14. Ocean sunfish (*Mola mola*)

Sensitivity Assessment

Table A11.14. Sensitivity assessment for the ocean sunfish (*Mola mola*). 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, NS = not sensitive.

Pressures		**Associated sector(s)**	**Resistance**				**Resilience**				**Sensitivity**				**References**
Classification	**Pressure type**		**Score**	**QoE**	**AoE**	**DoC**	**Score**	**QoE**	**AoE**	**DoC**	**Score**	**QoE**	**AoE**	**DoC**	
Physical	Physical loss (to land or freshwater habitat)	O	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	-
	Physical change (to another seabed type)	O, F	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	-
	Physical change (to another sediment type)	O, F	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	-

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

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity				References
Classification	**Pressure type**		**Score**	**QoE**	**AoE**	**DoC**	**Score**	**QoE**	**AoE**	**DoC**	**Score**	**QoE**	**AoE**	**DoC**	
	Smothering and siltation changes (heavy)	O	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	-
	Underwater noise	O, F, S	NA	NR	NR	NR	NA	NR	NR	NR	NA	NR	NR	NR	-
	Electromagnetic energy	O	NEv	NR	NR	NR	NEv	NR	NR	NR	NEv	NR	NR	NR	-
	Barrier to species movement	O, F	NA	NR	NR	NR	NA	NR	NR	NR	NA	NR	NR	NR	-
	Death or injury by collision	O, F, S	M	M	M	NR	M	M	H	NR	M	M	H	NR	6, 14
Hydrological	Water flow changes	O	H	M	M	M	H	M	M	M	NS	M	M	M	17,21
Chemical	Transition elements & organo-metal contamination	O, F, S	NEv	L	M	NR	NEv	L	NR	NR	sensitive	L	NR	NR	4,12, 27

Pressures		Associated sector(s)	Resistance				Resilience				Sensitivity				References
Classification	**Pressure type**		**Score**	**QoE**	**AoE**	**DoC**	**Score**	**QoE**	**AoE**	**DoC**	**Score**	**QoE**	**AoE**	**DoC**	
	Hydrocarbon & PAH contamination	O, F, S	NEv	L	M	NR	NEv	L	NR	NR	sensitive	L	NR	NR	4,12, 27
	Synthetic compound contamination	O, F, S	NA	NR	NR	NR	NA	NR	NR	NR	NA	NR	NR	NR	-
	Introduction of other substances	O, F, S	NA	NR	NR	NR	NA	NR	NR	NR	NA	NR	NR	NR	-
	Deoxygenation	O	H	M	M	NR	H	M	M	NR	NS	M	M	NR	6
Biological	Introduction or spread of invasive non-indigenous species	O, F, S	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	-
	Removal of target species	F	L	M	H	H	L	M	H	H	H	M	H	H	3, 7, 11, 14, 15, 20, 23, 26
	Removal of non-target species	F	L	H	H	H	L	H	H	H	H	H	H	H	1, 3, 5, 7, 10, 12-35

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Literature Search

Web of Science search terms

AB=("ocean sunfish" OR "Mola mola" OR "M. mola" OR “Poisson lune” OR “Poisson-lune” OR “Pesce mola” OR “Pesce luna” OR “Pez luna” AND "angl*" OR “beam” OR "bottom trawl*" OR "by-catch" OR "dredge*" OR "fish*" OR “gear” OR "gillnet*" OR "hook*" OR “injury” OR "net*" OR "otter trawl*" OR “remov*” OR “aggregate*" OR "anchor*" OR "ballast" OR "barrier*"OR "beach*" OR "launch*" OR "moor*" OR "noise" OR “ship*” OR "steaming" OR "collision*" OR "construction" OR "electro*" OR "turbine*"OR "renewable*" OR "wave" OR "wind" OR "wind farm*" OR "anoxia" OR "copper" OR "current*" OR "disease*" OR "disturbance" OR "endocrine disru*" OR "eutrophication" OR “exposure” OR "heavy metals" OR "hydrocarbon" OR "hypoxia" OR "litter" OR "nitrate*" OR "nitrite*" OR "noise" OR “radionuclide” OR "nutrient*" OR "oil" OR “oil” OR "PAH*" OR "pathogen*" OR "PCB*" OR "plastic*" OR “regime” OR “salinity” OR "sedimentation" OR "silt*" OR “temperatur*” OR “translocation” OR "tributyltin" OR “turbid*” OR “visual” OR "warm*"

Database

ISI Web of Science

Search date

20th February 2024 – 98 results

The term ‘sunfish’ was removed from the search as it produced 1,185 results.

https://www.webofscience.com/wos/woscc/summary/f7d0a5cf-61e2-4d0f-9482-87764abb1af2-cd57b731/relevance/1

Search output and screening process

Abstracts screened for relevance i.e. must describe ocean sunfish and mention of one of the listed sectors and/or pressures from MARESA. Workflow follows the Rapid Evidence Assessment approach. The title and all auxiliary information (including abstract) were downloaded from ISI Web of Science

in a .ris and excel format. In Excel, abstracts were read and listed to either pass or fail the initial screening process with a reason provided.

Outcome from screening

Forty-eight (49%) abstracts passed initial screening. Of these, 11 (23%) did not pass secondary screening (i.e., on further reading were determined as not relevant), three (6%) could not be accessed and therefore applicability could not be determined, and 33 (69%) passed secondary screening and were accessible. Sensitivity assessments were therefore made based on evidence provided by the resultant 33 papers.