Implementation of Best Practices in the LO exemption for Skates and Rays

Progress on Avoidance, Selectivity and Handling

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Skates and rays in the NS & NWW

GROUP TAC

Only these fall under the Landing Obligation

THORNBACK

BLONDE

UNDULATE

SPOTTED

CUCKOO

SMALL EYED

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PROHIBITED

Obligatory discarding of (dead) fish

BLUE / FLAPPER

STARRY

WHITE

COMMON STINGRAY

No Management

Rationale for the exemption (form 2018)

- Option for alternative management to group TAC are being explored but will not be implemented in 1 year
- Selectivity an option in some fisheries, needs further study
- Pretty high survival proven for a few species in some fisheries

The only short term option is a high survival exemption

- The correct use of the survival exemption can lead to filling in the data gaps and leading to sustainable long term management solutions

Exemption request

Joint Recommendation of the Scheveningen Group Discard Plan for Demersal Fisheries in the North Sea (Ref. Ares(2018)3458869 - 29/06/2018)

"All catches of skate and ray quota species should be handled with care, kept wet whilst on board and promptly released.

All Scheveningen Member States will issue **best practice guidelines on appropriate avoidance and selectivity measures** that should be followed by fishers when making use of this exemption."

Optimising survival is a 3 stage rocket

HANDLING → prompt release / handle with care / keep it wet

SELECTIVITY → deterrents (light/necro/magnets) / raised fishing line / escape panels / grids

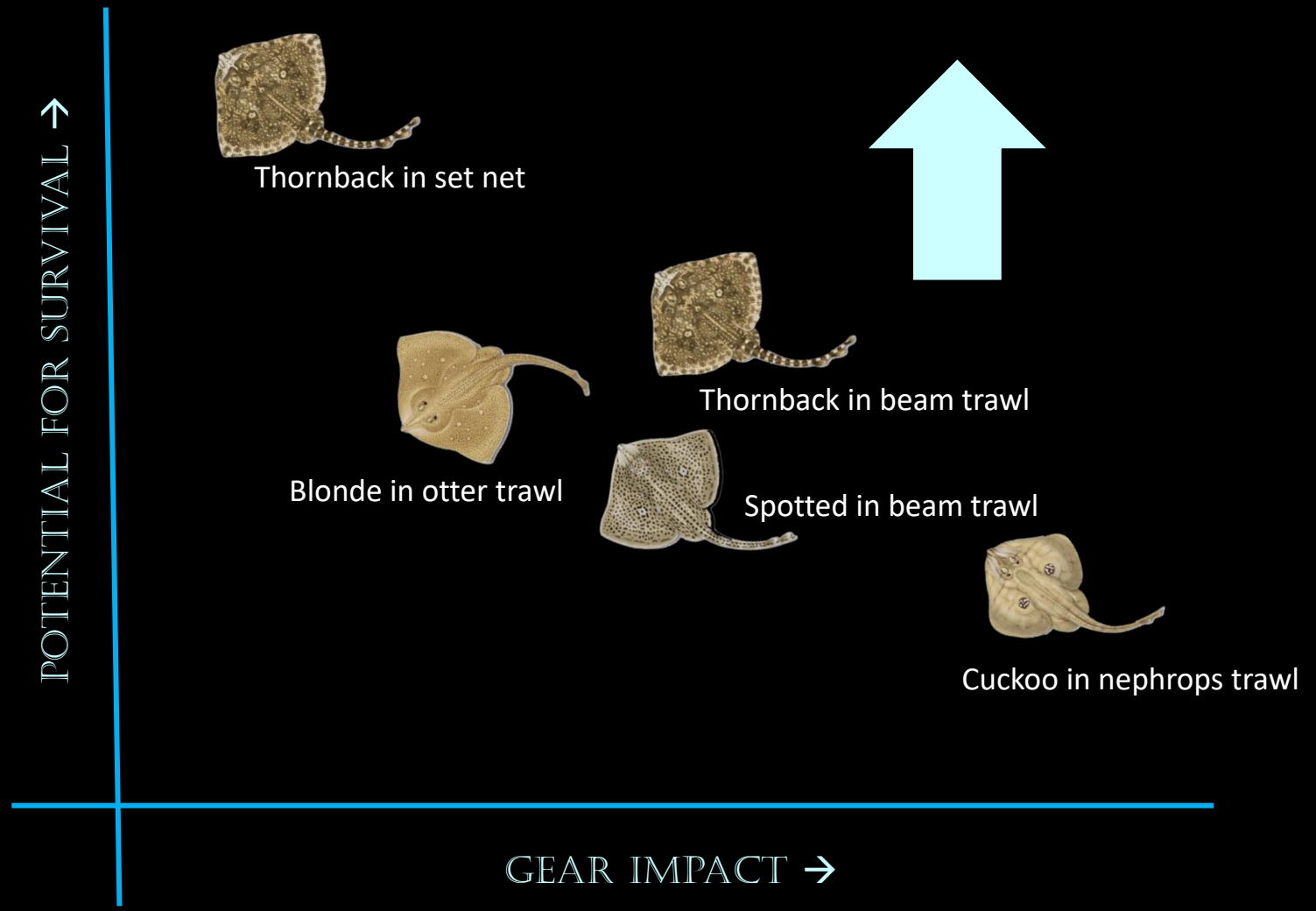
AVOIDANCE → Avoiding spawning areas/real time communication between vessel / move on rules

Suggested measures

Status			Type of measure	Gear	
	1. research still needed; 2. could be trialled; 3. could be implemented	Reference in background document		Trawls	Nets
Avoidance	1 and 2	A.1	Active sharing of information between operators	x	x
	1	A.2	Move on rules	x	
	1	A.3	Use of side-scan sonar to identify aggregations	x	
	1	A.4	Identify and avoid known spawning/nursery areas	x	x
Selectivity	1, 2	B.1	Deterrents - making use of sensory organs (lights, magnets)	x	x
	1	B.2	Behaviour of rays in and around the net	x	x
	1, 2	B.3	Tow speed & Tow duration	x	
	2, 3	B.4	Raised fishing line	x	
	2, 3	B.5	Mesh size	X	x
	2, 3	B.6	Selective grid	x	
	2, 3	B.7	Escape panel	x	
Survival	2 & 3	C.1	Prompt release after catch	x	
	3	C.2	Handle with care (don't lift by tail)	x	x
	3	C.3	Keep catch wet before and during sorting	x	
	2	C.4	Effects of fishing practice and gears	x	x

3 years to fill the gaps

- Better understanding of biology of the species
- Survival studies to get estimates for more species/gears
- **Research measures that could increase survival (avoidance, selectivity and handling)**
- Work with fishermen on filling the gap and let them become a part of the management solution



Best practices??

Roadmap to enhance evidence of discard survival of skates and rays and increase selectivity and survival of skates and rays (Oct 2028)

"The actions described in the **program of measures should (mandatory) include best practices for spatial/temporal avoidance measures, gear selectivity enhancements**, that either avoid unwanted catches or improve survival chances, and/or modifying catch handling practices to improve discard survival chances.

In some cases additional research may be necessary before measure can be implemented. This should be included in the research programme. The Advisory Council will lead in communicating industry issues, ideas and progress to policy and science and present the annual plans to the Regional Group, including evidence of implementation of the agreed actions. This will be done before 1 May of each year."

Annual report by NSAC / NWWAC

NSAC
North Sea Advisory Council

1 Glossary

JR Best Practices	Avoidance	Spatial methods to avoid catching individuals and/or aggregations
	Selectivity	Technical measures to prevent individuals being caught in the net
	Handling on board	Methods to increase survival on board
	Training / Communication	Ways to increase knowledge of skate and ray species and their ecological role in the ecosystem, throughout the supply chain
Approach	Measure	1 line description aligned with the exemption text - can be general (e.g. improving ID-skills)
	Projects	Description of the project, can add links to web content here
	Applicable metier/species	For which species or metier has the measure been trialled or is being implemented
	Applied in country	Where is the measure or project being carried out
	Comments	Extra information relevant for reporting on progress in the implementation of best practices
Categories	Currently in use	What methods/measures are being implemented by the fishing industry
	Could be implemented	What information/method/protocol is available that is not currently being used
	Trials ongoing	What is currently being trialled or tested in fisheries
	Proposed research	Potential measures that could be trialled but no research projects have been formulated
	Survival studies	Overview of studies being carried out to determine survival of skates and rays in fisheries

1. Avoidance

Mandatory measures implemented:

- none

Voluntary measures implemented:

- Avoid known spawning / nursery areas

  uptake: unknown (no data collected)

- Spurdog avoidance program (UK)

  result: no change in behaviour

Ongoing research:

- Part of Raywatch & INNOrays research project in NL have abundance studies in them

2. Selectivity

Mandatory measures implemented:

- Maximum landing size (NL, PO measure)
- Maximum landing weight (FR)

Voluntary measures implemented:

- Flip up rope (BE)
  - Uptake unknown
- Raised fishing line (Irish sea)
  - Uptake unknown

Ongoing research:

- Benthic release panel with LED (BE), Rigging Nephrops trawl (IE), Electric deterrents (Atlantic), Magnets (AU), lights (A

3. Handling on board

Mandatory measures implemented:

- none

Voluntary measures implemented:

- Multitude of handling guides available
  - Uptake unknown

Ongoing research:

- No research found

Conclusion

Has the exemption to the LO for skates and rays led to an improvement in the survival for skates and rays?

RESUTLS

- Limited number of mandatory actions (max sizes/weights)
- Some voluntary measures but no data on uptake
- Promising research results that deserve further scrutiny

NEXT PHASE

- Promising development in gear (BIM) and new technologies (lights & electricity)
- Revision of the LO exemption in 2023
- Bycatch targets in Action Plan to Conserve Fisheries Resources and Protect Marine Ecosystems

Thank You

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Pictures sourced from

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