

Site 12 - Glen Bay

Site description

Glen Bay is a medium-sized saltmarsh site covering 36.2 ha. The saltmarsh is distributed within the inner part of the bay just north-west of Glencolumbkille, Co. Donegal. It is part of the Slieve Tooley/Tormore Island/Loughros Beg Bay SAC (000190) (NPWS, 2013). The site lies almost entirely within the SAC, with the exception of some polygons that are located outside the protected area, close to St. Columba's Church, forming a 31 polygons sand dunes system. These habitats were not assessed during CHNW21 but some losses have been recorded for two polygons of **2110 Embryonic shifting dunes**, one of **2120 Marram dunes (white dunes)** and six of ***2130 Fixed dunes (grey dunes)** (Table 2).

Based on the currently available mapping, five coastal Annex I habitats occur within Slieve Tooley/Tormore Island/Loughros Beg Bay SAC, and all are listed as Qualifying Interests (**Error! Reference source not found.**).

Table 1. Annex I habitats present at Slieve Tooley/Tormore Island/Loughros Beg Bay SAC, the area they occupy (based on the most recent mapped available) and status as a Qualifying Interest of the SAC. An asterisk denotes a priority Annex I habitat and habitat that were not the target of this survey are excluded.

Habitat Code	Area (ha)	Qualifying Interest?
1330 Atlantic salt meadows	4.983	Yes
1410 Mediterranean saltmarsh	6.977	Yes
2110 Embryonic shifting dunes	0.126	Yes
2120 Marram dunes (white dunes)	0.879	Yes
*2130 Fixed dunes (grey dunes)	12.922	Yes

Table 2. Habitat loss recorded during the desk and field surveys in hectares and % of total habitat area in the site.

Habitat	Within SAC?	Loss (ha)	Impact code	New habitat
1330	Yes	0.020	PM07	Reed and large sedge swamps (FS1)
1410	Yes	0.756	PM07	Reed and large sedge swamps (FS1)
*2130	Yes	0.110	PA01	Horticultural land (BC2)
*2130	No	0.236	PF01	Buildings and artificial surfaces (BL3)

Conservation assessments were carried out within one sub-site occupying a total area of 18.4 ha. The habitat condition of the area within the SAC was similar to that outside of the SAC.

Table 3. Summary of Conservation Status for all habitats assessed at Glen Bay.

Subsite	Habitat	Area	Structure and Functions	Future Prospects	Overall assessment
12.01 Glen Bay Inner area	1330	Favourable (Stable)	Unfavourable – Inadequate (Stable)	Unfavourable - Inadequate	Unfavourable - Inadequate (Stable)
12.01 Glen Bay Inner area	1410	Favourable (Stable)	Favourable (Increasing)	Unfavourable - Inadequate	Unfavourable - Inadequate (Stable)

Sub-site 1 Glen Bay Inner area

Summary Information

Survey Date: 20/21 July 2022

Water Framework Directive Waterbody: Northwestern Atlantic Seaboard (HAs 37;38)

Previous survey identifiers: CMP146, SMP0126

Current survey details:

Table 4: Current survey details for Annex I habitats at Glen Bay Inner area

Habitat Code	Area	Monitoring stops
1330 Atlantic salt meadows	4.983	8
1410 Mediterranean saltmarsh	6.977	8

1330 Atlantic salt meadows

Area

The habitat **1330 Atlantic salt meadows** has increased from 3.05 ha to 4.98 ha since SMPII. This was mainly due to differences in interpretation of the mosaic. The swamp seemed to have increased in the eastern part of the site. This trend had also been noticed during SMPII and it was considered a natural process. This is consistent with an Area assessment of Favourable and the trend, compared to SMP, was considered stable.

Structure and Functions

Eight monitoring stops have been recorded in **1330 Atlantic salt meadows** and a single criterion - number of recorded indicator species, the same criteria which have failed in the last report - has failed the assessment: 11 positive species have been found instead of 12. Grazing has impacted the halophyte vegetation, although the height of vegetation has been high in both reports. This could have been due to a grazing pressure that was more intensive in the past or to an unmanaged grazing that have impacted most of the portion of the site where halophyte species are denser (such as the shores of rivers and canals). The Structure and Functions were therefore assessed as Unfavourable - Inadequate. Compared to SMP, the trend is stable.

Furthermore, the height of vegetation seemed too high, however, considering the change of area due to a different interpretation, this could potentially be a misleading indicator for the assessment.

The community types that have been found were SM2, SM3, SM4, SM6 and SM7.

Future Prospects

Overgrazing by cattle associated with poaching was a medium intensity negative pressure that had impacted a considerable portion of the habitat. Other impacts that have been recorded were old drainage and spreading of reeds in some areas, but they were assessed as neutral for their natural origin. The same impacts were recorded in the last report. Future Prospects were therefore assessed as Unfavourable - Inadequate, and the trend, compared to SMP, is considered stable.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Favourable (stable)
- Structure and Functions: Unfavourable - Inadequate (stable)
- Future Prospects: Unfavourable - Inadequate (stable)

Since at least one of the three parameters was assessed as Unfavourable - Inadequate, the overall conservation assessment for **1330 Atlantic salt meadows** at Glen Bay Inner area was Unfavourable - Inadequate. Compared to SMP, the trend is stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

Considering overgrazing and poaching, which have been affecting 25% of the habitat with moderate intensity, 20% of the habitat was considered to be in poor condition, while the remaining 80% was in good condition.

1410 Mediterranean saltmarsh

Area

The habitat **1410 Mediterranean salt meadows** has decreased over the most recent reporting cycle from 9.5 ha to 7.0 ha, probably because of a different interpretation of the mosaic. The swamp seemed to have increased in the eastern part of the site, as reported during SMPII and it is considered a natural process. This is consistent with an Area assessment of Favourable and the trend, compared to SMP, is stable.

Structure and Functions

Eight monitoring stops have been recorded in **1410 Mediterranean saltmarsh** and no indicator has failed the assessment. Compared to SMP, the cover of disturbed ground seemed to have reduced. This is consistent with a Structure and Functions assessment of Favourable and the trend is therefore assessed as increasing.

Future Prospects

As mentioned for the habitat **1330 Atlantic salt meadows**, overgrazing by cattle was a medium intensity impact. However, it affected a small portion of the habitat that was mostly too thick and unappetizing. Other impacts that have been recorded were old drainage and encroachment by reeds in some areas that were assessed as neutral. The same impacts had been recorded during SMPII. Future Prospects were therefore assessed as Unfavourable - Inadequate, and the trend, compared to SMP, is stable.

Conservation assessment

The conservation status assessments of the three parameters are as follows:

- Area: Favourable (stable)
- Structure and Functions: Favourable (increasing)
- Future Prospects: Unfavourable - Inadequate (stable)

Since at least one of the three parameters was assessed as Unfavourable - Inadequate, the overall conservation assessment for **1410 Mediterranean saltmarsh** at Glen Bay Inner area was Unfavourable - Inadequate. Compared to SMP, the trend is stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

Considering the pressure due to trampling and grazing that affected a small proportion of the habitat, 5% of the habitat was deemed to be in poor condition, while the remaining 95% was considered to be in good condition.

Site 12 Subsite 1 Glen Bay Inner Area Appendices

Appendix 1 Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1330	NS	2.332	3.057	4.983
1410	NS	14.464	9.463	6.977

Favourable Reference Area and cumulative changes in area due to human activities (restoration and loss) recorded during reporting cycles to date. Natural fluctuations are not taken into account.

Habitat	Favourable Reference area (ha)	2007 change (ha)	2013 change (ha)	2019 change (ha)	2025 change (ha)
1330	2.332	NS	0	0	0
1410	14.464	NS	0	0	0

Appendix 2. Structure and functions

Positive indicator species and notable species

Habitat	Species name	Cover (%) (if recorded)
1330	<i>Agrostis stolonifera</i>	
1330	<i>Armeria maritima</i>	
1330	<i>Aster tripolium</i>	
1330	<i>Carex extensa</i>	
1330	<i>Cochlearia species</i>	
1330	<i>Festuca rubra</i>	
1330	<i>Glaux maritima</i>	
1330	<i>Juncus gerardii</i>	
1330	<i>Plantago maritima</i>	
1330	<i>Puccinellia maritima</i>	
1330	<i>Triglochin maritimum</i>	
1410	<i>Aster tripolium</i>	
1410	<i>Cochlearia species</i>	
1410	<i>Glaux maritima</i>	
1410	<i>Juncus gerardii</i>	
1410	<i>Juncus maritimus</i>	
1410	<i>Leontodon autumnalis</i>	
1410	<i>Plantago maritima</i>	
1410	<i>Triglochin maritimum</i>	

Structure and Functions Assessment Criteria

Habitat	Indicator	Pass/Fail
1330	Positive indicator species	Fail
1330	Vegetation height – Standard deviation	Pass
1330	Vegetation height – Average height	Fail
1330	Negative indicator species	Pass
1330	Disturbed ground	Pass
1330	Signs of negative activities, e.g. infilling, reclamation, turf-cutting, pollution	Pass
1330	Human disturbance to hydrology	Pass
1330	Natural transitions to semi-natural terrestrial habitats on landward margin	Pass
1330	Presence of <i>Spartina</i> spp. within vicinity of habitat	Pass
1330	Presence of site-specific target species	Pass
1330	Number of zones (SM2, SM3, SM4, SM6BCD, SM7/driftline) covering 1% or more of 1330 area	Pass
1410	Positive indicator species	Pass
1410	Negative indicator species	Pass
1410	Disturbed ground	Pass
1410	Signs of negative activities, e.g. infilling, reclamation, turf-cutting, pollution	Pass
1410	Human disturbance to hydrology	Pass
1410	Natural transitions to semi-natural terrestrial habitats on landward margin	Pass
1410	Presence of site-specific target species (indicators of local distinctiveness)	Pass
1410	Presence of <i>Spartina</i> spp. within vicinity of habitat	Pass

Appendix 3. Impacts and Activities

Impacts recorded

Habitat code	Impact code	Impact description	Relative importance	Influence	Source	Timing	Trend	Area
1330	PA07	Overgrazing (cattle) and poaching	Medium	Negative	Inside	Ongoing	Stable	25.0
1330	PA22	Old drainage	Low	Neutral	Inside	Ongoing	Stable	1.0
1330	PM07	Natural succession to HCH FS1 (Phragmites australis)	Medium	Neutral	Inside	Ongoing	Stable	3.0
1410	PA07	Overgrazing (cattle), poaching and nutrient enrichment	Medium	Negative	Inside	Ongoing	Stable	4.0
1410	PA22	Signs of drainage	Low	Neutral	Inside	Ongoing	Stable	1.0
1410	PM07	Natural succession to HCH FS1 (Phragmites australis)	Medium	Neutral	Inside	Ongoing	Stable	7.0

Conservation Measures required

Habitat code	Measure code	Measure description	Area (ha)	Status (in place/partial/ Absent/unidentified)	Response timeframe	Purpose	Location (inside and or Outside SAC)
1330	CA05	Measure re-quired to regulate grazing	1.2458	Absent	Medium-term results	Restore the structure & functions, including the status of typical species	Inside

Appendix 4. Condition of the habitat by area

Summary of habitat condition

Habitat code	% remaining habitat in poor condition	% remaining habitat in good condition
1330	20	80
1410	5	95