

Site 4 - Blacksod

Site description

Blacksod is a large site located 4.7 km northwest of Gweesalia, county Mayo, on the eastern shores of Blacksod Bay. The site forms part of the Mullet/Blacksod Bay Complex SAC (SAC 000470). All the sub-sites are within the SAC boundary.

Based on the currently available mapping, nine coastal Annex I habitats occur within Mullet/Blacksod Bay Complex SAC, three of which are listed as Qualifying Interests (Table 1).

Table 1. Annex I habitats present at Mullet/Blacksod Bay Complex SAC, the area they occupy (based on the most recent mapping available) and status as a Qualifying Interest of the SAC. An asterisk denotes a priority Annex I habitat and habitats that were not the target of this survey are excluded.

Habitat Code	Area (ha)	Qualifying Interest?
1210 Drift line vegetation	0.083	No
1220 Perennial vegetation of stony banks	0.183	No
1330 Atlantic salt meadows	51.704	No
1410 Mediterranean saltmarsh	6.454	No
2110 Embryonic shifting dunes	1.290	No
2120 Marram dunes (white dunes)	8,949	Yes
*2130 Fixed dunes (grey dunes)	63.923	Yes
2190 Humid dune slacks	1.238	No
*21A0 Machairs	133.108	Yes

The main land use is as pasture for sheep and cattle.

Habitat losses were recorded due to small areas being converted to artificial surfaces (Table 2).

Table 2. Habitat loss (in hectares) recorded during the desk and field surveys.

Habitat	Within SAC?	Loss (ha)	Impact code	New habitat
*21A0	Yes	0.004	PE01	Buildings and artificial surfaces (BL3)

Conservation assessments were carried out within one sub-site occupying a total area of 119 ha (Table 3). Six habitats (**1210 Drift line vegetation**, **1220 Perennial vegetation of stony banks**, **2110 Embryonic shifting dunes**, **2120 Marram dunes (white dunes)**, ***2130 Fixed dunes (grey dunes)**, **2190 Humid dune slacks**) were in Favourable condition and the remainder (***21A0 Machairs**) was in Unfavourable-Inadequate condition, mainly due to overgrazing and/or undergrazing by cattle.

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

Sub-site	Habitat	Area	Structure and Functions	Future Prospects	Overall assessment
4.01 Doo Lough	1210	Favourable (Stable)	Favourable (Stable)	Favourable	Favourable (Stable)
4.01 Doo Lough	1220	Favourable (Stable)	Favourable (Increasing)	Favourable	Favourable (Improving)
4.01 Doo Lough	2110	Favourable	Favourable (Stable)	Favourable	Favourable

		(Stable)			(Stable)
4.01 Doo Lough	2120	Favourable (Stable)	Favourable (Stable)	Favourable	Favourable (Stable)
4.01 Doo Lough	*2130	Favourable (Stable)	Unfavourable - Bad (Decreasing)	Unfavourable - Inadequate	Unfavourable - Bad (Deteriorating)
4.01 Doo Lough	2190	Favourable (Stable)	Favourable (Stable)	Favourable	Favourable (Stable)
4.01 Doo Lough	*21A0	Unfavourable - Inadequate (Decreasing)	Unfavourable - Inadequate (Stable)	Unfavourable - Inadequate	Unfavourable - Inadequate (Stable)

Sub-site 1. Doo Lough

Summary Information

Survey Date: 09 July 2023

Water Framework Directive Waterbody: not applicable

Previous survey identifiers: CMP120

Current survey details:

Table 4: Current survey details for Annex I habitats at Doo Lough

Habitat	Area	Monitoring stops
1210 Drift line vegetation	0.083	2
1220 Perennial vegetation of stony banks	0.183	4
2110 Embryonic shifting dunes	0.829	6
2120 Marram dunes (white dunes)	4.885	8
*2130 Fixed dunes (grey dunes)	44.187	12
2190 Humid dune slacks	1.238	4
*21A0 Machairs	63.743	12

1210 Drift line vegetation

Area

The habitat has reduced over the most recent reporting cycle due to natural processes. This is consistent with an Area assessment of Favourable. During the CMP the habitat was not present, then it increased during SDM, but now it has reduced. This fluctuations are natural processes of this habitat and there are no signs of habitat loss due to human activities, therefore the trend is stable.

Structure and Functions

No criteria failed in the Structure and Functions assessment, so the Structure and Functions were Favourable. The habitat was not found at Doo Lough during CMP, and no assessment was carried out on it. During SDM it was assessed as Favourable, the trend is therefore stable.

Future Prospects

During SDM, coastal defences were recorded as a negative impact. The structures were still present during CHNW21, but the pressure was recorded as a low intensity neutral impact. Future Prospects were therefore assessed as Favourable with a stable trend.

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)

All three parameters were assessed as Favourable, and the conservation status of **1210 Drift line vegetation** at 4.01 Doo Lough is Favourable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

During CHNW21 100% of the habitat was considered to be in good condition.

1220 Perennial vegetation of stony banks

Area

The habitat has reduced from 0.42 ha recorded for SDM to 0.183 ha due to natural processes. There was no indication that the area of the habitat had been affected by human activities. Area was assessed as Favourable and the trend is stable compared to SDM.

Structure and Functions

1220 Perennial vegetation of stony banks present at Doo Lough is composed exclusively by *Honckenya peploides* dominated communities. No notable species were recorded. No criteria failed in the Structure and Functions assessment, so the Structure and Functions were Favourable. Because **1220 Perennial vegetation of stony banks** was assessed as Unfavourable - Inadequate during SDM, the trend is increasing.

Future Prospects

During SDM, coastal defences were recorded as a negative impact. The structures were still present during CHNW21, but the pressure was recorded as a low intensity neutral impact. Future Prospects were therefore assessed as Favourable, and the trend was assessed as increasing, because, during SDM, Future Prospects were assessed as Unfavourable - Inadequate.

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 **1220 Perennial vegetation of stony banks** at 4.01 Doo Lough is Favourable. Because the overall assessment was Unfavourable – Inadequate during SDM, the trend is improving.

Overall Conservation Status: Favourable (improving)

Condition of the habitat by area

During CHNW21 100% of the habitat was considered to be in good condition.

2110 Embryonic shifting dunes

Area

The habitat has reduced from 2.53 ha recorded for SDM to 0.829 ha due to natural processes. There was no indication that the area of the habitat had been affected by human activities. This is consistent with an Area assessment of Favourable. Area was assessed as Favourable during SDM so on the trend is stable.

Structure and Functions

No criteria failed in the Structure and Functions assessment, so the Structure and Functions were Favourable. **2110 Embryonic shifting dunes** was assessed as Favourable during SDM, the trend is therefore stable.

Future Prospects

During SDM, coastal defences were recorded as a negative impact. The structures were still present during CHNW21 but the pressure was recorded as a low intensity neutral impact. 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: Favourable (stable)
- Future Prospects: Favourable (stable)

Because all of the three parameters were assessed as Favourable, the overall conservation assessment for **2110 Embryonic shifting dunes** at 4.01 Doo Lough is Favourable and the trend is stable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

During CHNW21 100% of the habitat was considered to be in good condition.

2120 Marram dunes (white dunes)

Area

The area of **2120 Marram dunes (white dunes)** increased from 3.56 ha to 4.89 ha since SDM. This increase is due to natural processes of deposition. This is consistent with an Area assessment of Favourable. Because Area was assessed as Favourable during SDM, the trend was assessed as stable during CHNW21.

Structure and Functions

No criteria failed in the Structure and Functions assessment, so the Structure and Functions were Favourable. Because **2120 Marram dunes (white dunes)** was assessed as Favourable during SDM, the trend is stable.

Future Prospects

Natural erosion occurred but it had a neutral impact over 2.68 hectares. 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: Favourable (stable)
- Future Prospects: Favourable (stable)

Because all of the three parameters were assessed as Favourable, the overall conservation assessment for **2120 Marram dunes (white dunes)** at 4.01 Doo Lough is Favourable and the trend is stable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

During CHNW21 100% of the habitat was considered to be in good condition.

*2130 Fixed dunes (grey dunes)

Area

The area of ***2130 Fixed dunes (grey dunes)** decreased from 46.35 ha to 44.19 ha between SDM and CHNW21. This decrease is due to natural processes of deposition. This is consistent with an Area assessment of Favourable. Because Area was assessed as Favourable during SDM, the trend is stable.

Structure and Functions

Regarding the presence of positive indicator species, this criterion failed because one stop did not reach the relevant threshold of at least 4 species, containing only *Festuca rubra*. Furthermore, one negative indicator species, such as *Senecio jacobaea*, occurred at a frequency of 83.33% of stops while the threshold is fixed at 60%. Only 8.33% of stops were recorded with an average height between 2 and 10 cm, while the threshold is 30-70%. As these three assessment criteria failed, the Structure and Functions were Unfavourable – Bad during CHNW21. No criteria failed the Structure and Functions assessment habitat during SDM. The trend is therefore decreasing.

Future Prospects

High intensity negative impacts and activities on this habitat include overgrazing and trampling by cattle, which affects 10% of the habitat, and undergrazing. Due to the above-mentioned negative pressures and threats, Future Prospects were therefore assessed as Unfavourable - Inadequate, and the trend was assessed as decreasing.

Conservation assessment

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

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

Because one of the three parameters was assessed as Unfavourable - Bad, the overall conservation assessment for ***2130 Fixed dunes (grey dunes)** at 4.01 Doo Lough is Unfavourable - Bad. Because the overall assessment was Favourable (improving) during SDM, the trend is therefore deteriorating.

Overall Conservation Status: Unfavourable – Bad (Deteriorating)

Condition of the habitat by area

Considering the results of Structure and Functions and several impacts (mainly over and undergrazing), affecting about 6.63 hectares of ***2130 Fixed dunes (grey dunes)**, 30% of habitat area was considered to be in poor condition. The remaining 70% of the habitat was considered to be in good condition.

2190 Humid dune slacks

Area

The area of **2190 Humid dune slacks** increased from 0.54 ha to 1.24 ha between SDM and CHNW21. This change was the result of a different and more accurate mapping technique. This is consistent with an Area assessment of Favourable and the trend is stable compared to SDM.

Structure and Functions

No criteria failed in the Structure and Functions assessment, so the Structure and Functions were Favourable during CHNW21. Since **2190 Humid dune slacks** was assessed as Favourable during SDM, the trend is therefore stable.

Future Prospects

Low intensity negative impacts on this habitat included only overgrazing, but the affected area was very small in extent. 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: Favourable (stable)
- Future Prospects: Favourable (stable)

Because all of the three parameters were assessed as Favourable, the overall conservation assessment for **2190 Humid dune slacks** at 4.01 Doo Lough is Favourable. Because **2190 Humid dune slacks** was assessed as Favourable during SDM, the trend is stable.

Overall Conservation Status: Favourable (stable)

Condition of the habitat by area

During CHNW21 100% of the habitat was considered to be in good condition.

*21A0 Machairs

Area

The area of ***21A0 Machairs** increased from 63.19 ha to 63.74 ha between SDM and CHNW21. Most of these changes were due to natural process or different mapping techniques while a loss of 0.004 ha was due to the construction of a road. This is consistent with an Area assessment of Unfavourable - Inadequate, because the loss by anthropogenic causes is estimated to be less than 1% per year since the SDM. Because Area was assessed as Favourable during SDM, the trend is decreasing.

Structure and Functions

Only one criterion failed during the Structure and Functions assessment: the lowest cover of bryophytes recorded was 0% while the relevant threshold was at least 1% in every stop. As this criterion failed, the Structure and Functions were Unfavourable - Inadequate. During SDM, Structure and Functions were assessed as Unfavourable - Inadequate, therefore the trend is stable.

Future Prospects

High intensity negative impacts recorded at Doo Lough included vehicle tracks, concrete blocks and agricultural structures. Overgrazing (cattle), animal trampling and spreading of problematic native species (*Senecio jacobaea*, *Cirsium* spp, *Rumex* spp.) were recorded as medium intensity negative impacts. Grazing had a positive impact and affected more than 50% of the habitat. 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: Unfavourable - Inadequate (decreasing)
- Structure and Functions: Unfavourable - Inadequate (stable)
- Future Prospects: Unfavourable - Inadequate (stable)

Because all of the three parameters were assessed as Unfavourable - Inadequate, the overall conservation assessment for ***21A0 Machairs** at 4.1 Doo Lough was Unfavourable - Inadequate. Since the overall assessment was Unfavourable - Inadequate (deteriorating) in the previous assessment, the trend is therefore stable.

Overall Conservation Status: Unfavourable - Inadequate (stable)

Condition of the habitat by area

Considering the results of Structure and Functions and overgrazing, undergrazing and offroad driving affecting more than 23 hectares of ***21A0 Machairs**, 25% of the area was considered to be in poor condition. The remaining 75% of the habitat was considered to be in good condition.

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Appendix 1 Area

Total habitat area recorded during reporting cycles to date.

Habitat	2007	2013	2019	2025
1210	0.000	0.230	NS	0.083
1220	0.000	0.420	NS	0.183
2110	0.005	2.530	NS	0.829
2120	4.600	3.560	NS	4.885
2130	44.630	46.350	NS	44.187
2190	1.560	0.540	NS	1.238
21A0	63.400	63.190	NS	63.743

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	0.230	NR	0	NS	0
1220	0.420	NR	0	NS	0
2110	0.005	0	0	NS	0
2120	4.600	0	0	NS	0
*2130	44.630	<0.01	0	NS	0
2190	1.560	0	0	NS	0
*21A0	63.400	0	0	NS	0.01

Appendix 2. Structure and functions

Negative indicator species and non-native invasive species

Habitat	Species name	Cover (%)
2120	<i>Cirsium vulgare</i>	1.0
*2130	<i>Lolium perenne</i>	0.5
*2130	<i>Senecio jacobaea</i>	6.8
2190	<i>Senecio jacobaea</i>	1.0
*21A0	<i>Lolium perenne</i>	3.2
*21A0	<i>Senecio jacobaea</i>	2.0

Positive indicator species and notable species

Habitat	Species name	Cover (%) (if recorded)
1210	<i>Atriplex species</i>	
1210	<i>Honckenya peploides</i>	
1220	<i>Honckenya peploides</i>	12.5
1220	<i>Rumex crispus</i>	3.5
2110	<i>Elytrigia juncea</i>	
2120	<i>Ammophila arenaria</i>	
2120	<i>Elytrigia juncea</i>	
*2130	<i>Agrostis capillaris</i>	
*2130	<i>Anthyllis vulneraria</i>	
*2130	<i>Carex arenaria</i>	
*2130	<i>Carex flacca</i>	
*2130	<i>Crepis capillaris</i>	
*2130	<i>Deschampsia flexuosa</i>	
*2130	<i>Euphrasia officinalis ag.</i>	
*2130	<i>Festuca rubra</i>	
*2130	<i>Galium verum</i>	
*2130	<i>Linum catharticum</i>	
*2130	<i>Lotus corniculatus</i>	
*2130	<i>Luzula campestris</i>	
*2130	<i>Phleum arenarium</i>	
*2130	<i>Pilosella officinarum</i>	
*2130	<i>Plantago lanceolata</i>	
*2130	<i>Poa pratensis</i>	
*2130	<i>Polygala serpyllifolia</i>	
*2130	<i>Rhinanthus minor</i>	
*2130	<i>Rhytidadelphus squarrosus</i>	
*2130	<i>Rhytidadelphus triquetrus</i>	
*2130	<i>Scleropodium purum</i>	
*2130	<i>Thymus polytrichus</i>	
*2130	<i>Trifolium repens</i>	
2190	<i>Agrostis stolonifera</i>	
2190	<i>Anagallis tenella</i>	
2190	<i>Calliargon cuspidatum</i>	
2190	<i>Carex arenaria</i>	
2190	<i>Carex flacca</i>	
2190	<i>Festuca rubra</i>	
2190	<i>Galium palustre</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>Prunella vulgaris</i>	
2190	<i>Salix repens</i> v. <i>argentea</i>	
*21A0	<i>Agrostis stolonifera</i>	
*21A0	<i>Bellis perennis</i>	
*21A0	<i>Carex arenaria</i>	
*21A0	<i>Carex flacca</i>	
*21A0	<i>Cerastium fontanum</i>	
*21A0	<i>Crepis capillaris</i>	
*21A0	<i>Euphrasia officinalis</i> ag.	
*21A0	<i>Festuca rubra</i>	
*21A0	<i>Galium verum</i>	
*21A0	<i>Hydrocotyle vulgaris</i>	
*21A0	<i>Linum catharticum</i>	
*21A0	<i>Lotus corniculatus</i>	
*21A0	<i>Plantago lanceolata</i>	
*21A0	<i>Potentilla anserina</i>	
*21A0	<i>Prunella vulgaris</i>	
*21A0	<i>Trifolium repens</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
1220	Shingle habitat	Pass
1220	Native species	Pass
1220	Notable/rare species	Pass
1220	Negative indicator species	Pass
1220	Non-native species	Pass
1220	Interference with the sediment dynamics	Pass
1220	Damage due to disturbance	Pass
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	Fail
*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
*21A0	Positive indicator species	Pass
*21A0	Bryophytes	Fail
*21A0	Negative indicator species	Pass
*21A0	Non-native species	Pass
*21A0	Flowering or fruiting of positive indicator species	Pass
*21A0	Sward height	Pass
*21A0	Bare ground	Pass
*21A0	Notable/rare species	Pass
*21A0	Interference with the sediment dynamics	Pass
*21A0	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	PF15	Coastal defences	Low	Neutral	Outside	Ongoing	Unknown	Unknown
1220	PF15	Coastal defences	Low	Neutral	Outside	Ongoing	Unknown	Unknown
2110	PF15	Coastal defences	Low	Neutral	Outside	Ongoing	Unknown	Unknown
2120	PF15	Coastal defences	Low	Neutral	Outside	Ongoing	Unknown	Unknown
2120	PM07	Natural erosion	Medium	Neutral	Inside	Ongoing	Increasing	50.0
*2130	PA05	Undergrazing	Medium	Negative	Inside	Ongoing	Increasing	4.0
*2130	PA07	Overgrazing and trampling	High	Negative	Inside	Ongoing	Increasing	10.0
*2130	PF05	Pedestrian track	Low	Neutral	Inside	Ongoing	Stable	0.1
*2130	PF15	Coastal defences	Low	Neutral	Outside	Ongoing	Unknown	Unknown
*2130	PM07	Natural erosion	Low	Neutral	Inside	Ongoing	Increasing	2.0
2190	PA07	Overgrazing	Low	Negative	Inside	Ongoing	Increasing	0.1
*21A0	PA05	Undergrazing	Low	Negative	Inside	Ongoing	Decreasing	5.0
*21A0	PA07	Overgrazing, trampling and farming structures (cattle)	Medium	Negative	Inside	Ongoing	Increasing	30.0
*21A0	PA08	Grazing (cattle)	Medium	Positive	Inside	Ongoing	Decreasing	60.0
*21A0	PA25	Agriculture structure, vehicle tracks and concrete blocks	High	Negative	Inside	Ongoing	Increasing	2.0
*21A0	PL02	Drainage canal	Medium	Negative	Inside	Ongoing	Increasing	0.1
*21A0	PM07	Natural succession to HCH FS2 (Iris pseudacorus)	Medium	Neutral	Inside	Ongoing	Increasing	0.2

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)
*2130	CA05	Measure required to regulate grazing	6.6280	Absent	Medium-term results	Restore the structure & functions, including the status of typical species	Inside
*21A0	CA05	Measure required to regulate grazing	22.3102	Absent	Medium-term results	Restore the structure & functions, including the status of typical species	Inside
*21A0	CA16	Measure required to regulate offroad driving for agriculture	1.3386	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
1210	0	100
1220	0	100
2110	0	100
2120	0	100
*2130	30	70
2190	0	100
*21A0	25	75