

Site 17 - Lunniagh

Site description

Lunniagh is a medium-sized saltmarsh site covering about 35 ha. This site consists of saltmarsh distributed throughout a bay directly west of Derrybeg, and a smaller saltmarsh in a bay west of Bunbeg, Co. Donegal. It is part of the Gweedore Bay and Islands SAC (SAC 001141) (NPWS, 2013). All the sub-sites are within the SAC boundary, except for a few polygons. The core areas are the sub-sites where the field surveys took place (see general introduction to Volume 2).

Based on the currently available mapping, eight coastal Annex I habitats occur within Gweedore Bay and Islands SAC, and six of them are listed as Qualifying Interests (Table 1).

Table 1. Annex I habitats present at Gweedore Bay and Islands 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?
1210 Drift line vegetation	0.055	No
1310 <i>Salicornia</i> flats	0.635	No
1330 Atlantic salt meadows	24.103	Yes
1410 Mediterranean saltmarsh	4.340	Yes
2120 Marram dunes (white dunes)	3.684	Yes
*2130 Fixed dunes (grey dunes)	186.188	Yes
2190 Humid dune slacks	5.682	Yes
*21A0 Machairs	42.774	Yes

Large part of this site is heavily grazed by sheep, particularly north-east of the GAA grounds, which appears to promote erosion in **1330 Atlantic salt meadows** habitat and may be retarding saltmarsh development.

Small habitat losses, mainly due to natural succession, were recorded (Table 2).

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	0.010	PM07	Reed and large sedge swamps (FS1)
1410	Yes	0.042	PM07	Reed and large sedge swamps (FS1)
*2130	Yes	0.485	PF03	Buildings and artificial surfaces (BL3)

Conservation assessments were carried out within one sub-site occupying a total area of 35.17 ha (Table 3). Two habitats (**1310 *Salicornia* flats** and **1410 Mediterranean saltmarsh**) were in Favourable condition and the remainder was in Unfavourable condition, mainly due to overgrazing.

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

Subsite	Habitat	Area	Structure and functions	Future Prospects	Overall assessment
17.01 Lunniagh salt marshes	1310	Favourable (Stable)	NA (NA)	Favourable	NA (NA)
17.01 Lunniagh salt marshes	1330	Favourable (Stable)	Favourable (Increasing)	Unfavourable - Inadequate	Unfavourable - Inadequate (Stable)
17.01 Lunniagh salt marshes	1410	Favourable (Stable)	Favourable (Increasing)	Favourable	Favourable (Improving)

Sub-site 1. Lunnagh salt marshes

Summary Information

Survey Date: 12-13 July 2022

Water Framework Directive Waterbody: Loughros Bay

Previous survey identifiers: SMP0151

Current survey details:

Table 4: Current survey details for Annex I habitats at Lunnagh salt marshes

Habitat	Area	Monitoring stops
1310 <i>Salicornia</i> flats	0.635	0
1330 Atlantic salt meadows	24.103	21
1410 Mediterranean saltmarsh	4.341	8

1310 *Salicornia* flats

Area

The habitat has increased over the most recent reporting cycle due to natural processes. There was no indication of change due to human activities. This is consistent with an Area assessment of Favourable and the trend is stable.

Structure and Functions

No monitoring stops were recorded for this habitat so no Structure and Functions assessment was carried out for **1310 *Salicornia* flats** habitat. The trend assessment is not applicable.

Future Prospects

No pressures were recorded for this habitat. Future Prospects were therefore assessed as Favourable, and the trend was assessed as stable.

Conservation assessment

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

- Area: Favourable (stable)
- Structure and Functions: not assessed (NA)
- Future Prospects: Favourable (stable)

Because Structure and Functions were not assessed, the overall conservation assessment for **1310 *Salicornia* flats** at 17.01 Lunnagh salt marshes was not applicable.

Overall Conservation Status: NA (NA)

Condition of the habitat by area

Given that no assessment of Structure and Functions was carried out, condition of habitat by area has not been assessed.

1330 Atlantic salt meadows

Area

The habitat has decreased over the most recent reporting cycle due to natural processes. This is consistent with an Area assessment of Favourable. The loss of area due to natural fluctuations between **1330 Atlantic salt meadows**, **1410 Mediterranean saltmarsh** and reed beds has been very small (0.01 ha). The trend is stable.

Structure and Functions

Four saltmarsh community types were recorded during the surveys: SM2a *Puccinellia maritima*–*Glaux maritima* saltmarsh; SM3a *Plantago maritima*–*Armeria maritima* saltmarsh; SM4b *Festuca rubra*–*Juncus gerardii* saltmarsh; SM6b *Agrostis stolonifera*–*Triglochin maritimum* saltmarsh.

No criteria failed in the Structure and Functions assessment, so they were assessed as Favourable. Since, during the SMP11 Structure and Functions were assessed as Unfavourable - Inadequate, the trend is therefore increasing.

Future Prospects

High-intensity, negative impacts corresponded to car parking and offroad driving (affecting only 1% of the habitat's area), while overgrazing (affecting about 80% of the habitat's area) was recorded as medium-intensity, negative impact. Future Prospects were therefore assessed as Unfavourable - Inadequate, and the trend was assessed as 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 out of three parameters was assessed as Unfavourable - Inadequate, the overall conservation assessment for **1330 Atlantic salt meadows** at 17.01 Lunnyagh salt marshes was Unfavourable - Inadequate and the trend is stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

Since 10% of **1330 Atlantic salt meadows** was affected by several impacts (mainly overgrazing), this area was considered to be in poor condition. The remaining 90% of the habitat was considered to be in good condition.

1410 Mediterranean saltmarsh

Area

The habitat has expanded over the most recent reporting cycle due to natural processes. There has been no indication of change due to human activities. This is consistent with an Area assessment of Favourable and the trend is stable.

Structure and Functions

No criteria failed in the Structure and Functions assessment, so the Structure and Functions were assessed as Favourable. Since, during the SMP11 Structure and Functions were assessed as Unfavourable - Inadequate, the trend is therefore increasing.

Future Prospects

Overgrazing had been affecting this habitat, as noted before, but during CHNW21 it has been recorded as a medium-intensity negative impact on 1% of the habitat's area only. Future Prospects were therefore assessed as Favourable, and the trend was assessed as increasing.

Conservation assessment

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

- Area: Favourable (stable)

- Structure and Functions: Favourable (increasing)
- Future Prospects: Favourable (increasing)

Because all of the three parameters were assessed as Favourable, the overall conservation assessment for **1410 Mediterranean saltmarsh** at 17.01 Lunnagh salt marshes is Favourable and the trend is improving.

Overall Conservation Status: Favourable (improving)

Condition of the habitat by area

100% of **1410 Mediterranean saltmarsh** was considered to be in good condition.

Site 17 Subsite 1 Appendices

Appendix 1 Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1310	NS	NS	0.011	0.635
1330	NS	NS	26.222	24.103
1410	NS	NS	3.322	4.340

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)
1310	0.635	NS	NS	0	0
1330	24.178	NS	NS	0	0
1410	3.324	NS	NS	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>Atriplex prostrata</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>Limonium humile</i>	
1330	<i>Plantago maritima</i>	
1330	<i>Puccinellia maritima</i>	
1330	<i>Salicornia species</i>	
1330	<i>Spergularia marina</i>	
1330	<i>Spergularia media</i>	
1330	<i>Suaeda 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>Plantago maritima</i>	
1410	<i>Triglochin maritimum</i>	

Structure and Functions Assessment Criteria

Habitat	Indicator	Pass/Fail
1330	Positive indicator species	Pass
1330	Vegetation height – Standard deviation	Pass
1330	Vegetation height – Average height	Pass
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
1310	PX04							
1330	PA07	Overgrazing and trampling (sheep)	Medium	Negative	Inside	Ongoing	Stable	80.0
1330	PF05	Car parking and offroad driving	High	Negative	Inside	Ongoing	Stable	1.0
1330	PF13	Drainage	Low	Neutral	Inside	Ongoing	Stable	0.5
1330	PF15	Rock armour	High	Neutral	Inside	Ongoing	Stable	Unknown
1410	PA07	Overgrazing (sheep)	Medium	Negative	Inside	Ongoing	Stable	1.0
1410	PF13	Drainage	Low	Neutral	Inside	Ongoing	Stable	1.0

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	10	90
1410	0	100