

Gretta Byrne, M.A. M.I.A.I.

Ballyglass,

Ballycastle,

Ballina,

Co. Mayo.

F26WV05

grettabyrne1@gmail.com

June 24th 2026

Case Reference ACP PAX16.324258

Administrative Officer

Strategic Infrastructure Development Section,

An Coimisiún Pleanála,

64-67 Marlborough Street,

Dublin 1

D01 V90

ACP- PAX16.324258

Proposed Development of the construction of Tirawley Windfarm consisting of 16 no. wind turbines, including a 110kV sub-station on site, an energy storage system in the form of a battery array located within container units and all associated infrastructure.

Dear Sir / Madam,

I am writing to express my objection to the above proposed construction of Tyrawley Windfarm and associated works. My concerns are primarily with the irreversible impact on the unique archaeological remains in the area of the proposed development.

It is my belief that the impacts of the proposed development were inadequately assessed in the Environmental Impact Assessment Report. In order to explain my reasons this is some background information on the unique archaeological landscape of the area.

1.0 General Background.

The Neolithic time period is defined as the time when farming was first practiced. In 2006 Barker stated that the “transition from foraging to farming was the most profound revolution in human history”, (Barker, G. 2006. *The Agricultural Revolution in Prehistory: Why did Foragers become Farmers?* Oxford, Oxford University Press, 414). This occurred at different times throughout the world and in Ireland the period extends from roughly 4,000 to 2,500 B.C. Normally in Europe the archaeological evidence from this time period survives in the form of individual ritual monuments such as various types of megalithic tombs and dwelling houses and also artefacts. In North Mayo however, uniquely, in addition to those monuments, evidence of the contemporary farmed landscape survives in the form of stone wall field boundaries. These have survived because they were constructed at a time before the growth of the blanket of peat that subsequently engulfed and preserved them. The archaeological importance of this area is that it is unparalleled anywhere else as evidence of Neolithic fields demonstrating a managed farmed landscape. By its nature it is the entire landscape that is the monument and not a collection of individual monuments scattered through the modern landscape.

1.1 North Mayo Pre-Bog Archaeological Landscape.

These Neolithic landscapes extend over significant areas of North Mayo and particularly between Belderrig in the west to Lacken. Fig. 1, below, shows a satellite image of this area with all of the known pre-bog field boundaries superimposed in red lines. What is generally known as the Céide Fields is a smaller area that includes Céide hill where the visitor centre is located and Sralagagh hill to the east with the intervening Glenulra valley. This map, and other similar ones, have been on public display in the Céide Fields visitor centre since 2022.

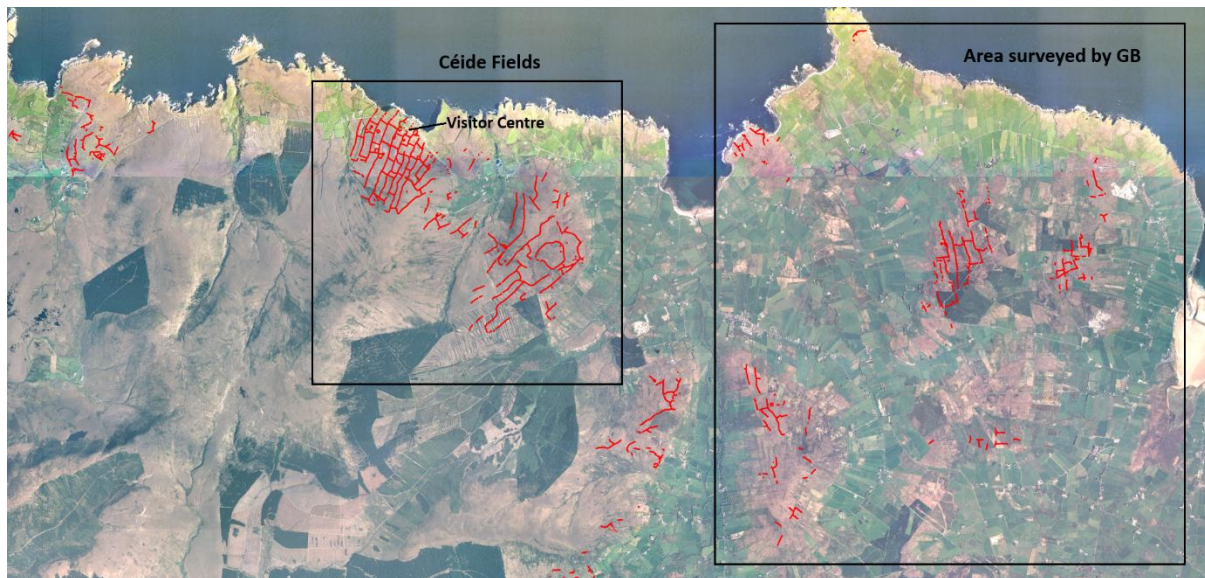


Fig. 1. Known pre-bog field boundaries (in red) from Belderrig to Lacken on satellite image.

All of those in the area bounded by the Ballinglen river in the west to Lacken Bay in the East were originally located and mapped by this author in the 1980s¹ and a shorter account has been published in 2018².

Similar maps have appeared in various publications such as Caulfield³ and Warren⁴. The archaeological research has been supplemented and confirmed by a programme of radiocarbon dating of pine stumps preserved in the peat throughout North Mayo⁵ and also

¹ **Byrne, M.J.B. (Gretta) (1986)** "The Pre-Bog Archaeology of the Ballycastle-Palmerstown Area of North Mayo", Volumes 1 & 2. Unpublished MA Thesis, UCD.

² **Byrne G. (2018)** Glimpses into the Past. Some Natural and Human Imprints Visible in the North Mayo Landscape. In Boschiero, P. and Latini, L. *The Céide Fields, Ireland International Carlo Scarpa Prize for Gardens 2018*, Fondazione Benetton Studi Ricerche, Treviso, pp 74 – 91.

³ **Caulfield S. (2013)** Céide Fields: Europe's oldest surviving dairy fields. In: Jebb M., Crowley C. (eds) *Secrets of the Irish Landscape: The Story of the Irish Landscape is the Story of Ireland*. Cork University Press, Cork, pp 95-103.

⁴ **Warren G. (2018)** 'The Prehistoric Archaeology of North Mayo', in Boschiero, P. and Latini, L. *The Céide Fields, Ireland International Carlo Scarpa Prize for Gardens 2018*, Fondazione Benetton Studi Ricerche, Treviso, pp 92 – 107.

⁵ **Caulfield S., O'Donnell R. G., Mitchell P. I. (1998)** ¹⁴C Dating of a Neolithic Fields System at Céide Fields, County Mayo, Ireland. *Radiocarbon* 40, 629-640.

by extensive palaeoecological research⁶. The latter has reaffirmed the Neolithic dating of the field systems.

1.2 Pre-Bog Archaeological Landscape of Trawley Area.

The Neolithic field walls in the area surrounding the proposed development are shown in Fig. 2 below. These were originally mapped in much greater detail at a scale of 1:2,500. There are certainly many more walls that have not been found and mapped. Those that have been located were found by surveying involving intensive field walking and detailed probing using the technique pioneered by Caulfield at Céide Fields (Appendix 1). Areas of bog on the maps that do not show red lines are not evidence of absence of walls, but are simply areas that have not been surveyed. Only definite remains of walls were mapped and insufficient remains or indefinite profiles were not mapped. There were frequently areas that had evidence such as occasional upright stones that were more than likely the remains of walls but were insufficient to be sure. This was the case in one area of Lackanhill approximately 400m north of the two Lecarrowntemple court tombs MA007-057 and MA007-058. There was also insufficient time to undertake a fully comprehensive survey of parts of the area, especially in the bog areas devoid of mapped field walls in the central area of Fig. 2 below. Ten of the proposed turbines, AT07 – AT16 and associated works are located in this area.

It was not possible to use the probing technique in areas of forestry, visible as dark green on the satellite images, although occasionally sufficient remains were visible. Some areas of forestry in Fig. 2, below, do have mapped walls. These were located and mapped by this author in 1984 and 1985, prior to the planting of the forestry.

It is highly probable that there are undiscovered archaeological remains within the peatland areas, including those that have been forested, under the direct footprint of a number of turbines and access routes.

⁶ O'Connell, M., Molloy, K., and Jennings, E. (2020) Long-term human impact and environmental change in mid-western Ireland, with particular reference to Céide Fields – an overview, *E&G Quaternary Sci. J.*, 69, 1–32. Available at: <https://doi.org/10.5194/egqsj-69-1-2020>.



Fig. 2. Known pre-bog field walls (in red) in the vicinity of proposed Tyrawley Windfarm.

1.3 Rathlackan Court Tomb Excavation.

In the 1990s a research archaeological excavation was undertaken by the author on the Rathlackan court tomb and associated enclosure wall and house structure (MA 007-016006, MA 007-016019 and MA 007-016018 in the Archaeological Survey of Ireland inventory entries). The Rathlackan site was chosen for excavation in order to examine the relationship of the various elements of this prehistoric landscape – tomb, walls and house to each other and to establish a chronological framework for the extensive archaeological remains. It was significant as one of the very few court tombs excavated in Ireland and also for being part of the integrated landscape of associated pre-bog landscape field boundaries, other tombs and house sites. Fig. 3, below shows details of the court tomb in relation to the field boundaries and associated house sites. The other two court tombs shown are both in Castletown (MA007-016007 and MA007-016008). More details are available in Byrne 2018 in Appendix B.

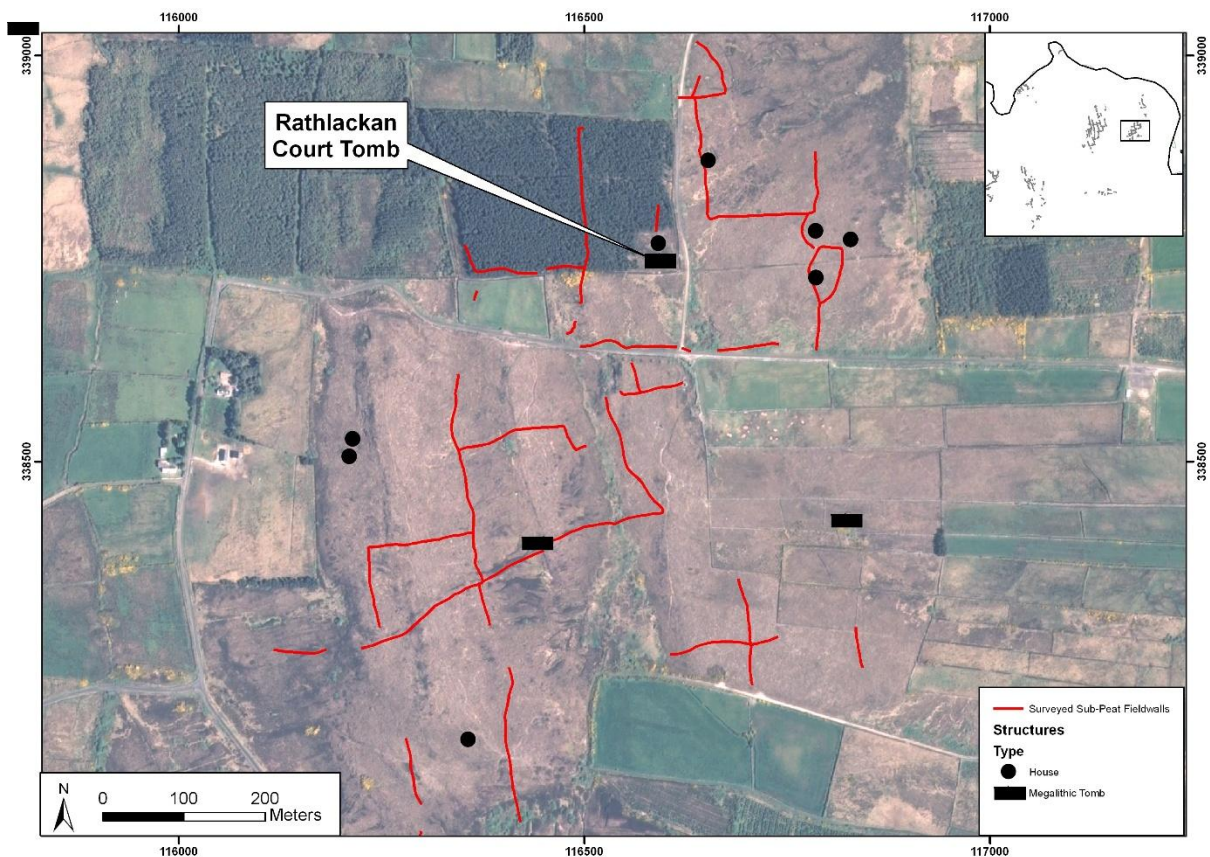


Fig. 3. Rathlackan court tomb and associated field boundaries, tombs and house sites.

2.0 Environmental Impact Assessment Report.

There are serious concerns in relation to the assessment of the impacts of the proposed project on the sub peat archaeological remains in particular. The main concern is that the EIAR Chapter 14 – Cultural Heritage is incomplete and inadequate. It demonstrates a lack of understanding and appreciation for the nature of the uniquely preserved archaeological landscape beneath the blanket bogs all across North Mayo, including within the Tyrawley windfarm area.

2.1 EIAR Chapter 14 Figure 14.1

In the EIAR Chapter 14, Figure 14.1 is incomplete as only individual structures of houses and tombs are marked and there is no indication of the integrated field systems shown in Figs 2 and 3 above. In addition not even all of the individual monuments of the pre-bog landscape, including some closest to the proposed turbines, are indicated.

These are some examples:

1. One of the Castletown court tombs (MA007-016007) located just NW of turbine AT15, is not numbered.
2. One of the Lecarrowntemple court tombs (MA007-057) located about midway between turbines AT10, AT14 and AT16, is not numbered.
3. A pre-bog round house which is one of a pair along with MA007-016015 close together in Beltra (MA007-016016) NW of AT15 is not shown or numbered.
4. The location of Barnhill court tomb (MA14-011002) which is north of turbine AT05 and west of turbine AT07 is not clear as it is overwritten.

2.2 Lack of understanding of archaeology of Trawley.

2.2.1 In “EIAR 14.3.2.1 Prehistoric Periods” the significance of the integrated archaeological landscape is totally ignored with the only mention of the field boundaries being in relation to the Rathlackan court tomb *“The investigations revealed a number of house structures, as well as enclosures and field boundaries, within its environs including one example that was dated to the Neolithic period (MA007-016018-).”*

2.2.2 In EIAR “14.3.2.5 Archaeological monuments with landscape setting sensitivity” there is again a fundamental lack of understanding of the significance of this pre-bog archaeology. Individual stone prehistoric monuments are assessed “for ritual visual alignments or topographical settings across the wider landscape”. The entire field systems are ignored and there is no appreciation that the whole landscape is in a sense one large integrated monument.

The assessment of the two round cairns on Suifinn hill is incorrect in the observations. The Aghaleague cairn (MA014-002005) is clearly not “sited on the highest point of the hill”. This can be seen on the OS Discovery maps as in the EIAR 6289-PL-000-01 SITE LOCATION MAP DISCOVERY MAPPING. The observation that there was “originally deliberate intervisibility” between that cairn and a similar large round cairn in Carrowcuilleen (MA014-002006) is also incorrect. In the opinion of this author who undertook extensive surveys of this hill included in Byrne 1986 and Byrne 2018 (cited above) these monuments were intentionally sited not to be intervisible.

2.2.2 In EIAR “14.3.2.6 Céide Fields” it is stated *“This prehistoric archaeological complex (Céide Fields) is located c. 9.5 km from the northern portion of the Proposed Development.”* This is misleading in that it gives the impression the Céide Fields are confined to the visitor centre and the immediate surroundings. It is also stated *“The prehistoric agrarian complex does not in and of itself retain inherent attributes*

connected to landscape setting considerations in terms of visual astronomical and landscape alignments". This demonstrates a lack of understanding of the significance of the archaeological landscape. The fields and associated monuments demonstrate how the Neolithic people managed their entire landscape and how they farmed and lived their lives in addition to their ritual constructions. The landscape is the monument and would be seriously impacted by the presence of the sixteen proposed turbines.

3.0 Potential effects and mitigation.

In EIAR 14.4.1 it is acknowledged that "**potential exists for direct, adverse, and permanent construction phase effects** of medium to high magnitude (potential moderate significance of effect)" during the construction phase on any unrecorded archaeological remains within the footprint of the proposed development. However, there does not seem to have been sufficient weight given to the likely presence of such features.

In EIAR 14.5.1 "Construction Phase Mitigation Measures" it is stated that a programme of archaeological test excavations will be carried out in advance of construction at four named areas of archaeological sensitivity. None of those are in the sub-peat Neolithic landscape areas. In fact they seem to want to specifically exclude "deep/wet pockets of bogland".

3.1 Forested areas.

In EIAR Appendix 2.1 CEMP 3.6.1 it is stated "A systematic advance programme of archaeological field-walking surveys will also be carried out within Proposed Development areas in forestry plantations following tree felling to confirm the conditions predicted in this assessment, i.e., that they contain no visible surface traces of potential unrecorded archaeological or architectural heritage sites". Given the extent of archaeological remains already recorded in areas that were surveyed

prior to planting with forestry, shown on Fig 2 above, those predicted conditions are demonstrably inaccurate. The large block of forestry immediately west of AT12 was already mature forestry when the original archaeological survey was undertaken in the 1980s by this author. One of the Neolithic walls in Conaghra was followed for a distance of 60m into the forest where sufficient stones of the wall were visible in the drainage furrows dug prior to planting. It could not be traced further as it was not possible to use the probing technique in the forest. It is certain that there are other unrecorded walls in this forest as two further walls were traced as far as the forest edge.

3.2 Effects on cultural heritage.

Further in EIAR Appendix 2.1 CEMP 3.6.1 it is stated “The identified temporary indirect negative impacts on the Cultural Heritage resource during construction stage are of a visual nature only...”. This is a contradiction of the statement quoted in 3.0 above.

In EIAR 14.5.2 “Construction Phase Residual Effects – Direct” it is stated “No residual construction phase direct effects are predicted following the implementation of these mitigation measures” (recording by record). However, even if archaeological remains that are discovered during the construction phase are properly recorded archaeologically, the result of their subsequent removal is a permanent direct effect with a consequent negative impact on this unique Neolithic landscape in North Mayo.

3.3 Impact on Lacken Trail walk.

There does not appear to have been any assessment made of the impact of the proposed development on the Lacken Trail walking route that traverses directly through the proposed development area. In EIAR 12.3.7.5 other trails mentioned are the Western Way, Kilcummin Loop Walks, Bsllycastle Loop Walk, Moygownagh Loop Walk and Belleek Nature Trail but there is no mention of the Lacken Trail. Apart from the Western Way none of the mentioned walks are within the area of the proposed

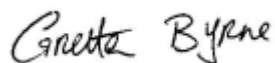
development. There will be negative impacts on this trail during the construction phase and also long term visual impacts during the lifetime of the proposed windfarm. One of the main reasons for originally selecting the particular route for the Lacken Trail was that it incorporated the Rathlackan court tomb and associated archaeological landscape as well as the Lacken Gazebo. It was regarded as a route with exceptional historical / archaeological points of interest along with natural flora and fauna in variety of habitats. The original promotional brochure from 2012 when the trail was opened is Appendix 2.

4.0 Conclusions

In conclusion I request that An Coimisiún Pleanála take into consideration the significant concerns raised in this letter. The proposal for the Tyrawley Windfarm should be rejected on the basis that the impacts of the proposed development on the cultural heritage of this unique Neolithic landscape were inadequately assessed in the Environmental Impact Assessment Report as outlined above.

Thank you for considering my submission,

Yours sincerely,



Gretta Byrne.

Additions below:

Appendix 1. Probing Technique in Blanket Bog.

Appendix 2. Lacken Trail Promotional Brochure 2012.

Appendix 1. Probing Technique in Blanket Bog.

The probing technique used to locate the walls beneath the bog was first developed by Seamas Caulfield based on an old traditional method of locating trees preserved in the peat.

The purpose of archaeological probing is to project above ground the exact shape and contours of the sub-peat surface. It is possible to do this using a straight metal rod or “probe” as the soft blanket peat is comprised of approximately 85% water. The probe is made from a length of rod iron with the end pointed and a short length welded at right angles on to the top as a handle. The probes can be any length up to 4m which is the maximum length available in rod iron.

The probe can be physically pushed straight downwards through the soft peat until it hits the harder sub-peat surface and cannot penetrate further. This harder surface can be either soil or stone or occasionally wood from tree stumps preserved in the peat. The height of the top of the probe is marked by inserting a short bamboo cane alongside to the level of the probe top. The probe is removed while the bamboo is left in place. The probe is then inserted at approximately 30cm intervals in a straight line and each height marked by a bamboo with the bamboos giving a visual profile of the sub peat surface, (example of profile below). If there are no sub peat surface features all the bamboo markers will be of a similar height.

If a high feature is detected probes can be inserted in a circle surrounding the feature to determine if it is a linear feature or an isolated stone or other singular feature. If it is determined to extend in a linear fashion it can then be followed by doing a transect profile every few metres. The length of the probed transect line needs to be at least a couple of metres to either side of the wall to ensure that it is a linear feature and not natural sub peat topographical changes in slope.



Example of probed profile.

Probing was used to verify walls where only occasional stones were visible and also to locate completely hidden features under the deeper peat. There were however some limitations to the technique. If the wall was very collapsed and spread out or if the wall had been robbed of stones either in antiquity or in modern times such as when exposed after turf cutting it was very difficult to identify in a probed profile.

Appendix 2. Lacken Trail Promotional Brochure 2012.

Archaeology and History

This route contains sites of historical interest that stretch from the Neolithic era to early medieval and more recent times. The bog that covers the higher, western part of the route preserved an ancient farmed landscape that revealed itself as past generations cut their turf.



The sharp-eyed among you will be able to spot numerous stone walls, cairns, standing stones and house remains jutting through the cutaway bog. The archaeologist Gretta Byrne surveyed much of this area and found an integrated system of field walls, house structure and megalithic tombs, equal to that of the Céide Fields further up the coast. Right beside the route is a magnificent court tomb with an associated house and walls. The area has been fully excavated and left open, so you can now walk about the explore this ancient monument which carbon dating has put at 5,500 years old.



The enormous flat stone lying on the cairn is one of several used by stone age man to cover over the chambers. The sheer scale of the Neolithic landscape can be seen from Conaghra, the highest point of the route. Looking west to Seefin, Sralaghagh, Doonfeney and Ceide, you get a breathtaking perspective on the scale of this ancient world.

Principles of Outdoor Ethics

Please adhere to this code in any trips to the outdoors

1. Plan ahead and prepare
2. Dispose of waste properly
3. Leave what you find
4. Respect wildlife and farm stock. Dogs should be kept under control at all times and should not be brought onto hills or farmland.
5. Be Considerate of Others
6. Travel on Durable Surfaces

In the event of any emergency please call 999

Rathlacken Court Tomb Trail

Trail Head:	Located at picnic area beside Lacken Church
Theme:	Archeological, nature and scenic walk
Distance:	Green Loop: 08 km
Blue Loop:	11 kms
Direction:	Follow the marked posts along the beach road
Terrain:	Paved and bog roads, laneway and grassy track
Suitability:	This trail is also suitable for Mountain Bike use
Minimum Gear:	Walking Boots, Rain Gear, Snack and fluids
Map Ref:	OS Discovery 23 and 24.




@MAYOTRAILS **MAYO TRAILS**

Acknowledgements: The Lacken Trails were developed with the assistance of the local community, landowners, Mayo North East Leader Partnership Teo, Local Rural Social Scheme and Mayo County Council.



Rathlacken Trail



Nature ... Scenery ... Archaeology

Printed by Ballina Print: 096-21522

Flora & Fauna

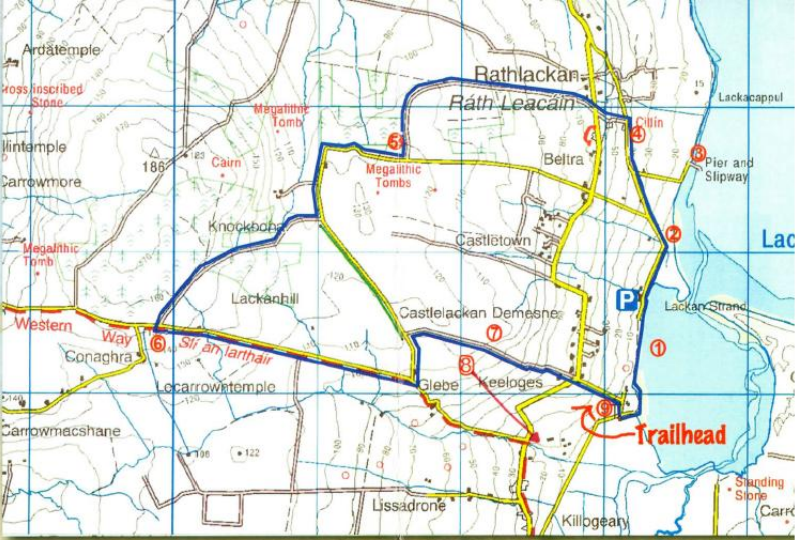
The walk covers a variety of terrain, including blanket bog, wet grassland, sand dunes, salt marshes, farmland, forestry and heathland. This provides a wide variety of habitats.

The plaintive cry of the endangered curlew can be heard on the seashore and red grouse, also endangered, is often spotted on the uplands. Also here are skylarks, sand martins, plovers, kestrels, and house martins. Oystercatchers, razorbills, shags, snipe, mallard and various gulls can be seen by the shore.

Hares, foxes, badgers, lizards and pine martins abound, all of them protected species. Those interested in flora will find wild thyme, yarrow, ox-eyed daisy and pyramidal orchids while down on the salt marshes are eelgrass, sea plantain, asters. In summer the bog becomes a colourful carpet of mosses, heathers, lichens, and flowers like asphodels, orchids, milkworts, cotton, and the carnivorous sundew.





Points of Interest

- 1. Lackan Strand:** The Lackan salt marsh is a Special Area of Conservation and the tidal bay plays host to many rare birds including curlews, lapwings and plovers.
- 2. Greenhill:** A large circular green mound is visible, though not accessible, from the road. Erosion in the 1950s and 1990s revealed numerous human bones that had been buried in long stone cists, possibly in early medieval times. The bones were reburied in a local churchyard.
- 3. Lackan Pier:** A short diversion from the walk lead to this pier and its monument to the local fishermen who drowned in The Big Wave of 1927.
- 4. Cillín:** This is a burial ground for unbaptised children which may also have been an earlier stone fort or cashal.
- 5. Rathlacken Court Tomb:** Excavated in the 1990s, this is one of the country's finest megalithic Court Tombs. It has three chambers, a circular court and long cairn and an associated house and enclosure.
- 6. Conaghra:** This is the highest point on the walk and offers views of Mayo, Sligo and Donegal.
- 7. Gazebo:** This folly overlooks the ruins of Castletackan Demesne, the home of Sir John Palmer who had the Gazebo built in 1794. The obelisk also acted as a navigational aid to sailors before the GPS was born.
- 8. Castletackan Demesne:** Visible from the Gazebo, the now-ruined buildings have a long history, dating back to 1585. The Palmer family sold it to the Congested Districts' Board in 1916.
- 9. Lackan Church:** Built in 1969 to replace the original church, this church features a stained glass window over the altar depicting the legend of St Patrick and the children of 'Fochlud' or Foghill. Beneath this is a bog oak sculpture housing the tabernacle. Two windows at the back commemorate the fishermen drowned in the 1927 great storm.