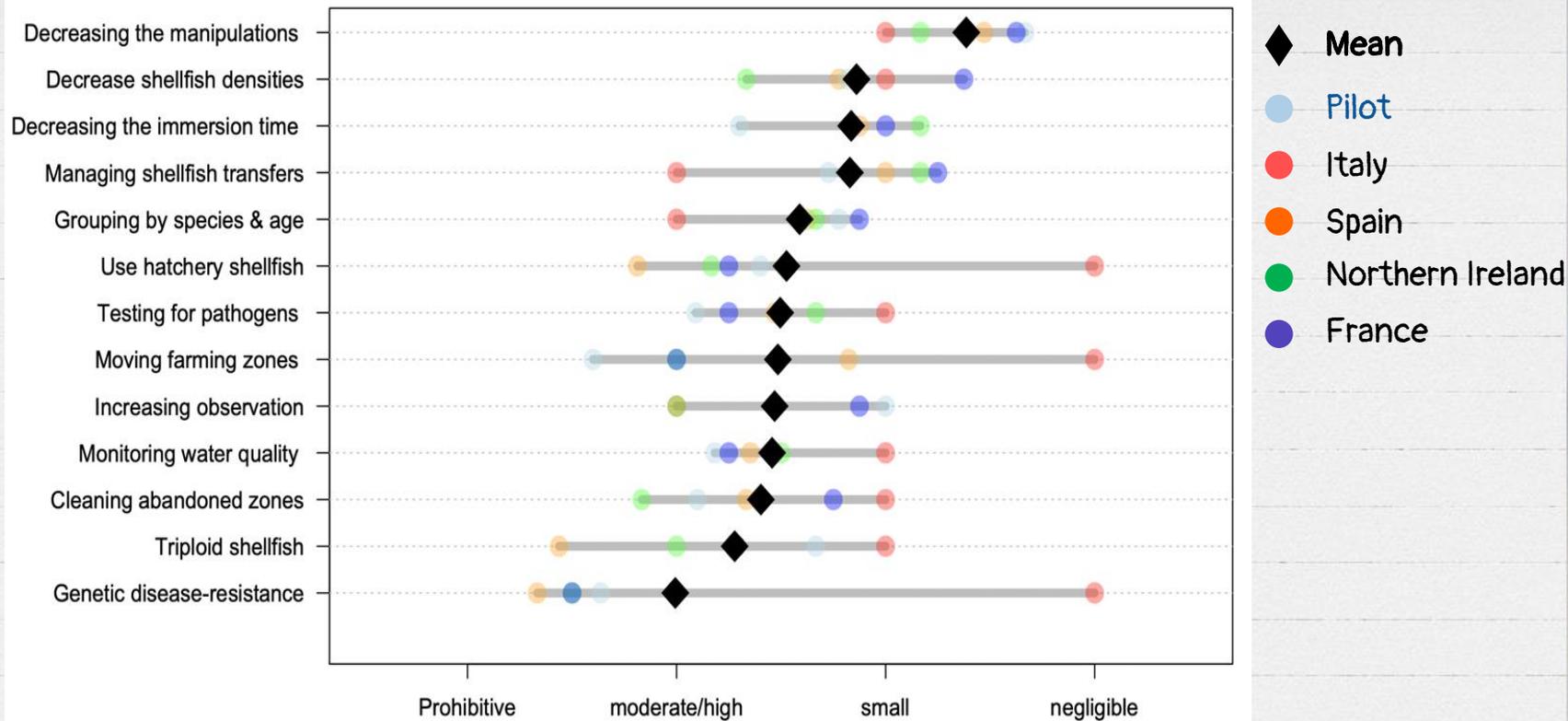
Effectiveness



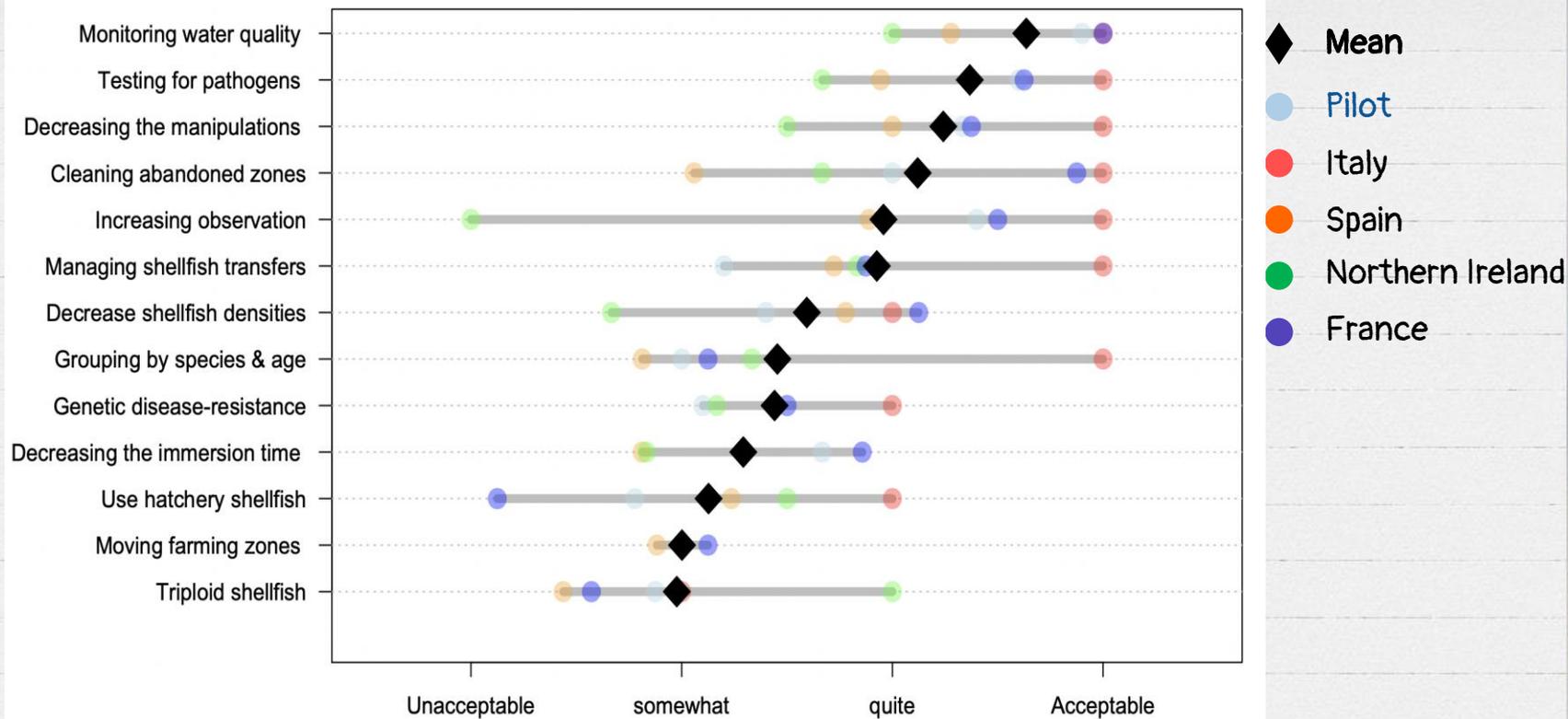
Feasibility



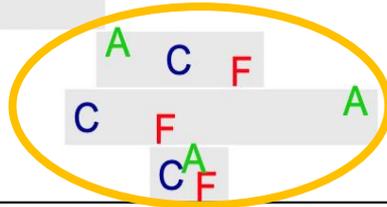
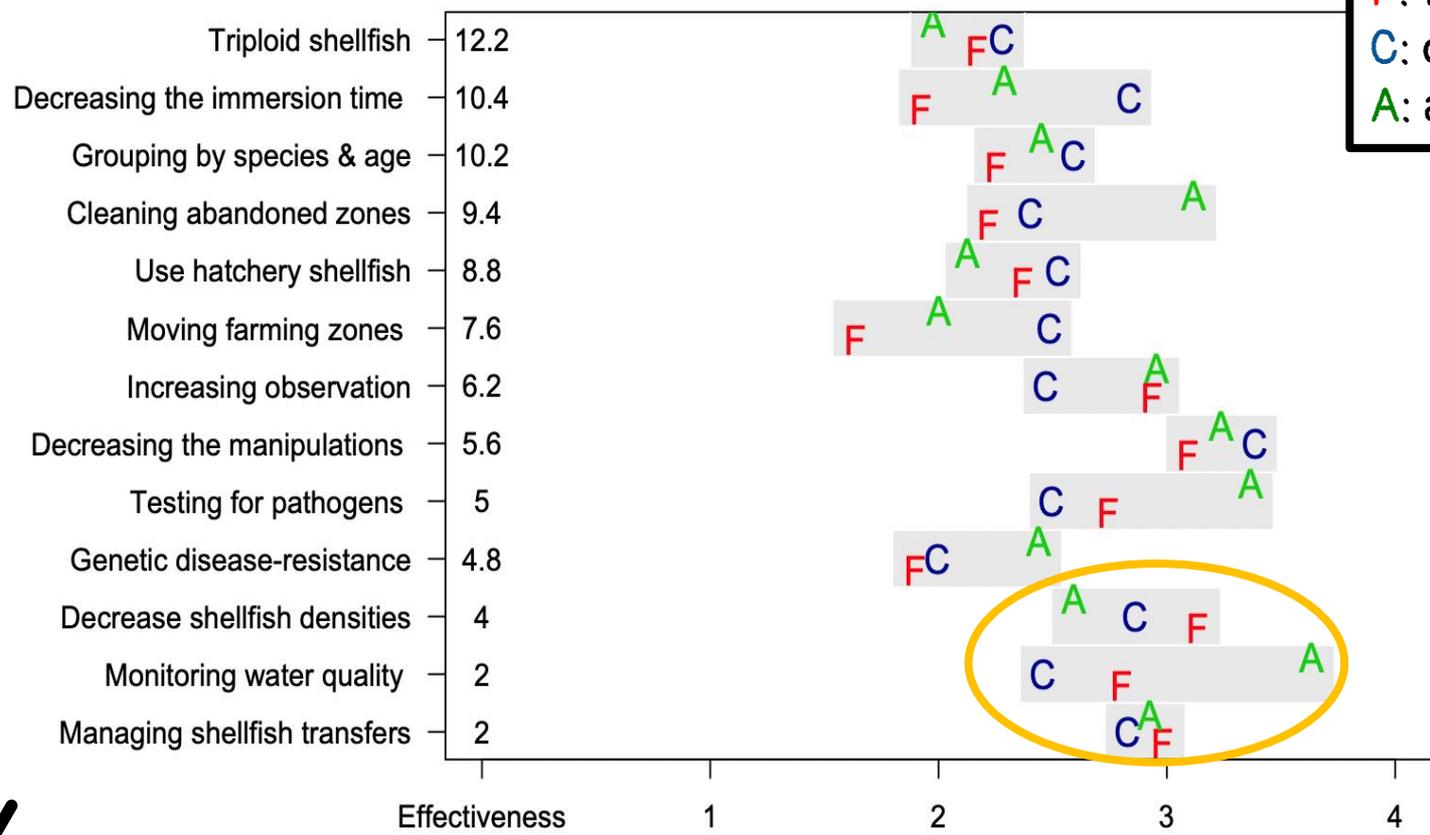
Cost



Acceptability



F: feasibility
 C: cost
 A: acceptability



More effective

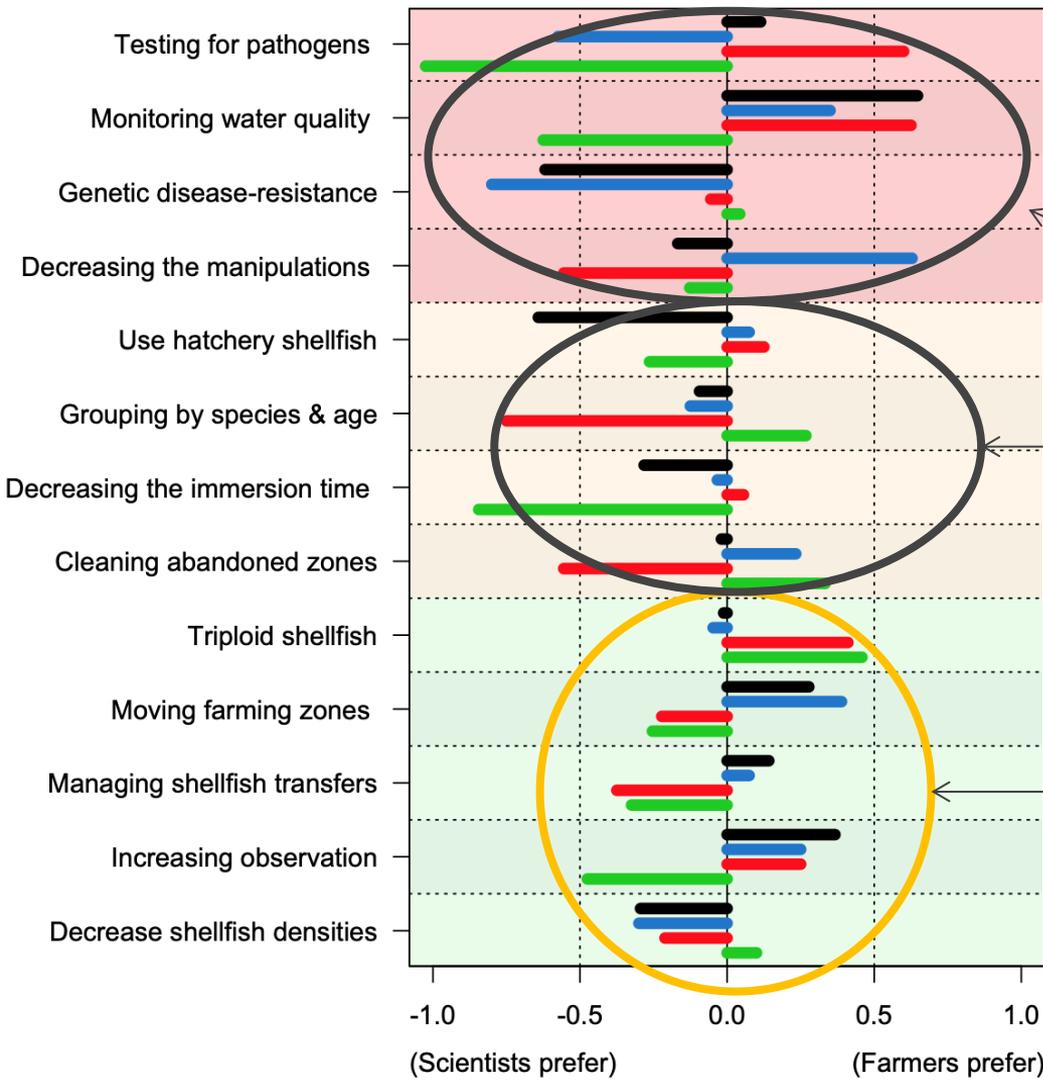


A white rectangular sticky note is centered on a light-colored wooden surface. The note has a small piece of clear tape at the top edge. The text "Farmers vs. Scientists" is printed in a bold, blue, sans-serif font. The note is surrounded by several coffee stains: a large, light brown circular stain to the left, a smaller circular stain below it, and a large, dark brown circular stain to the right. The wooden background has a vertical grain pattern.

Farmers vs.
Scientists

Effectiveness, Feasibility, Cost, Acceptability

Farmers vs. Scientists



Stronger disagreement

Disagreement

Agreement



Conclusions

Conclusions

x Variability in the perceptions

- x Across locations & stakeholder categories

- x ⇔ Differences in **priorities** of stakeholders? Stakeholder **network**?



may affect the success of actions to encourage development and implementation of control/prevention measures

x Suitable target measures:

- x Managing shellfish **transfers**

- x Decreasing shellfish **densities**

- x Increasing shellfish **observation** & testing shellfish for **pathogens**



Thank you!

Questions?



This project has received funding from the European Union's Horizon 2020 Research and innovation programme under grant agreement N° 678589



Special thanks to the facilitators of the FGDs:

Isabelle Arzul, Alessia Bacchi, Amanda Bréchon, Lydie Canier, Noelia Carrasco, Estelle Delangle, Elyne Dugeny, Mikaela Fox, Lorenzo Gennari, Jean-Baptiste Lamy, Elise Maurouard, Nicolas Mérou, Morgane Smits, Christophe Stavrakakis