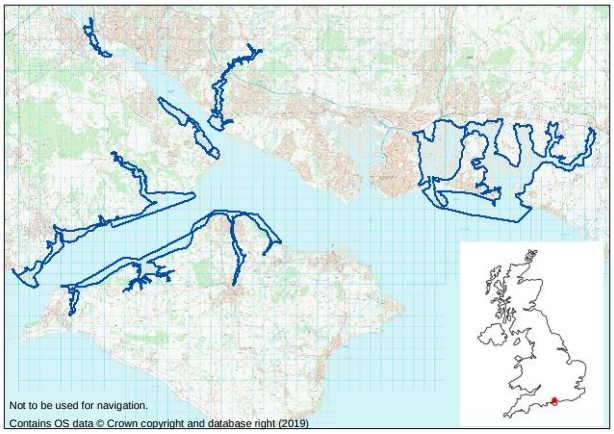
Solent Maritime SAC

Description:



The Solent Maritime Special Area of Conservation (SAC) is a complex site encompassing a major estuarine system on the south coast of England. The Solent and its inlets are unique in Britain and Europe for their unusual tidal regime, including double tides and long periods of tidal stand at high and low tide. As a result, the Solent Maritime SAC is a unique suite of functionally linked estuaries and dynamic marine and estuarine habitats. The site has the largest number of small estuaries in the tightest cluster anywhere in Great Britain, with examples of coastal plain estuaries and bar-built estuaries. It is located in one of the only major sheltered channels in Europe, lying between a substantial island (the Isle of Wight) and the mainland. Sediment habitats within the site include extensive areas of intertidal mudflats and sandflats, often supporting eelgrass (*Zostera* spp.), subtidal sandbanks, saltmarsh and natural shoreline transitions such as drift line vegetation.

Qualifying Features:

The Solent Maritime SAC hosts the following habitats: annual vegetation of drift lines, Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*), coastal lagoons, estuaries, mudflats and sandflats not covered by seawater at low tide, perennial vegetation of stony banks, *Salicornia* spp. and other annuals colonising mud and sand, sandbanks which are slightly covered by sea water all the time, shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”) and Spartina swards (*Spartinion maritimae*). It is also designated for the species Desmoulin's whorl snail (*Vertigo moulinsiana*).

Management:

- Voluntary management initiatives are in place which aim to protect the intertidal sediment and wading birds e.g. The Fareham Seashore byelaw.
- Various local management systems e.g. Special Nature Conservation Order at Fareham Creek for bait digging.
- Southern Inshore Fisheries and Conservation Authority byelaws - bait collection voluntary agreement
- Solent Seals Code of Conduct

Stakeholder Concerns:

Stakeholders identified motor boating and towed water sports as the greatest threats as a result of chemical and noise pollution causing a detrimental effect to plants and animals. Bait collection, beach recreation, and drone use were also a cause for concern in this SAC.

Academic Studies:

The impacts of bait collection include physical characteristics of the shore being altered causing topographical changes which redistribute organic material, cause loss of the finer grained particles, and causes changes in bioavailability of sediment-bound pollutants (Howell, 1985; Watson *et al*., 2007). Bait collection can also adversely affect many other shore users as unfilled holes are a hazard causing injury, whilst moorings, jetties and boats can be damaged or undermined (Fowler, 1999; 2001).

MPA: Solent Maritime SAC				**No. Stakeholders:** 2 online & 0 workshop			
Activity	**Frequency**	**Duration**	**Participation**	**Intensity**	**Confidence**	**MPA Extent**	**Trend**
Board sports	?	1	?	?	?	?	?
Geophysical surveys	?	?	?	?	?	?	?
Motor boating	?	?	?	?	?	?	?
Jetskis	?	?	?	?	?	?	?
Paddle sports	4	3	6	72	?	2	↑
Parascending	?	?	?	?	?	?	?
Sailing (non-motorised)	?	?	?	?	?	?	?
SCUBA diving	?	?	?	?	?	?	?
Swimming / Snorkelling	?	?	?	?	?	?	?
Towed water sports	?	?	?	?	?	?	?
Wildlife watching from the sea	?	?	?	?	?	?	?
Bait collection	4	2	4	32	H	1	?
Beach recreation	?	?	?	?	?	?	?
Coasteering	?	?	?	?	?	?	?
Land boarding	?	?	?	?	?	?	?
Motorsports (quad bikes, motorbikes)	?	?	?	?	?	?	?
Vehicle access (cars on foreshore)	?	?	?	?	?	?	?
Wildlife watching from the land	?	?	?	?	?	?	?
Drone use	1	1	1	1	M	1	↑
Gliding (unpowered)	?	?	?	?	?	?	?
Aircraft (powered)	?	?	?	?	?	?	?

KEY

FREQUENCY	DURATION	PARTICIPATION	INTENSITY	CONFIDENCE	EXTENT	TREND
4 Regular/daily	**4** >8 hours	**6** >100	**45-96** High	**H** High	**2** Whole MPA (solid)	↑ Increase
3 Regular/weekends	**3** 4-8 hours	**5** 51-100	**24-40** Med-high	**M** Medium	**1** Part of MPA (shaded)	→ Stay the same
2 Seasonally	**2** 2-4 hours	**4** 21-50	**9-20** Low-med	**L** Low	**0** Does not occur	↓ Decrease
1 Sporadically	**1** <2 hours	**3** 11-20	**1-8** Low	**?** Data missing	**?** Data missing	**?** Data missing
0 Does not occur	**0** Does not occur	**2** 6-10	**0** Does not occur			
? Data missing	**?** Data missing	**1** 1-5	**?** Data missing			
		0 Does not occur				
		? Data missing				

References:

Fowler, S.L. 1999. Guidelines for managing the collection of bait and other shoreline animals within UK European marine sites. English Nature (UK Marine SACs Project). 132 pages.

Fowler, S.L., 2001. Investigation into the Extent of Bait Collection and its Impacts on Features of Conservation Interest for Birds and Intertidal Species and Habitats within the Solent Natural Area. Report for English Nature, p. 102.

Howell, R., 1985. The effect of bait-digging on the bioavailability of heavy metals from surficial intertidal sediments. Mar. Poll. Bull. 16, 292-295.

Watson, G.J., Farrell, P., Stanton, S., Skidmore, L.C., 2007. The effects of bait collection on Nereis virens populations and macrofaunal communities in the Solent, UK. J. Mar. Biol. Assoc. 87, 703-716.