

## 11. Fan mussel (*Atrina fragilis*)

### Sensitivity Assessment

This sensitivity assessment was sourced directly from Tyler-Walters, H., & Wilding, C.M. 2022. *Atrina fragilis* Fan mussel. In Tyler-Walters H. and Hiscock K. (eds) Marine Life Information Network: Biology and Sensitivity Key Information Reviews, [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 26-03-2024]. Available from: <https://www.marlin.ac.uk/species/detail/1157>

**Table A11.11. Sensitivity assessment for Fan Mussel (*Atrina fragilis*).** Associated sectors include activities related to offshore renewable energy (O), Fishing (F), or shipping (S). NR = not relevant, NA = not assessed, NEv = no evidence, H = high, M = medium, L = low, VL = very low, N = none, NS = not sensitive.

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
Physical	Physical loss (to land or freshwater habitat)	O	N	H	H	H	VL	H	H	H	H	H	H	H
	Physical change (to another seabed type)	O, F	N	H	H	H	VL	H	H	H	H	H	H	H
	Physical change (to another sediment type)	O, F	H	L	NR	NR	H	H	H	H	NS	L	L	L

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
	Habitat structure change-removal of substratum (extraction)	O	N	L	NR	NR	VL	M	M	M	H	L	L	L
	Abrasion/disturbance of substratum surface or seabed	O, F	L	H	M	M	L	M	M	M	H	M	M	M
	Penetration or disturbance of substratum subsurface	O, F	N	H	M	M	VL	M	M	M	H	M	M	M
Physical	Changes in suspended solids (water clarity)	O, F	M	H	M	M	L	M	M	M	M	M	M	M
	Smothering and siltation changes (light)	O	M	L	NR	NR	L	M	M	M	M	L	L	L

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
	Smothering and siltation changes (heavy)	O	N	L	NR	NR	VL	M	M	M	H	L	L	L
	Underwater noise	O, F, S	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	Electromagnetic energy	O	NEv	NR	NR	NR	NR	NR	NR	NR	NEv	NR	NR	NR
	Barrier to species movement	O, F	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	Death or injury by collision	O, F, S	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Hydrological	Water flow changes	O	H	L	NR	NR	H	H	H	H	NS	L	L	L
Chemical	Transition elements & organo-metal contamination	O, F, S	NEv	NR	NR	NR	NR	NR	NR	NR	NEv	NR	NR	NR

Appendix 11 Sensitivity Analyses - 11 Fan mussel

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity			
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC
	Hydrocarbon & PAH contamination	O, F, S	NEv	NR	NR	NR	NR	NR	NR	NR	NEv	NR	NR	NR
	Synthetic compound contamination	O, F, S	NEv	NR	NR	NR	NR	NR	NR	NR	NEv	NR	NR	NR
	Introduction of other substances	O, F, S	NEv	NR	NR	NR	NR	NR	NR	NR	NEv	NR	NR	NR
	Deoxygenation	O	L	M	M	M	L	M	M	M	H	M	M	M
Biological	Introduction or spread of invasive non-indigenous species	O, F, S	NEv	NR	NR	NR	NR	NR	NR	NR	NEv	NR	NR	NR
	Removal of target species	F	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
	Removal of non-target species	F	N	H	M	M	VL	M	M	M	H	M	M	M

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