

33. Intertidal *Mytilus edulis* beds

Sensitivity Assessment

Sensitivity scores for intertidal *Mytilus edulis* beds biotopes were obtained from the MarLIN website (www.marlin.ac.uk), see references for the three biotopes used. The resistance, resilience and sensitivity scores for each pressure comprise those scores for the biotope(s) most sensitive to that pressure.

Table A11.33. Sensitivity assessment for intertidal *Mytilus edulis* beds. 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. Refs = References.

Pressures		Associate d sector(s)	Resistance				Resilience				Sensitivity				biotope associated with score	Refs
Classification	Pressure type		Score	Qo E	Ao E	Do C	Score	Qo E	Ao E	Do C	Score	Qo E	Ao E	Do C		
Physical	Physical loss (to land or freshwater habitat)	O	N	H	H	H	VL	H	H	H	H	H	H	H	All	1, 2, 3
	Physical change (to another seabed type)	O, F	N	H	H	H	VL	H	H	H	H	H	H	H	All	1, 2, 3
	Physical change (to another sediment type)	O, F	N	L	NR	NR	VL	H	H	H	H	L	L	L	All	1, 2, 3

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity				biotope associated with score	Refs
Classification	Pressure type		Score	Qo E	Ao E	Do C	Score	Qo E	Ao E	Do C	Score	Qo E	Ao E	Do C		
	Habitat structure change-removal of substratum (extraction)	O	L	H	H	H	L	H	M	M	H	H	M	M	All	1, 2, 3
	Abrasion/disturbance of substratum surface or seabed	O, F	L	H	M	M	M	H	M	M	M	H	M	M	All	1, 2, 3
	Penetration or disturbance of substratum subsurface	O, F	L	H	M	M	M	H	M	M	M	H	M	M	All	1, 2, 3
Physical	Changes in suspended solids (water clarity)	O, F	H	H	H	M	H	H	H	H	NS	H	H	M	All	1, 2, 3

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity				biotope associated with score	Refs
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC		
	Smothering and siltation changes (light)	O	M	H	H	M	M	H	M	M	M	H	M	M	All	1, 2, 3
	Smothering and siltation changes (heavy)	O	L	H	H	M	M	H	M	M	M	H	M	M	All	1, 2, 3,
	Underwater noise	O, F, S	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR		
	Electromagnetic energy	O	NEv	NR	NR	NR	NEv	NR	NR	NR	NEv	NR	NR	NR		
	Barrier to species movement	O, F	M	L	NR	NR	H	H	H	H	L	L	L	L	All	1, 2, 3
	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	M	H	H	M	M	H	M	M	M	H	M	M	All	1, 2, 3

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity				biotope associated with score	Refs
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC		
Chemical	Transition elements & organo-metal contamination	O, F, S	N	H	M	M	L	H	M	M	H	M	M	M	All	1, 2, 3
	Hydrocarbon & PAH contamination	O, F, S	N	H	M	M	L	H	M	M	H	M	M	M	All	1, 2, 3
	Synthetic compound contamination	O, F, S	N	H	M	M	L	H	M	M	H	M	M	M	All	1, 2, 3,
	Introduction of other substances	O, F, S	NEv	NR	NR	NR	NEv	NR	NR	NR	NEv	NR	NR	NR		
Chemical	Deoxygenation	O	H	H	H	H	H	H	H	H	NS	H	H	H	All	1, 2, 3
Biological	Introduction or spread of invasive non-indigenous species	O, F, S	L	M	M	M	VL	H	H	H	H	M	M	M	All	1, 2, 3

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity				biotope associated with score	Refs
Classification	Pressure type		Score	QoE	AoE	DoC	Score	QoE	AoE	DoC	Score	QoE	AoE	DoC		
	Removal of target species	F	L	H	H	H	M	H	M	M	M	H	M	M	All	1, 2, 3
	Removal of non-target species	F	L	H	H	H	M	H	M	M	M	H	M	M	All	1, 2, 3

References for intertidal *Mytilus edulis* beds sensitivity assessment

1. Tillin, H.M., Mainwaring, K., Williams, E. & Tyler-Walters, H. (2023a). *Mytilus edulis* beds on littoral mixed substrata. In Tyler-Walters H. (ed) *Marine Life Information Network: Biology and Sensitivity Key Information Reviews*, [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 03-04-2024]. Available from:
<https://www.marlin.ac.uk/habitats/detail/1165>
2. Tillin, H.M., Mainwaring, K., Williams, E. & Tyler-Walters, H. (2023b). *Mytilus edulis* beds on littoral mud. In Tyler-Walters H. (ed) *Marine Life Information Network: Biology and Sensitivity Key Information Reviews*, [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 03-04-2024]. Available from:
<https://www.marlin.ac.uk/habitats/detail/1167>
3. Tillin, H.M., Mainwaring, K., Wilson, E. & Tyler-Walters, H. (2023c). *Mytilus edulis* beds on littoral sand. In Tyler-Walters H. (ed) *Marine Life Information Network: Biology and Sensitivity Key Information Reviews*, [on-line]. Plymouth: Marine Biological Association of the United Kingdom. [cited 03-04-2024]. Available from:
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