

<b>Habitat</b>	Saltmarsh	
<b>Relevant Annex I habitats</b>	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )	
<b>Bait collection activity with potential to interact with habitat (range of activity; Limited - Common)</b>	<b>Accessing or crossing shore (includes trampling) (C)</b> (12,21,29,30,34,48,59)	
<b>UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48</b>	<b>x</b>	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61) <i>Hediste diversicolor</i> (C) (28-31,36,48,53) <i>Perinereis cultrifera</i> (C) (28,29,48) <i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59) <i>Arenicola defodiens</i> (C) (25,29,31,48) <i>Nephtys</i> spp. (O?) (29-31,46-48) <i>Ensis</i> spp. (O) (29-31,48,53) <i>Mya arenaria</i> (R) (29,48,53) <i>Cerastoderma edule</i> (R) (29,34,48,53) <i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88) Fanworm (R*) (53) <i>Littorina littorea</i> (R) (29,32,48) <i>Sabellaria</i> (R*) (37,48,81) 'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90) Piddocks (R*) (85,91,92)	<b>Species collected by given method</b>  All species	
<b>Impacts</b>	<b>Impact (Low-High)</b>	<b>Evidence (Low-High)</b>
Habitat impact (vegetation, sediment physicochemical)	L	H (12,102)
Impact target species	-	-
Impact non-target macrofaunal assemblage	L	M (12)
Impact non-target birds (disturbance)	M	L (16,25,28,38,42,49)
<b>Recovery</b>	<b>Recovery (sediment type)</b>	<b>Evidence (L-H)</b>
Recovery rate habitat	-	-
Recovery target species	-	-
Recovery non-target	-	-

Habitat	Saltmarsh	
Relevant Annex I habitats	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocometea fruticosi</i> )	
Bait collection activity with potential to interact with habitat (range of activity; Limited - Common)	Hand digging (C) (5-7,12,16,26,28-31,34,35,38,42,46-48,56,58-61)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	x	
	<b>Species collected by given method</b>	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>A. virens</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>H. diversicolor</i>	
<i>Perinereis cultrifera</i> (C) (28,29,48)	<i>P. cultrifera</i>	
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)	<i>A. marina</i>	
<i>Arenicola defodiens</i> (C) (25,29,31,48)	<i>A. defodiens</i>	
<i>Nephtys</i> spp. (O?) (29-31,46-48)	<i>Nephtys</i> spp.	
<i>Ensis</i> spp. (O) (29-31,48,53)	<i>Ensis</i> spp.	
<i>Mya arenaria</i> (R) (29,48,53)	<i>M. arenaria</i>	
<i>Cerastoderma edule</i> (R) (29,34,48,53)	Fanworm	
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)	<i>Sabellaria</i>	
Fanworm (R*) (53)	'Rockworms'	
<i>Littorina littorea</i> (R) (29,32,48)	Piddocks	
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<b>Impacts</b>	<b>Impact (Low-High)</b>	<b>Evidence (Low-High)</b>
Habitat impact (vegetation, sediment physicochemical)	-	-
Impact target species	-	-
Impact non-target macrofaunal assemblage	-	-
Impact non-target birds (disturbance)	-	-
<b>Recovery</b>	<b>Recovery (sediment type)</b>	<b>Evidence (L-H)</b>
Recovery rate habitat	-	-
Recovery target species	-	-
Recovery non-target	-	-

Habitat	Saltmarsh	
Relevant Annex I habitats	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )	
Bait collection activity with potential to interact with habitat (range of activity; Limited - Common)	Bait dragging (L) (5,28,29,30,31,38,42,48)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>A.virens</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)		
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
Impacts	Impact (Low-High)	Evidence (Low-High)
Habitat impact (vegetation, sediment physicochemical)	-	-
Impact target species	-	-
Impact non-target macrofaunal assemblage	-	-
Impact non-target birds (disturbance)	-	-
Recovery	Recovery (sediment type)	Evidence (L-H)
Recovery rate habitat	-	-
Recovery target species	-	-
Recovery non-target	-	-

Habitat	Saltmarsh	
Relevant Annex I habitats	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )	
Bait collection activity with potential to interact with habitat (range of activity; Limited - Common)	Bait pump (C?) (29,30,31,48,59,64)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>A. defodiens</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>Ensis</i> spp.	
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea</i> ? (89,90)		
Piddocks (R*) (85,91,92)		
Impacts	Impact (Low-High)	Evidence (Low-High)
Habitat impact (vegetation, sediment physicochemical)	-	-
Impact target species	-	-
Impact non-target macrofaunal assemblage	-	-
Impact non-target birds (disturbance)	-	-
Recovery	Recovery (sediment type)	Evidence (L-H)
Recovery rate habitat	-	-
Recovery target species	-	-
Recovery non-target	-	-

Habitat	Saltmarsh	
Relevant Annex I habitats	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )	
Bait collection activity with potential to interact with habitat (range of activity; Limited - Common)	Raking (L?) (19,48,50,67,88)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>C. edule</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>M. edulis</i>	
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea</i> ? (89,90)		
Piddocks (R*) (85,91,92)		
Impacts	Impact (Low-High)	Evidence (Low-High)
Habitat impact (vegetation, sediment physicochemical)	-	-
Impact target species	-	-
Impact non-target macrofaunal assemblage	-	-
Impact non-target birds (disturbance)	-	-
Recovery	Recovery (sediment type)	Evidence (L-H)
Recovery rate habitat	-	-
Recovery target species	-	-
Recovery non-target	-	-

Habitat	Saltmarsh	
Relevant Annex I habitats	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )	
Bait collection activity with potential to interact with habitat (range of activity; Limited - Common)	Salting (?) (48,64)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	Species collected by given method <i>Ensis</i> spp.	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)		
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)		
<i>Perinereis cultrifera</i> (C) (28,29,48)		
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)		
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea</i> ? (89,90)		
Piddocks (R*) (85,91,92)		
<b>Impacts</b>	<b>Impact (Low-High)</b>	<b>Evidence (Low-High)</b>
Habitat impact (vegetation, sediment physicochemical)	-	-
Impact target species	-	-
Impact non-target macrofaunal assemblage	-	-
Impact non-target birds (disturbance)	-	-
<b>Recovery</b>	<b>Recovery (sediment type)</b>	<b>Evidence (L-H)</b>
Recovery rate habitat	-	-
Recovery target species	-	-
Recovery non-target	-	-

Habitat	Saltmarsh	
Relevant Annex I habitats	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocornetea fruticosi</i> )	
Bait collection activity with potential to interact with habitat (range of activity; Limited - Common)	Hand picking (?) (29,31,32,37,48,50)	
UK bait species: use 'Rare', 'Occasional', or 'Common' (29,48). *Indicates use not included in refs. 29 or 48	Species collected by given method	
<i>Alitta virens</i> (C) (5,7,15,21,23,26-31,38,46-48,58-61)	<i>M. edulis</i>	
<i>Hediste diversicolor</i> (C) (28-31,36,48,53)	<i>C. edule</i>	
<i>Perinereis cultrifera</i> (C) (28,29,48)	<i>Ensis</i> spp.	
<i>Arenicola marina</i> (C) (6,13,15,17,21,23,25-27,29-31,34-36,41,46-48,53,56,59)	<i>L. littorea</i>	
<i>Arenicola defodiens</i> (C) (25,29,31,48)		
<i>Nephtys</i> spp. (O?) (29-31,46-48)		
<i>Ensis</i> spp. (O) (29-31,48,53)		
<i>Mya arenaria</i> (R) (29,48,53)		
<i>Cerastoderma edule</i> (R) (29,34,48,53)		
<i>Mytilus edulis</i> (O) (15,21,29-31,48,84,88)		
Fanworm (R*) (53)		
<i>Littorina littorea</i> (R) (29,32,48)		
<i>Sabellaria</i> (R*) (37,48,81)		
'Rockworms' from chalk reefs (R*) <i>Marphysa sanguinea?</i> (89,90)		
Piddocks (R*) (85,91,92)		
<b>Impacts</b>	<b>Impact (Low-High)</b>	<b>Evidence (Low-High)</b>
Habitat impact (vegetation, sediment physicochemical)	-	-
Impact target species	-	-
Impact non-target macrofaunal assemblage	-	-
Impact non-target birds (disturbance)	-	-
<b>Recovery</b>	<b>Recovery (sediment type)</b>	<b>Evidence (L-H)</b>
Recovery rate habitat	-	-
Recovery target species	-	-
Recovery non-target	-	-

Habitat	Saltmarsh	
Relevant Annex I habitats	Estuaries, <i>Salicornia</i> and other annuals colonizing mud and sand, <i>Spartina</i> swards ( <i>Spartinion maritimae</i> ), Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> ), Mediterranean and thermo-Atlantic halophilous scrubs ( <i>Sarcocometea fruticosi</i> )	
Impact summary - Habitat	No significant negative effects of trampling were identified, although one of the studies described a personal observation of decreased plant abundance and increase in bare mud as a result of trampling (12). With respect to bait collection within saltmarsh habitat, for the Solent and Poole Bay Natural Area, low potential for bait collection was highlighted for pioneer and low marsh communities and cordgrass swards, with sensitivity to bait collection noted as 'intermediate, if digging disturbs and destroys colonising plants' and 'intermediate - but only likely to take place in uncolonised salt pans and creeks' (30). Studies with evidence for the direct impacts of bait collection in saltmarsh were not identified here.	
Impact summary - Non-target assemblage	Trampling study did not reveal significant effects on multivariate composition of the macrofauna.	
Impact summary - Non-target birds	Evidence identified for bird disturbance caused by crossing saltmarsh, nearshore, and onshore activities.	
MMO Risk Matrix for protected features of European Marine Sites. <a href="https://www.gov.uk/government/publications/fisheries-in-european-marine-sites-matrix">https://www.gov.uk/government/publications/fisheries-in-european-marine-sites-matrix</a>	For 'Saltmarsh spp, <i>Salicornia</i> and Seablite', bait digging (with forks) and intertidal handwork also considered relevant to bait collection were rated as 'Amber'. Bait dragging was rated 'Blue'.	<b>Amber:</b> Where there is doubt as to whether conservation objectives for a feature (or subfeature) will be achieved because of its sensitivity to a type of fishing, in all EMSs where that feature occurs, the effect of that activity or activities on such features will need to be assessed in detail at a site specific level. Appropriate management action should then be taken based on that assessment. <b>Blue:</b> For gear types where there can be no feasible interaction between the gear types and habitat features, a fourth categorisation of blue is used, and no management action should be necessary