



LIFE on Machair
LIFE20 NAT/IE/000263

Presented By

Dr Caitriona Maher

Using RBAPS for Coastal Protection

Caitriona.Maher@npws.gov.ie



Main Threats: Vehicle pressure (& coastal erosion)

Barriers: Diffuse road access, shared ownership (3 adjoining commonages), lack of empowerment, no clear message from government.

Speed presentations – RBaPS Platform Meeting – 9th Oct – Leuven, Belgium



II. Selecting Meaningful Indicators

ACRES Coastal grassland SCORECARD

Farmer name: _____ Surveyor: _____
Field number: _____ Survey date: _____
Business ID: _____

Primary habitat type: (tick relevant box) Dry dunes Wet dunes Salt marsh **Total Score: (A+B) /100**

A Ecological integrity

Total score A: (sum of A1 to A6) /95

A1 What is the number of positive indicators in the field?

Tick all positive indicators present below.

Note all positive indicators present as you walk a 'W' through the field.

Low: 0-4 **0** High: 9-12 **10**
Medium: 5-8 **5** Very high: 13+ **25**

Positive indicators:

(tick those present)

- | | | |
|--|---|--|
| <input type="checkbox"/> Bedstraws & stitchworts | <input type="checkbox"/> Lesser spearwort | <input type="checkbox"/> Sea beet |
| <input type="checkbox"/> Birdsfoot trefoil | <input type="checkbox"/> Lichen spp. | <input type="checkbox"/> Sea lavender |
| <input type="checkbox"/> Common stork's bill | <input type="checkbox"/> Marsh pennywort | <input type="checkbox"/> Sea milkwort |
| <input type="checkbox"/> Creeping VIO | <input type="checkbox"/> Mosses | <input type="checkbox"/> Sea or Buckhorn plantain |
| <input type="checkbox"/> Crowberry | <input type="checkbox"/> Crache | <input type="checkbox"/> Sedges |
| <input type="checkbox"/> Eyebrights | <input type="checkbox"/> Parsley Water-dropwort | <input type="checkbox"/> Speedwell |
| <input type="checkbox"/> Heathers/Ling | <input type="checkbox"/> Restharrow | <input type="checkbox"/> Spurry |
| <input type="checkbox"/> Juniper | <input type="checkbox"/> Scabious (Devil's-bit & field) | <input type="checkbox"/> Stonecrops |
| <input type="checkbox"/> Kidney vetch | <input type="checkbox"/> Scurvy grass | <input type="checkbox"/> Thrift |
| | <input type="checkbox"/> Sea arrowgrass | <input type="checkbox"/> Yellow rattle (Hay rattle) |
| | | <input type="checkbox"/> Tormentil (Common & English) |
| | | <input type="checkbox"/> Violets (all), Harebell |
| | | <input type="checkbox"/> Water mint |
| | | <input type="checkbox"/> White/purple composites (e.g. See aster; Sea mayweed, Daisy) |
| | | <input type="checkbox"/> Wind thyme |
| | | <input type="checkbox"/> Yellow composites (Cats ears, Hawkweeds, Hawkbits & Goat-beard) - not dandelion |

Positive Indicator Plants

A2 What is the combined cover of all positive indicators (listed above) throughout the field? (areas of bare soil are excluded from assessment)

Low: You can take up to 10 steps without encountering any positive indicators. You have to search for them. **0**
Moderate: You encounter a positive indicator with every two to three steps taken. **10**
High: You encounter a positive indicator with every step taken. **20**
Very high: You encounter multiple different positive indicators with every step taken (and in between steps). **30**

A3 What is the combined cover of negative indicators/weeds throughout the field?

Tick if present: Docks (NOT small sorrels) Thistles (Creeping & spear) Perennial Rye-grass Ragwort Nettles

High: Occurring in dense patches or abundant throughout the field. Very visible in the sward. **-20**
Moderate: Occurring in medium to large patches in the field and not limited to previous feeding sites, trackways, field boundaries, water troughs and gateways. Readily visible in the sward. **-10**
Low: Scattered or small clumps of weeds/negative indicators. Where present at gateways, water troughs, field boundaries and along well-used trackways, this cover should be less than 5% and the weeds should not extend into the main body of the field. **0**
Very low: Absent, or scattered individuals or very small patches in the plot. **10**

A4 What is the vegetation structure in dune and grazed saltmarsh habitats?

Poor: Presence of bare substrate and/or a lack of tall vegetation in the area supporting 'taller' vegetation. **-10**
Moderate: Vegetation is dense and tall throughout the site, with a third of the area covered by vegetation (<10cm). **-5**
Good: A balance of shorter (<10cm) and taller vegetation is present in the site, with neither dominating over more than two-thirds of the area. **15**

Vegetation Structure

A5 Marsh Fritillary suitability assessment in primarily grazed grassland

Numerous patches (at least quarter of the field), or majority of field with Devil's Bit Scabious? Yes No
Is the Devil's Bit Scabious present from ankle to knee height throughout? Yes No

A6 What is the extent of bare substrate?

Poor: Over-grazed with 25-100% bare substrate. Under-grazed with no bare sand /substrate 0% bare substrate. **-10**
Moderate: Over-grazed with 10-25% bare substrate. Under-grazed with <1% bare substrate. **-5**
Good: Fixed dunes: 1-10% bare sand. Machair: 1-5% bare sand. Salt marsh: Natural distribution of pans and creeks. **15**

Bare Sand

B Threats & pressures

B1 Is there any evidence of damaging activities to habitat, vegetation, or soil?

High: Damage occurring across a large area (≥21%) or of a serious nature if confined. **-30**
Moderate: Damage occurring across a moderate area (≥6-20%) or of a moderate nature if confined. **-20**
Low: Damage occurring across a small area (≤5%) or of a minor nature if confined. **-10**
None: No damaging activities. **0**

Damaging activity

Damaging activities: (tick relevant damage & describe in comments)

- | | | |
|--|---|--|
| <input type="checkbox"/> Damage from supplementary feeding | <input type="checkbox"/> Trampling | <input type="checkbox"/> Built structures |
| <input type="checkbox"/> Coastal stabilisation work | <input type="checkbox"/> Reclamation | <input type="checkbox"/> Sand extraction |
| <input type="checkbox"/> Inappropriate herbicide use | <input type="checkbox"/> Dumping | <input type="checkbox"/> Other (please specify): |
| <input type="checkbox"/> Artificial ponds | <input type="checkbox"/> Silage storage | |
| | <input type="checkbox"/> Vehicle tracks | |

B3 Artificial drainage features within plot.

Drained grassland: Frequent widespread free flowing drains or dug ponds within plot affecting >20% plot. **-20**
Partly drained: Free flowing drains or dug ponds within plot affecting up to 20% plot. **-15**
Past drainage: Drains present but flow is impeded. **-5**
No drainage: No artificial drainage or dug ponds within plot. **5**

B4 What is the cover of non-native invasive species (excluding *Spartina anglica*)?

High: Abundant. Some forming dense clumps, many seedlings. **-20**
Moderate: Frequent. Some flowering, many seedlings present. **-10**
Low: Scattered. Plants mostly small and not flowering. **-5**
None: No non-native invasive species present. **0**

Non-native invasive species: (tick if present)

- | | |
|---|--|
| <input type="checkbox"/> Red Valerian | <input type="checkbox"/> Japanese Knotweed |
| <input type="checkbox"/> Beach Rose | <input type="checkbox"/> Other (please specify): |
| <input type="checkbox"/> New-Zealand flax | |
| <input type="checkbox"/> Sea-Buckthorn | |

B5 What is the extent of spreading immature scrub?

High: >25% of the field has immature scrub cover, some well-established saplings may be present. Scrub along field boundaries may be encroaching onto the field. Field is likely to show few signs of management, such as recent grazing, or signs of livestock. **-20**
Moderate: 11-25% cover of immature scrub in patches or individuals. Some spread of scrub from field boundaries may be evident, particularly briars/bramble. **-10**
Low: <10% of small patches of immature scrub or individual seedlings of encroaching scrub. Grass growth easily seen under the scrub. **0**

Total score B (sum of B1 to B5) /5

B2 What is the level of risk to the quality of natural water bodies within, adjacent to and downstream of the field due to pressures relating to low, sediment, nutrients or other pollutants?

The source - pathway - receptor model should inform the assessment (see guidance).

High: **-25** Low: **-5**
Moderate: **-15** None: **0**

ACRES payment score = 1/10 = €0

III. Linking Payment Schemes to Indicators

POSITIVES

- Farmers understand the assessment criteria – logical, visible, understandable by all.
- ACRES payment score = 1/10 = €0
- Payment reflects condition.
- LIFE & ACRES (GOV) Supporting & Empowering farmers to take appropriate action.
- **Agreement for vehicle barrier in 2024.**

Challenges re Payments:

- National DAFM ACRES scheme
- How does LIFE sit on this with payments?
- Payments for finding solutions, & implementing bespoke actions

LIFE on Machair Restoration Programme 2024/2025 – Truska commonage, Slyne Head Peninsula SAC, Co. Galway. ¶

Code-¶	Level-1-Project-meetings-----€280-each-¶	Payments-¶
L1a¶	Summer-site-walk, discussion-of-draft-2024/25-restoration-plan...On-going-engagement-and-support.¶	€280¶
L1b¶	Habitats---plants-and-floral-resources..Grazing---timing-and-livestock.¶	€280¶
L1c¶	Indoor-meeting-winter-2024...Bigger-LOM-picture-and-project-updates...On-going-engagement-and-support. ¶ Restoration-planning---review-of-actions, discussions, good-practice.¶	€280¶
L1d¶	Focus-breeder-wader-ecology-and-requirements...Review-spring-&-summer-data.¶	€280¶
Code-¶	Level-2-Restoration-Actions-----€290-per-action..2024-priority-actions-for-the-site-listed..¶ Max..of-Four-actions-can-be-selected...Priority-Actions-for-the-Site-are-shown-in-RED¶	¶
9¶	Erosion-Risk-and-Management-¶	¶
9A¶	Understanding-erosion-at-your-site--Natural-dynamics, why-increasing, management-options-¶	€290¶
9B¶	Chestnut-fence-installation--Installation-and-management-of-wind-breaking-&/or-sand-trapping-fences.¶	25/hr?¶
6¶	Breeding-waders---reducing-predator-risk-in-core-breeding-areas..¶	¶
6A¶	Temporary-wader-fence-planning- -- Discussion-and-agreement-on-location, timing, management-of-fence-installation-and-dismantle, any-adjustments-during-wader-season-and-maintenance. On-site-meetings-and-on-going-discussions-where-issues-arise-(e.g.-one-hour-on-site-chats, phone-calls-to-check-in, at-agreed-times)..-¶	€290¶
6B¶	Wader-fence-install-and/or-dismantle/maintenance--On-site-working-to-put-up-the-fence-and/or-take-it-down-(available-for-c..8-hours-during-installation-or-dismantling)..Checking-voltage-when-on-site, keeping-touch-with-project-re-breaches-or-other-issues.¶	25/hr?¶
6C¶	Breeding-waders-and-predator-control---workshop-on-breeding-waders-and-predation, best-practice, legislation-and-licensing-in-predator-control, including-site-walks, demonstration-and-discussion-with-LOM-Nest-Protection-Officers. ¶	25/hr?¶
5B¶	Enhancing-habitats-for-waders--Reed-control..¶	25/hr?¶
8¶	Visitor-Management-¶	¶
8A¶	Visitor-management-planning--Discussion-on-options---zoning, signage, barriers, information-and-awareness, visit-to-another-site, wardens, litter-removal, closing-off-access-points. Site-walk-and-up-to-three-meetings..-¶	€290¶
¶	POTENTIAL-TOTAL-¶	€2,280¶



LIFE on Machair
SAOL ar an Mhacaire

LIFE20 NAT/IE/000263

Caitriona.Maher
@npws.gov.ie

Key Messages to Share

Top tip(s) for delivering RBaPS

- Robust habitat indicators – simplicity facilitates use across departments and upscaling
- Unified efforts → LIFE on Machair + DAFMs RBAPS
- Stakeholder engagement – bringing the public along
 - <https://www.advertiser.ie/galway/article/142830/habitat-protection-and-restoration-at-slyne-head>

Scan for more info

LIFE on Machair
SAOL ar an Mhacaire

**NO UNAUTHORISED VEHICLES
BEYOND THIS POINT**

Machair is a rare and delicate habitat, which only exists in the
west of Ireland and Scotland.

This area is under restoration.

This site is protected under EU and national legislation (EU Habitats Regulations 2016 and EU Habitats Directive 92/43/EEC).
It supports sensitive sand dune and machair habitat, breeding waders and other rare and threatened species.
<https://www.npws.ie/protected-sites/sac/001529>

LIFE

NATURA 200