

Site 8 – Killala Bay

Site description

Killala Bay is a large size site (486 ha) located in Co. Mayo. It includes the Killala Bay/Moy Estuary SAC (SAC 000458) and is adjacent to the Killala Bay/Moy Estuary (SPA 004036). Some polygons are located outside of the SAC but are mainly not listed as Annex I habitat with few exceptions.

Based on the currently available mapping, eight coastal Annex I habitats occur within Killala Bay/Moy Estuary SAC and seven of them are listed as Qualifying Interests (Table 1).

Table 1. Annex I habitats present at Killala Bay/Moy Estuary 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	0.798	Yes
1310 <i>Salicornia</i> flats	0.558	Yes
1330 Atlantic salt meadows	50.103	Yes
1410 Mediterranean saltmarsh	10.691	No
2110 Embryonic shifting dunes	3.526	Yes
2120 Marram dunes (white dunes)	9.174	Yes
*2130 Fixed dunes (grey dunes)	254.829	Yes
2190 Humid dune slacks	5.855	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
1410	Yes	0.026	PM07	Reed and large sedge swamps (FS1)
*2130	Yes	0.085	PE01	Buildings and artificial surfaces (BL3)

Field data were recorded from 2 sub-sites:

- Bartragh Island (168 ha)
- Rusheens (3.7 ha)

Conservation assessments were carried out within sub-site 1 and 2 occupying a total area of 171.7 ha (Table 3). 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 Killala Bay

Subsite	Habitat	Area	Structure and Functions	Future Prospects	Overall assessment
8.01 Bartragh Island	1210	Favourable (Stable)	Favourable (Stable)	Favourable	Favourable (Stable)
8.01 Bartragh Island	1310	Favourable (Stable)	NA (NA)	Favourable	NA (NA)
8.01 Bartragh Island	1330	Favourable (Stable)	Unfavourable - Inadequate (Stable)	Unfavourable - Inadequate	Unfavourable - Inadequate (Stable)
8.01 Bartragh Island	1410	Favourable (Stable)	NA (NA)	Favourable	NA (NA)

8.01 Bartragh Island	2110	Favourable (Stable)	Favourable (Stable)	Favourable	Favourable (NA)
8.01 Bartragh Island	2120	Favourable (Stable)	Favourable (Stable)	Favourable	Favourable (Stable)
8.01 Bartragh Island	*2130	Favourable (Stable)	Unfavourable - Inadequate (Decreasing)	Unfavourable - Bad	Unfavourable - Bad (Deteriorating)
8.01 Bartragh Island	2190	Favourable (Stable)	Favourable (Stable)	Favourable	Favourable (Stable)
8.02 Rusheens	1330	Favourable (Stable)	Unfavourable - Inadequate (Stable)	Unfavourable - Inadequate	Unfavourable - Inadequate (Stable)
8.02 Rusheens	1410	Favourable (Stable)	Favourable (Increasing)	Favourable	Favourable (Improving)

Sub-site 1 Bartragh Island

Bartragh Island is an isolated site located off the coast of Co. Mayo, near Killala. Most of the island is composed of sand dune habitats (about 131 ha) although this is not the total land cover for the island (Delaney et al., 2013). Much of the southern portion of the island is composed of saltmarsh that covers 31 ha (Brophy et al., 2019).

There is a disused residence on the island and, although the site is used as an amenity, the number of visitors is limited since access is by boat only. The land is mainly used as pasture for sheep (Delaney et al., 2013). Visitor numbers are low, although there is a barbecue site, maintained by a local angling club, at the eastern end, and evidence of camping sporadically throughout the island (CMP, 2006).

Summary Information

Survey Date: 2 August 2023

Water Framework Directive Waterbody: Moy estuary

Previous survey identifiers: CMP131, SMP0023

Current survey details:

Table 4: Current survey details for Annex I habitats at Bartragh Island

Habitat Code	Area	Monitoring stops
1210 Drift line vegetation	0.798	5
1310 <i>Salicornia</i> flats	0.270	0
1330 Atlantic salt meadows	28.262	8
1410 Mediterranean saltmarsh	0.113	0
2110 Embryonic shifting dunes	2.720	8
2120 Marram dunes (white dunes)	3.942	8
*2130 Fixed dunes (grey dunes)	111.171	16
2190 Humid dune slacks	1.989	8

1210 Drift line vegetation

Area

The habitat **1210 Drift line vegetation** has decreased from 4.55 ha to 0.80 ha over the most recent reporting cycle due to natural processes of erosion. Area was assessed as Favourable with a stable trend.

Structure and Functions

Five monitoring stops have been recorded and no indicator have failed the assessment. This is consistent with a Structure and Functions assessment of Favourable and compared to SDM, the trend is stable.

Future Prospects

The only pressure that has been recorded is natural erosion, which was a high intensity neutral pressure. Future Prospects were therefore assessed as Favourable, and the trend is stable compared to SDM.

Conservation assessment

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

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

Since all parameters were assessed as Favourable, the overall conservation assessment for **1210 Drift line vegetation** at Bartragh Island was Favourable. Given that the overall conservation status was Favourable during SDM, the overall trend is stable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

100% of habitat was considered to be in good condition.

1310 Salicornia flats

Area

During SMP11 the area of **1310 Salicornia flats** was 0.03 ha while during CHNW21 it increased to 0.27 ha. This is consistent with an Area assessment of Favourable and, compared to the SMP report assessment, the trend is stable.

Structure and Functions

The habitat **1310 Salicornia flats** has been recorded in the site during CHNW21 but the habitat area was below the minimum assessment area. For this reason, the Structure and Functions were not assessed.

Future Prospects

No human activities have been detected in the habitat and no evidence of disturbance has been recorded. For this reason, Future Prospects were assessed as Favourable and the trend is stable compared to SMP.

Conservation assessment

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

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

No monitoring stop was recorded in the habitat, so Structure and Functions couldn't be assessed and the overall conservation assessment and the trend for **1310 Salicornia flats** at Bartragh Island was considered not assessable.

Overall Conservation Status: NA (NA)

Condition of the habitat by area

The condition by area couldn't be assessed because Structure and Functions of the habitat were not assessed for CHNW21.

1330 Atlantic salt meadows

Area

The habitat **1330 Atlantic salt meadows** increased from 28.1 ha to 28.3 ha since SMPII due to natural processes, but during SMP the area of the habitat was 29.11 ha. These variations could have been due to natural processes or differences in mapping methods. This is consistent with an Area assessment of Favourable, and the trend is therefore stable compared to SMP.

Structure and Functions

Eight monitoring stops have been recorded in **1330 Atlantic salt meadows**, where a single indicator have failed the assessment. The average vegetation height was never greater than 15 cm and the standard deviation of median plant height was 3.26 rather than 5. Structure and Functions of **1330 Atlantic salt meadows** were therefore assessed as Unfavourable – Inadequate, confirming results of last survey, and the trend was considered stable compared to SMP. The site was tightly grazed during SMPII, but then grazing on the island ceased and during CHNW21 no grazing animals were observed. However, the effect of this was not yet detectable on the saltmarsh, since this habitat probably grows too slow to observe these dynamics in a few years.

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

Future Prospects

The inappropriate management of grazing resulted in an overgrazing situation followed by an interruption. Presence of tracks and footpaths that were assessed as a low intensity negative pressure were also considered. Natural erosion was considered a high neutral pressure to the habitat. 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: 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 Bartragh Island was Unfavourable-Inadequate. Compared to SMP, the overall trend is therefore stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

The sward had been tightly grazed and certain species were almost entirely grazed out. At the moment of monitoring, grazing was absent but the vegetation hadn't grown up enough yet. Furthermore, the interruption of grazing hadn't been gradual and some areas had instead started to be undergrazed. 25% of the habitat was therefore considered to be in poor condition. The remaining 75% was in good condition.

1410 Mediterranean saltmarsh

Area

During SMP11 the area of **1410 Mediterranean saltmarsh** was 0.12 ha, while during CHNW21 it decreased to 0.11 ha due to differences in interpretation and mapping method. No Area loss caused by human activities has been recorded. This is consistent with an Area assessment of Favourable and, compared to SMP the trend is stable.

Structure and Functions

Structure and Functions of the habitat haven't been assessed during CHNW21, since no survey plots were recorded during CHNW21.

Future Prospects

Vehicle tracks have been recorded in a single place on-site, were considered a low negative pressure and its impact on the conservation status of the habitat was not relevant. For this reason, Future Prospects were assessed as Favourable and the trend is stable compared to SMP.

Conservation assessment

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

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

No monitoring stop was recorded in the habitat, so Structure and Functions were not assessable and so weren't also the overall conservation assessment and the relative trend for **1410 Mediterranean saltmarsh** at Bartragh Island.

Overall Conservation Status: NA

Condition of the habitat by area

The conditions by area couldn't be assessed because Structure and Functions of the habitat were not assessed during CHNW21.

2110 Embryonic shifting dunes

Area

The habitat **2110 Embryonic shifting dunes** was not recorded during SDM because it disappeared due to natural erosion and succession to **2120 Marram Dunes (white dunes)**; during CHNW21 area increased to 2.72 ha due to the erosion and regression of **2120 Marram Dunes (white dunes)** in the north-east side of the island. This is consistent with an Area assessment of Favourable and the trend is stable compared to CMP.

Structure and Functions

Eight monitoring stops have been recorded and no indicator have failed the assessment. This is consistent with a Structure and Functions assessment of Favourable and, compared to CMP, the trend is stable.

Future Prospects

No pressures or threats were recorded and therefore Future Prospects were assessed as Favourable. The trend, compared to CMP, was assessed as stable.

Conservation assessment

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

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

Since all parameters were assessed as Favourable, the overall conservation assessment for **2110 Embryonic shifting dunes** at Bartragh Island was Favourable. The overall trend was not assessed.

Overall Conservation Status: Favourable (NA)

Condition of the habitat by area

100% of habitat was considered to be in good condition.

2120 Marram dunes (white dunes)

Area

The habitat **2120 Marram dunes (white dunes)** has decreased from 9.28 ha to 3.94 ha over the most recent reporting cycle due to natural process of erosion. Formerly marram dune areas have been almost completely eroded and replaced by littoral sediments north and west of the island, while in the north-east, part of the dune has been eroded and replaced by **2120 Embryonic shifting dunes**. Even if area has decreased, there was no reason to believe that the loss has been due to human activities, therefore area assessment was Favourable and the trend is stable compared to SDM.

Structure and Functions

Eight monitoring stops have been recorded and no indicator has failed the assessment. This is consistent with a Structure and Functions assessment of Favourable. Compared to SDM, the trend is stable.

Future Prospects

Natural erosion was recorded on 50% of the habitat but it was considered as a neutral pressure since it was not aided by human activities. For this reason, Future Prospects were assessed as Favourable, and the trend, compared to the SDM survey, was assessed as stable.

Conservation assessment

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

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

Since all parameters were assessed as Favourable, the overall conservation assessment for **2120 Marram dunes (white dunes)** at Bartragh Island was Favourable. Considering the SDM survey assessment, the overall trend is stable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

Because of the considerable portion of habitat affected by natural erosion, 5% of the habitat was considered to be in poor condition, while the remaining 95% was in good condition.

*2130 Fixed dunes (grey dunes)

Area

The area of ***2130 Fixed dunes (grey dunes)** has decreased from 116.4 ha to 111.2 ha since SDM. The loss could be in part ascribed to natural process of erosion and partially to differences in mapping method. This is consistent with an Area assessment of Favourable. Compared to SDM, the trend is therefore assessed as stable.

Structure and Functions

Sixteen monitoring stops have been recorded and two indicators have failed the assessment. Combined cover of all negative species and shrubs across the habitat was more than 5%. Moreover, vegetation mean height was always over the threshold of 10 cm. Considering the last report which stated that all indicators had passed the assessment, negative species were only occasionally found and 75% of plots presented a mean of vegetation height between 2 and 10 cm, the conditions of the habitat seemed to have worsened. This is consistent with a Structure and Functions assessment of Unfavourable - Inadequate and the trend, compared to the SDM assessment, is decreasing.

Future Prospects

During SDM, grazing animals were still present on the island and the vegetation structure was in good condition. As showed in the Structure and Functions assessment, the abandonment of grassland management has led to an alteration of vegetation structure (that have been assessed as a medium intensity negative pressure on the entire site) and to an increase in the frequency of negative species. Other negative pressures recorded for the habitat included bracken encroachment on a small proportion of the site, pedestrian tracks and walking on the same locations and presence of some individuals of the non-native species *Acer pseudoplatanus*. In the last report the situation was very different because the non-intensive grazing had a positive impact on 100% of the habitat, bracken was considered a neutral pressure because it wasn't abundant and instead added structural diversity to the habitat. With the abandonment of grazing, positive impacts have ceased to make their contribution and bracken seemed to have increased in thickness. Therefore, Future Prospects were assessed as Unfavourable - Bad and compared to SDM, the trend is decreasing. Other pressures recorded include natural erosion and encroachment of *Rosa spinosissima*, however they have been considered as neutral.

Conservation assessment

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

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

Since at least one of the three parameters was assessed as Unfavourable - Bad, the overall conservation assessment for ***2130 Fixed dunes (grey dunes)** at Bartragh Island was Unfavourable - Bad. Compared with SDM, the overall trend is therefore deteriorating.

Overall Conservation Status: Unfavourable - Bad (deteriorating)

Condition of the habitat by area

Considering the impact of the abandonment of management and alteration of vegetation structure, 25% of the habitat was deemed to be in poor condition, while the remaining 75% was in good condition.

2190 Humid dune slacks

Area

The area of **2190 Humid dune slacks** has increased from 1.7 ha to 2.0 ha since SDM. This was probably due to differences in interpretation and mapping methods. This is consistent with an Area assessment of Favourable and the trend is stable.

Structure and Functions

Eight monitoring stops have been recorded, and all the indicators have passed the assessment. This is consistent with a Structure and Functions assessment of Favourable. In the last report grazing had a positive effect on Structure and Functions, however its interruption hasn't led to any detectable alteration of vegetation structure on this habitat. The trend is assessed as stable, compared to SDM.

Future Prospects

No pressure has been recorded on this habitat. This is consistent with an assessment of Favourable and the trend is assessed as stable compared to SDM.

Conservation assessment

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

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

Since all parameters were assessed as Favourable, the overall conservation assessment for **2190 Humid dune slacks** at Bartragh Island was Favourable. Compared to SDM, the trend is stable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

Considering the conspicuous diffusion of shrubs in the dune slacks, 5% of the habitat was considered to be in poor condition, while the remaining 95% in good condition.

Site 8 Sub-site 1 Bartragh Island: Appendix

Appendix 1 Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1210	0.580	4.550	NS	0.798
1310	0.257	NS	0.030	0.270
1330	29.601	NS	28.096	28.262
1410	0.012	NS	0.127	0.113
2110	0.750	0.000	NS	2.720
2120	7.520	9.280	NS	3.942
2130	119.580	116.440	NS	111.171
2190	1.670	1.670	NS	1.989

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)
1210	0.580	0	0	NS	0
1310	0.257	0	NS	0	0
1330	29.601	0	NS	0	0
1410	0.012	0	NS	0	0
2110	0.750	0	NR	NS	0
2120	7.520	0	0	NS	0
*2130	119.580	0	0	NS	0
2190	1.670	0	0	NS	0

Appendix 2. Structure and functions

Negative indicator species and non-native invasive species

Habitat	Species name	Cover (%)
2120	<i>Senecio jacobaea</i>	0.1
2120	<i>Tussilago farfara</i>	11.7
*2130	<i>Acer species</i>	1.0
*2130	<i>Senecio jacobaea</i>	1.1
2190	<i>Arrhenatherum elatius</i>	1.0
2190	<i>Lolium perenne</i>	0.1

Positive indicator species and notable species

Habitat	Species name	Cover (%) (if recorded)
1210	<i>Atriplex species</i>	
1210	<i>Cakile maritima</i>	
1210	<i>Salsola kali</i>	
1330	<i>Agrostis stolonifera</i>	
1330	<i>Armeria maritima s. maritima</i>	
1330	<i>Aster tripolium</i>	
1330	<i>Carex extensa</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 europaea</i>	
1330	<i>Spergularia media</i>	
1330	<i>Suaeda maritima</i>	
1330	<i>Triglochin maritimum</i>	
2110	<i>Elytrigia juncea</i>	
2110	<i>Leymus arenarius</i>	
2120	<i>Ammophila arenaria</i>	
2120	<i>Elytrigia juncea</i>	
2120	<i>Leymus arenarius</i>	
*2130	<i>Aira praecox</i>	
*2130	<i>Anthyllis vulneraria</i>	
*2130	<i>Carex arenaria</i>	
*2130	<i>Carex flacca</i>	
*2130	<i>Crepis capillaris</i>	
*2130	<i>Euphrasia officinalis ag.</i>	
*2130	<i>Festuca rubra</i>	
*2130	<i>Galium verum</i>	
*2130	<i>Homalothecium lutescens</i>	
*2130	<i>Hypnum cupressiforme s.s.</i>	
*2130	<i>Hypochaeris radicata</i>	
*2130	<i>Linum catharticum</i>	
*2130	<i>Lotus corniculatus</i>	
*2130	<i>Luzula campestris</i>	

*2130	<i>Peltigera species</i>	
*2130	<i>Phleum arenarium</i>	
*2130	<i>Pilosella officinarum</i>	
*2130	<i>Plantago lanceolata</i>	
*2130	<i>Pleurozium schreberi</i>	
*2130	<i>Poa pratensis</i>	
*2130	<i>Polygala serpyllifolia</i>	
*2130	<i>Rhytidiadelphus squarrosus</i>	
*2130	<i>Rhytidiadelphus triquetrus</i>	
*2130	<i>Scleropodium purum</i>	
*2130	<i>Syntrichia ruralis</i>	
*2130	<i>Thymus polytrichus</i>	
*2130	<i>Trifolium repens</i>	
*2130	<i>Veronica chamaedrys</i>	
*2130	<i>Viola riviniana</i>	
2190	<i>Agrostis stolonifera</i>	
2190	<i>Calliergon cuspidatum</i>	
2190	<i>Campylium stellatum</i>	
2190	<i>Carex arenaria</i>	
2190	<i>Carex flacca</i>	
2190	<i>Carex nigra</i>	
2190	<i>Dactylorhiza species</i>	
2190	<i>Epipactis palustris</i>	
2190	<i>Festuca rubra</i>	
2190	<i>Hydrocotyle vulgaris</i>	
2190	<i>Juncus articulatus</i>	
2190	<i>Lotus corniculatus</i>	
2190	<i>Mentha aquatica</i>	
2190	<i>Potentilla anserina</i>	
2190	<i>Salix repens v. argentea</i>	

Structure and Functions Assessment Criteria

Habitat	Indicator	Pass/Fail
1210	Positive indicator species	Pass
1210	Negative indicator species	Pass
1210	Non-native species	Pass
1210	Notable/rare species	Pass
1210	Interference with the sediment dynamics	Pass
1210	Damage due to disturbance	Pass
1330	Positive indicator species	Pass
1330	Vegetation height – Standard deviation	Fail
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	Pass

	area	
2110	Positive indicator species	Pass
2110	Negative indicator species	Pass
2110	Non-native species	Pass
2110	Flowering or fruiting of positive indicator species	Pass
2110	Notable/rare species	Pass
2110	Interference with the sediment dynamics	Pass
2110	Damage due to disturbance	Pass
2120	Positive indicator species	Pass
2120	Negative indicator species	Pass
2120	Non-native species	Pass
2120	Flowering or fruiting of positive indicator species	Pass
2120	Notable/rare species	Pass
2120	Interference with the sediment dynamics	Pass
2120	Damage due to disturbance	Pass
*2130	Positive indicator species	Pass
*2130	Negative indicator species	Fail
*2130	Non-native species	Pass
*2130	Cover of trees and scrub other than <i>Juniperus communis</i>	Pass
*2130	Trees or saplings from adjacent plantations	Pass
*2130	Height of vegetation	Fail
*2130	Flowering or fruiting of positive indicator species	Pass
*2130	Bare sand	Pass
*2130	Notable/rare species	Pass
*2130	Interference with the sediment dynamics	Pass
*2130	Damage due to disturbance	Pass
2190	Positive indicator species	Pass
2190	Bryophytes	Pass
2190	Cover of <i>Salix repens</i>	Pass
2190	Negative indicator species	Pass
2190	Non-native species	Pass
2190	Cover of scrub	Pass
2190	Forb:grass ratio (mean)	Pass
2190	Bare ground	Pass
2190	Notable/rare species	Pass
2190	Interference with the sediment dynamics	Pass
2190	Damage due to disturbance	Pass

Appendix 3. Impacts and Activities

Impacts recorded

Habitat code	Impact code	Impact description	Relative importance	Influence	Source	Timing	Trend	Area
1210	PM07	Natural erosion	High	Neutral	Inside	Ongoing	Decreasing	50.0
1310	PX04							
1330	PA05	Undergrazing	High	Negative	Inside	Future	Decreasing	100.0
1330	PA07	Overgrazing	Medium	Negative	Inside	Past/suspended	Stable	100.0
1330	PF05	Tracks and footpaths	Low	Negative	Inside	Ongoing	Stable	0.5
1330	PM07	Natural erosion	High	Neutral	Inside	Ongoing	Decreasing	2.0
1410	PF05	Vehicle track	Low	Negative	Inside	Ongoing	Stable	0.5
2110	PX04							
2120	PM07	Natural erosion	High	Neutral	Inside	Ongoing	Decreasing	50.0
*2130	PA05	Undergrazing	Medium	Negative	Inside	Ongoing	Decreasing	100.0
*2130	PF05	Pedestrian tracks and walking	Low	Negative	Inside	Ongoing	Stable	1.0
*2130	PI02	Acer pseudoplatanus	High	Negative	Inside	Ongoing	Stable	0.1
*2130	PI03	Pteridium aquilinum	High	Negative	Inside	Ongoing	Decreasing	5.0
*2130	PM07	Natural erosion and encroachment (Rosa spinosissima)	High	Neutral	Inside	Ongoing	Decreasing	5.0
2190	PX04							

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 required to regulate grazing	28.2616	Absent	Medium-term results	Restore the structure & functions, including the status of typical species	Inside
*2130	CA04	Measure required to reintroduce grazing	111.1713	Absent	Medium-term results	Restore the structure & functions, including the status of typical species	Inside
*2130	CI05	Measure required to control or eradicate Pteridium aquilinum	5.5586	Absent	Short-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
1210	0	100
1330	25	75
2110	0	100
2120	5	95
*2130	25	75
2190	5	95

Sub-site 2 Rusheens

Rusheens is a small saltmarsh site covering 4 ha, fringing an inlet within Killala Bay, Co. Mayo. It is located on the western side of Killala Bay near the mouth of the Moy River in Co. Mayo. The site is 4 km south-east of Killala Town. The site supports **1330 Atlantic salt meadows** and **1410 Mediterranean saltmarsh**.

Summary Information

Survey Date: 4 August 2023

Water Framework Directive Waterbody: Moy Estuary

Previous survey identifiers: SMP0025

Current survey details:

Table 5: Current survey details for Annex I habitats at Rusheens

Habitat Code	Area	Monitoring stops
1330 Atlantic salt meadows	1.340	4
1410 Mediterranean saltmarsh	1.609	8

1330 Atlantic salt meadows

Area

The habitat **1330 Atlantic salt meadows** has decreased from 1.37 ha to 1.34 ha since SMPII mostly due to differences in interpretation. This is consistent with an Area assessment of Favourable. Compared to SMP, the trend is therefore stable.

Structure and Functions

Four monitoring stops have been recorded, and a single indicator has failed the assessment. The standard deviation of median plants height was 2.23 rather than 5. During SMPII, **1330 Atlantic salt meadows** were assessed as Unfavourable - Inadequate due to the impact of sheep grazing that was consistent with the low variability of the height of vegetation. This is consistent with a Structure and Functions assessment of Unfavourable - Inadequate and the trend is considered stable.

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

Future Prospects

The entire habitat was impacted by overgrazing: this was supported by the height of vegetation of the monitoring stops which was lower than 15 cm in all plots. Cattle and sheep grazing therefore had a negative impact on the habitat Structure. This is consistent with the findings of the last report and for this reason, Future Prospects were assessed as Unfavourable - Inadequate and the trend is considered stable.

The presence of the non-native species *Acer pseudoplatanus* was also recorded on the strips of **1330 Atlantic salt meadows** located in the northern part of the site. Nonetheless, this was nearly negligible because there were just a few individuals. Some old deep tracks have been recorded in the northern strip too but they were impacting a very small proportion of the site.

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 Rusheens was Unfavourable - Inadequate. Compared to SMP, the overall trend is therefore stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

Considering the results of Structure and Functions assessment and the pressures observed, all the site was impacted by a low intensity grazing pressure. For this reason, 25% of the habitat was considered to be in poor condition, while the remaining 75% was in good condition.

1410 Mediterranean saltmarsh

Area

The habitat **1410 Mediterranean saltmarsh** has remained stable over the most recent reporting cycle. A small patch on the north-west part of the site has been lost due to the encroachment of reeds but this was probably due to differences in interpretation or natural processes. This is consistent with an Area assessment of Favourable. Compared to SMP, the trend is therefore stable.

Structure and Functions

Eight monitoring stops have been recorded, and no indicator failed the assessment. During SMP II Structure and Functions were assessed as Unfavourable due to the presence of 10% cover of disturbed ground in one stop caused by poaching and grazing. The number of monitoring stops surveyed on **1410 Mediterranean saltmarsh** in the last report was only one according to available data. For this reason, the result could differ because of the scarcity of data. Anyway, given that all criteria passed, Structure and Functions for Rusheens were assessed as Favourable and the trend compared to SMP is increasing.

Future Prospects

A low intensity pressure due to trampling involving a small portion of the site was the only negative pressure recorded for this habitat. Future Prospects were therefore assessed as Favourable. Taking into account the Structure and Functions assessment, the trend was assessed as increasing, compared to SMP.

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)

Since all parameters were assessed as Favourable, the overall conservation assessment for **1410 Mediterranean saltmarsh** at Rusheens was Favourable. Compared to SMP, the overall trend is therefore improving.

Overall Conservation Status: Favourable (improving)

Condition of the habitat by area

Considering the low pressure due to trampling, 1% of the habitat was considered to be in poor condition. The remaining 99% was in good condition.

Site 8 Sub-site 2 Rusheens: Appendix

Appendix 1 Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1330	1.244	NS	1.369	1.340
1410	2.006	NS	1.605	1.609

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	1.244	0	NS	0	0
1410	2.006	0	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> s. <i>maritima</i>	
1330	<i>Aster tripolium</i>	
1330	<i>Atriplex prostrata</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>Spergularia media</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>Oenanthe lachenalii</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	Fail
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	Low	Negative	Inside	Ongoing	Stable	100.0
1330	PA22	Old drainage	Low	Neutral	Inside	Ongoing	Stable	0.5
1330	PI02	Acer pseudoplatanus	High	Negative	Inside	Ongoing	Stable	0.1
1410	PA07	Trampling	Low	Negative	Inside	Ongoing	Stable	1.0
1410	PA22	Old drainage	Low	Neutral	Inside	Ongoing	Stable	0.5

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 required to regulate grazing	1.3397	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	25	75
1410	1	99