RESTORE NATURE

Priority Peatland Under Afforestation

A Shadow Nature Restoration Plan

Part 1 Raised Bog



Prepared by The Irish Peatland Conservation Council & The Environmental Pillar

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With special thanks to Fintan Kelly, Ángel Duarte Campos, The National Biodiversity Data Centre, The National Parks and Wildlife Service and the Irish Peat Soil Map Project

IRISH PEATLAND CONSERVATION COUNCIL

Environmental Pillar

An Roinn Comhshaoil, Aeráide agus Cumarsáide
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Restore Nature: Raised Bog

Abstract

Peatland once covered ~1.17M hectares of the Republic of Ireland. This represented ~17.2% of the habitat but because of Ireland's history of turbary, industrial peat extraction, afforestation and agricultural reclamation only 25% of this is in an intact condition and performing the original ecological and hydrological functions (Peatlands & Climate Change Action Plan 2030, 2021). Raised bog, which started to form over 10,000 years ago in the midlands of Ireland have been so heavily modified and destroyed that only 46,196ha are in a conservation worthy condition (15% of the original extent of raised bog).

This loss of peatland habitat has had a truly destructive effect on the status of Ireland's biodiversity as it is estimated that 18.8% of birds listed within Irish Red-List utilise peatland, 60% of dragonflies and damselflies on the Irish red-List utilise peatland and 41.7% of butterflies on the Irish red-List also utilise peatland (Ireland's Biodiversity Emergency – Peatland Species of Concern, IPCC, 2022). The Irish Peatland Conservation Council also estimate that 28.2% of peatland has been utilised by forestry (Peatlands & Climate Change Action Plan 2030, 2021). Afforestation not only causes the direct loss of the surface, nutrient poor loving vegetation but the transpiration further draws water away from the peat soils allowing oxygen, fungi and microbes in to facilitate decomposition. The mechanisms which normally provide for the sequestration of carbon, water filtration and retention break down causing greenhouse gases to be released to the atmosphere and peat silt enters neighbouring water-ways disrupting aquatic habitats.

A key benchmark for assessing the condition of Ireland's peatland habitats is the mandatory six-year reporting cycle conducted by the National Parks and Wildlife Service (NPWS), as required under Article 17 of the EU Habitats Directive. In its most recent assessment "The Status of EU Protected Habitats and Species in Ireland*" (2019) the NPWS* classified the conservation status of these habitats predominantly as "Bad & Deteriorating." This alarming designation highlights the vulnerability of peatlands, which may lack the ecological resilience to withstand ongoing and future climatic pressures, including shifts in temperature and rainfall patterns. Immediate and targeted restoration efforts are essential to rehabilitate their hydrological functions, thereby supporting biodiversity and contributing to climate change mitigation.

In August 2024, to address biodiversity loss and ecosystem degradation across member states the European Union adopted the Nature Restoration Law. It mandates binding restoration targets for degraded ecosystems, especially those listed in Annex I of the Habitats Directive and areas designated as Special Protection Areas under the Birds Directive. Following this, Ireland needs to restore 30% of degraded habitats by 2030, 60% of degraded habitats by 2040 and 100% of degraded habitats by 2050. Particular focus has to be on the Annexed habitats under the EU Habitats and Species Directives. Ireland needs to submit the National Restoration Plans to the European Commission by August 2026. The plan has to outline how Ireland plans to meet the restoration targets through a whole of Government and society approach, including public and expert input.

Project Summary

The aim of this project is to support the Environmental Pillar's (a coalition of 32 national environmental NGOs in Ireland that advocates for sustainable environmental policies) input into the development of Ireland's Nature Restoration Plan. The Environmental Pillar will submit a Shadow Nature Restoration Plan which will describe sites that will bring high gains for biodiversity and climate change mitigation.

This project aims to support the Environmental Pillar's input by identifying priority peatland restoration and, where appropriate, habitat re-establishment opportunities using geospatial analysis. Specifically, GIS will be used to locate areas within and adjacent to Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Natural Heritage Areas and proposed Natural Heritage Areas that contain Article 17 Active Raised Bog and impacted by afforestation. These degraded peatlands represent high-potential opportunities for habitat restoration while some heavily modified areas may also contribute to longer-term habitat re-establishment. The sites

identified will provide enhanced connectivity and will directly support the Conservation Objectives of the designated areas and high value nature habitats.

By mapping and assessing these areas, the IPCC will produce a scientifically grounded forestry peatland deforestation itinerary. This will highlight strategic restoration opportunities that can be rapidly implemented to meet the 2030 targets, while also contributing to long-term ecosystem recovery. The findings will be submitted to the Government of Ireland as part of the Environmental Pillar's input to inform and complement the official National Restoration Plan due in August 2026.

This sub-project, by feeding into the Environmental Pillar's Shadow Nature Restoration Plan, will contribute to Ireland's biodiversity commitments, climate mitigation goals, and the EU's broader ambition to halt and reverse ecosystem degradation. The project directly supports Article 4 of the Nature Restoration Regulation which states binding targets for specific ecosystems including peatlands. The plan supports the Water Framework Directive by improving freshwater habitats and reducing organic matter emissions to waterways and the project also supports the Climate Action Plan by reducing carbon emissions and increasing sequestration.

Methodology

The spatial analysis presented in this report draws upon the broader Environmental Pillar GIS Project, which was established to identify priority nature restoration opportunities across multiple ecosystem types in support of Ireland's Nature Restoration Plan and the Environmental Pillar's Shadow Nature Restoration Plan. The methodology described below represents the peatland-specific component of that wider geospatial assessment framework.

For the purposes of this report, a distinction is made between *habitat restoration* and *habitat re-establishment* in line with the Nature Restoration Regulation. Habitat restoration refers to measures that improve the ecological condition, structure, functions and processes of existing degraded peatland habitats. Habitat re-establishment refers to measures that recreate peatland habitat in areas where it has been lost or substantially transformed. The sites identified in this analysis primarily represent opportunities for habitat restoration, although some areas may also contribute to longer-term habitat re-establishment objectives following forestry removal and hydrological rehabilitation.

Spatial overlay analysis was conducted to identify priority forestry areas located within historical raised bog habitats and European designated conservation sites (Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)). Input vector datasets for public forestry (Coillte Forest Inventory) and private forestry (National Map of Private Forestry) were intersected with historical raised bog habitat layers derived from the Irish Peat Soils Map, the NPWS Article 17 Blanket and Raised Bog habitat layer, and the Irish Wetlands dataset. Identified overlap areas were subsequently screened against SAC and SPA boundaries to determine where forestry occurs within designated conservation sites. Finally, a 500m spatial buffer was generated around these priority areas to group adjacent sites into clusters and assist in identifying restoration opportunities at a landscape scale.

Appendix E contains a summary of the spatial analysis describing the extent of forestry (private and Coillte) over peatland with Article 17 Active Raised Bog derived from the different vector datasets.

The resulting forestry overlap areas were analysed to determine where forestry is impacting historical raised bog habitats and designated conservation sites, including areas containing NPWS Article 17 Active Raised Bog (Habitat 7110) and Degraded Raised Bog Capable of Natural Regeneration (Habitat 7120). The designated sites identified through this analysis were then described using location information (Irish Transverse Mercator coordinates and county), site code (National Parks and Wildlife Service designation code), and the area (ha) of forestry overlapping with Article 17 Active Raised Bog and Degraded Raised Bog Capable of Natural Regeneration habitats.

Utilising the NPWS Site Synopsis documents (official site descriptions and rationale for designation), the IPCC Peatland Sites Database (a database of over 1,000 peatland sites of conservation importance), and the National Biodiversity Data Centre Biodiversity Maps platform, species of conservation importance recorded within or adjacent to each site were identified. Species which may benefit from habitat restoration have also been highlighted. Each site listing additionally includes aerial imagery.

The Irish Peatland Conservation Council utilised the IPCC Peatland Sites Database to research the historical and ecological characteristics of individual sites. The database contains information on threats and pressures, site condition, development history, scientific research undertaken, habitats and species present, and details of any previous restoration or rehabilitation works. This information helps further support the rationale for forestry removal, restructuring, and/or management interventions where appropriate.

For completeness, the total surface area of identified raised bog habitats, including raised bog containing Active Raised Bog and the area of Coillte and public forestry is included in Appendix C.

Table 1.1 GIS Data used in Project Analysis

GIS Data	Provider
Article 17 – 7110 Active Raised Bog & SAC/SPA/NHA Site Maps	National Parks & Wildlife Service
Irish Wetlands Map	Irish Wetland Surveys Ireland
Irish Peat Soil Map	RePeat, Department of Agriculture, Forestry and the Marine
Coillte Forest Inventory	Coillte
National Map of Private Forestry	Department of Agriculture, Forestry and the Marine
Irish Peatland Conservation Council Peatland Sites of Conservation Importance Database	Irish Peatland Conservation Council

QGIS Version 3.42.1 has been utilised for GIS research.

National Biodiversity Data Centre Biodiversity Maps have been used to investigate records of protected species.

Results

Table 1.2 Identified Designated Sites Needing Forestry Removal

No.	DesigSite	SiteCode	Size(ha)	County
1	Lough Oughter and Associated Loughs SAC (Drummany)	7	2139.9/4748	Cavan
2	Drumalough Bog SAC (West)	207	277.87	Roscommon
3	River Shannon Callows SAC (Cloniff Bog)	216	72 (approx area within the SAC. SAC Total = 1490ha	Offaly
4	Ballygar Bog NHA	229	122	Galway
5	Kilmore Bog NHA	283	90	Galway
6	Kilnaborris Bog NHA	284	237	Galway
7	Killsallagh Bog SAC	285	279.13	Galway
8	Ballynafagh Bog SAC	391	156.04	Kildare
9	Carrowbehy/Caher Bog SAC	597	276	Roscommon
10	Cloonshanville Bog SAC	614	240.8	Roscommon
11	Arragh More Bog NHA	640	280	Tipperary
12	Cloncrow Bog (New Forest) NHA	677	136	Westmeath
13	Screggan Bog NHA	921	54	Offaly
14	Schohaboy Bog NHA	937	240	Tipperary
15	Lough Gowna pNHA	992	932.2885 (Section identified=~65ha)	Cavan
16	(Castlesampson Esker) Curraghaleen Bog pNHA	1625	222.7	Roscommon
17	Cranberry Lough Bog pNHA	1630	98	Roscommon
18	Nore Valley Bogs NHA (Timoney)	1853	270	Tipperary
19	Derrinlough Bog NHA	2197	69	Galway
20	River Moy SAC (Sessuegarry Bog)	2298	773	Roscommon, Sligo, Mayo
21	Carn Park SAC	2336	208	Westmeath
22	Drumalough Bog SAC (West) Cloonmaul Bog	2338	207	Roscommon
23	Mount Hevey Bog SAC	2342	190	Meath
24	Annaghbeg Bog NHA	2344	163	Galway
25	Hawkswood Bog NHA	2355	60	Offaly
26	Slieve Aughty Mountain SPA/ Drumminamuckla South	4168	1180	Galway

The initial analysis has identified 26 sites, designated because they contain raised bog, but which are impacted by private and Coillte forestry. 11 sites are Special Areas of Conservation, 1 Site is a Special Area for the Protection of birds. 11 Sites are designated as Natural Heritage Areas and 3 sites are proposed Natural Heritage Areas. All sites contain European Habitat 7120 Degraded Raised Bog and/or 7110 Active Raised Bog.

The data from all the sources regarding each site has been tabulated (Appendix A). Aerial imagery was used to examine each site identified in the analysis.

By examining the data IPCC have selected the top 15 sites (Appendix B) that are in need of restoration works and forestry removal to improve biodiversity recovery, improve water quality and carbon sequestration and improve connectivity between conservation worthy habitats and sites. While state-owned land should be predominately targeted initially the Government also needs to establish a mechanism to reduce in-appropriate private forestry.

Conclusion

Ireland's raised bogs are among the most critically endangered habitats in the country, with only **15% of their original extent** remaining in conservation worthy condition. The analysis presented in this Shadow Nature Restoration Plan demonstrates that afforestation, both historic and ongoing continues to undermine the ecological integrity, hydrological function and climate value of these peatland systems. Across 26 designated sites, including SACs, NHAs, pNHAs and one SPA, forestry is directly impacting Active Raised Bog (7110) and Degraded Raised Bog (7120), accelerating drying, decomposition, biodiversity loss and water-quality decline.

Through detailed GIS assessment, site level ecological review and integration of NPWS, IPCC, NBDC and the Irish Peat Soil Map datasets, this project identifies high-priority peatland restoration zones where deforestation and hydrological rehabilitation will deliver immediate and measurable gains. These sites represent strategic locations where removing inappropriate forestry will rapidly restore peatland function, reconnect fragmented habitats, support Annex I species, and contribute significantly to Ireland's legally binding restoration targets under the EU Nature Restoration Law.

The evidence is clear. Restoration is not only possible but urgent. Many sites show ongoing damage from drainage, turbary, agricultural reclamation and scrub encroachment, while others have begun recovery but require continued management to prevent regrowth of conifers and invasive species. In several cases, forestry removal would also strengthen neighbouring SACs, SPAs and wetland complexes, creating landscape scale ecological networks resilient to climate change.

Ireland must now act decisively. Meeting the 2030, 2040 and 2050 restoration targets will require a whole of government approach that prioritises state owned land while establishing mechanisms to address inappropriate private forestry. The scientifically grounded restoration itinerary developed here provides a practical, evidence-based pathway to deliver those outcomes.

Restoring raised bogs is a national opportunity. By removing afforestation from these priority peatlands, Ireland can protect biodiversity, improve water quality, enhance carbon sequestration, and honour its commitments to future generations. The sites identified in this plan should form a core component of Ireland's National Restoration Plan, ensuring that raised bogs one of our most ancient and irreplaceable ecosystems are finally placed on a trajectory of recovery.

REFERENCES

Peatlands and Climate Change Action Plan 2030, Irish Peatland Conservation Council, 2021.

The Status of EU Protected Habitats and Species in Ireland, National Parks and Wildlife Service, 2025.

National Biodiversity Data Centre – Biodiversity Maps https://biodiversityireland.ie/

Irish Peat Soil Map, Trinity College Dublin,
https://www.sciencedirect.com/science/article/pii/S0016706124001629#t0045

National Parks & Wildlife Service GIS Data, https://www.npws.ie/maps-and-data

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Restore Nature: Blanket Bog

Abstract

Blanket bogs represent one of Ireland's most extensive semi-natural habitats, occurring predominantly in upland and western regions where high rainfall and low evapotranspiration allow peat to accumulate across entire landscapes rather than in confined basins. Unlike raised bogs, blanket bogs are ombrotrophic from formation and are highly dependent on sustained precipitation and intact hydrological conditions. These habitats support specialised vegetation communities, including Sphagnum mosses, ericaceous shrubs and a range of rare upland bird and invertebrate species, while also playing a critical role in carbon storage, water regulation and climate resilience.

Despite their ecological importance, blanket bogs in Ireland are subject to widespread degradation due to historic and ongoing pressures including overgrazing, drainage, afforestation, peat extraction and infrastructure development. These pressures disrupt the delicate surface hydrology, leading to peat erosion, loss of active peat-forming vegetation and increased carbon emissions. Large areas of blanket bog are now classified as degraded, with significant portions no longer functioning as active peat-forming systems.

Recent policy developments, including the EU Nature Restoration Law and Ireland's forthcoming National Restoration Plan, place a strong emphasis on the recovery of peatland ecosystems, particularly Annex I blanket bog habitats such as *Active Blanket Bog* and *Degraded Blanket Bog Capable of Natural Regeneration*. Restoration of these areas is essential not only to halt biodiversity loss but also to reinstate hydrological function, stabilise peat soils and enhance carbon sequestration capacity.

This component of the project focuses specifically on identifying blanket bog sites where restoration can deliver significant ecological and climate benefits. By prioritising degraded blanket bogs impacted by land-use pressure, particularly afforestation, within and adjacent to designated conservation areas, the study contributes to a strategic, evidence-based approach to meeting national and EU restoration targets.

Project Summary

The aim of this component of the project is to support the Environmental Pillar's contribution to Ireland's Nature Restoration Plan by identifying priority restoration opportunities within blanket bog habitats. Building on the broader peatland assessment, this phase focuses specifically on Annex I blanket bog ecosystems, recognising their distinct hydrological characteristics, spatial extent and conservation requirements.

Using geospatial analysis, the project identifies areas of *Active Blanket Bog* and *Degraded Blanket Bog Capable of Natural Regeneration* that are currently impacted by afforestation and located within, or in close proximity to, designated conservation areas including Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Natural Heritage Areas (NHAs) and proposed NHAs. Particular emphasis is placed on upland and western landscapes where blanket bogs form extensive, interconnected systems and where restoration can enhance ecological coherence at a landscape scale.

These degraded sites are considered high-priority restoration candidates due to their capacity for recovery once hydrological integrity is restored. The removal or management of forestry in these areas can rapidly reduce evapotranspiration pressures, raise water tables and facilitate the re-establishment of peat-forming vegetation. This, in turn, supports biodiversity recovery, improves water quality and contributes to climate mitigation through reduced emissions and renewed carbon sequestration.

The analysis integrates spatial datasets including the Coillte Forest Inventory, the National Map of Private Forestry and the Irish Peat Soils Map, alongside NPWS Article 17 habitat layers specific to blanket bogs. For each identified site, key information is compiled including location, designation status, extent of forestry overlap and associated species of conservation concern. Supporting data from NPWS site synopses, the IPCC Peatland Sites Database and the National Biodiversity Data Centre is used to contextualise ecological value and restoration potential.

The outputs of this work will inform a targeted blanket bog restoration strategy, highlighting opportunities where intervention can deliver measurable gains within the timelines set out under the EU Nature Restoration Law. By aligning site-level actions with national conservation objectives, this project contributes to a coordinated approach

to peatland recovery, reinforcing Ireland's commitments to biodiversity protection, water quality improvement and climate action.

Methodology

The Coillte Forest Inventory data-set and the National Map of Private Forestry were geo-spatially analysed to identify areas of forestry overlapping with historical blanket bog habitat. Spatial overlay analysis was conducted to identify priority forestry areas located within historical blanket bog habitats and designated conservation sites (SACs and SPAs). Input vector datasets for public forestry (Coillte Forest Inventory) and private forestry (National Map of Private Forestry) were intersected with peatland habitats derived from the Irish Peat Soils Map and the NPWS Article 17 Blanket Bog layer. Identified overlap areas were subsequently screened against SAC and SPA boundaries to determine which forestry areas occur within designated sites. Finally, a 500 m spatial buffer was generated around these priority areas to group adjacent sites into clusters and to allow a reasonable distance to account for potential reseeding impacts on designated restored areas.

The clusters identified in the analysis were then described using aerial imagery, location information (Irish Transverse Mercator coordinates and counties), and site codes of designated sites (National Parks and Wildlife Service descriptors). Utilising the NPWS Site Synopsis (NPWS official site description and rationale for designation), the IPCC Peatland Sites Database (a database of over 1,000 peatland sites of conservation importance), and the National Biodiversity Data Centre Biodiversity Maps (citizen science biodiversity recording platform), species of conservation importance and threats were noted.

IPCC have utilised the IPCC Peatland Sites Database to research the designated sites' history and ecological parameters. It contains important data such as threats and damage to a site, development history, research and scientific studies conducted, habitats and species present, and whether a site has previously received restoration or rehabilitation, which may further bolster the rationale for forestry removal and/or management.

The top 15 clusters that IPCC conjecture are the most suitable sites for forestry removal are listed in Appendix D and Appendix E contains the summary of the spatial analysis describing the amount of forestry (private and Coillte) that contains Article 17 Blanket Bog Designations across the Irish Peat Soils Map.

Table 1.1 GIS Data used in Project Analysis

GIS Data	Provider
Article 17 – 7110 Blanket Bog & SAC/SPA Site Boundaries	National Parks & Wildlife Service
Irish Wetlands Map	Irish Wetland Surveys Ireland
Irish Peat Soil Map	RePeat, Department of Agriculture, Forestry and the Marine
Coillte Forest Inventory	Coillte
National Map of Private Forestry	Department of Agriculture, Forestry and the Marine
Irish Peatland Conservation Council Peatland Sites of Conservation Importance Database	Irish Peatland Conservation Council

QGIS Version 4 has been utilised for GIS research.

National Biodiversity Data Centre Biodiversity Maps have been used to investigate records of protected species.

Results

The GIS analysis has identified 30 clusters of forestry that intersect with historical blanket bog (Irish Peat Soil Map), Article 17 Blanket Bog and European level designated sites (NPWS). These are shown below in Figure_1.1 & Figure 1.2 which describe the sites in relation to forestry and the designated sites respectively.

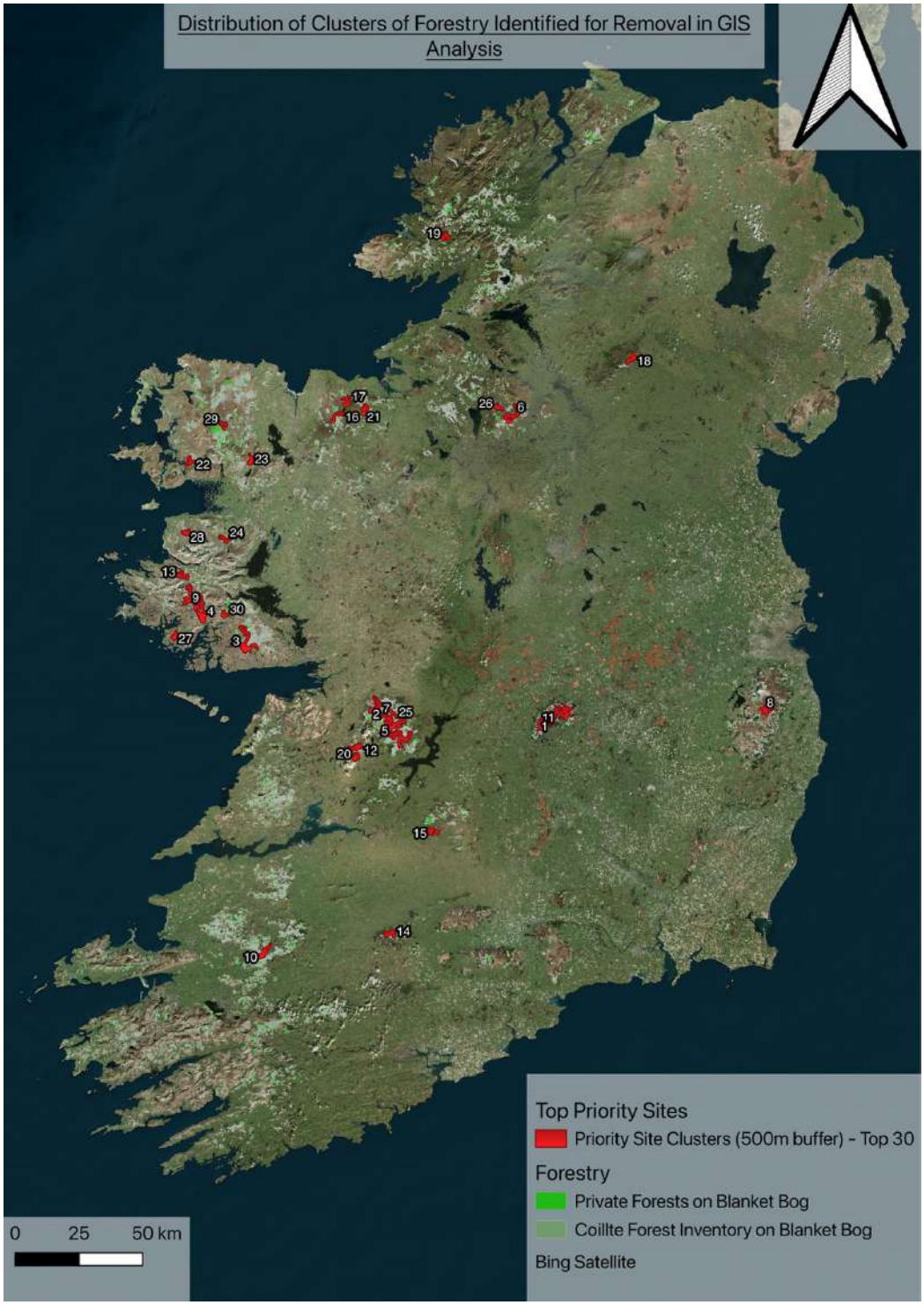


Figure 1.1 Distribution of Clusters of Forestry Identified for Forestry Removal in GIS Analysis. This map shows the distribution of the areas of forestry (Coillte and private) and the clusters identified, that if removed would benefit Article 17 Blanket Bog habitat and designated sites. The clusters are in order of size (ha).

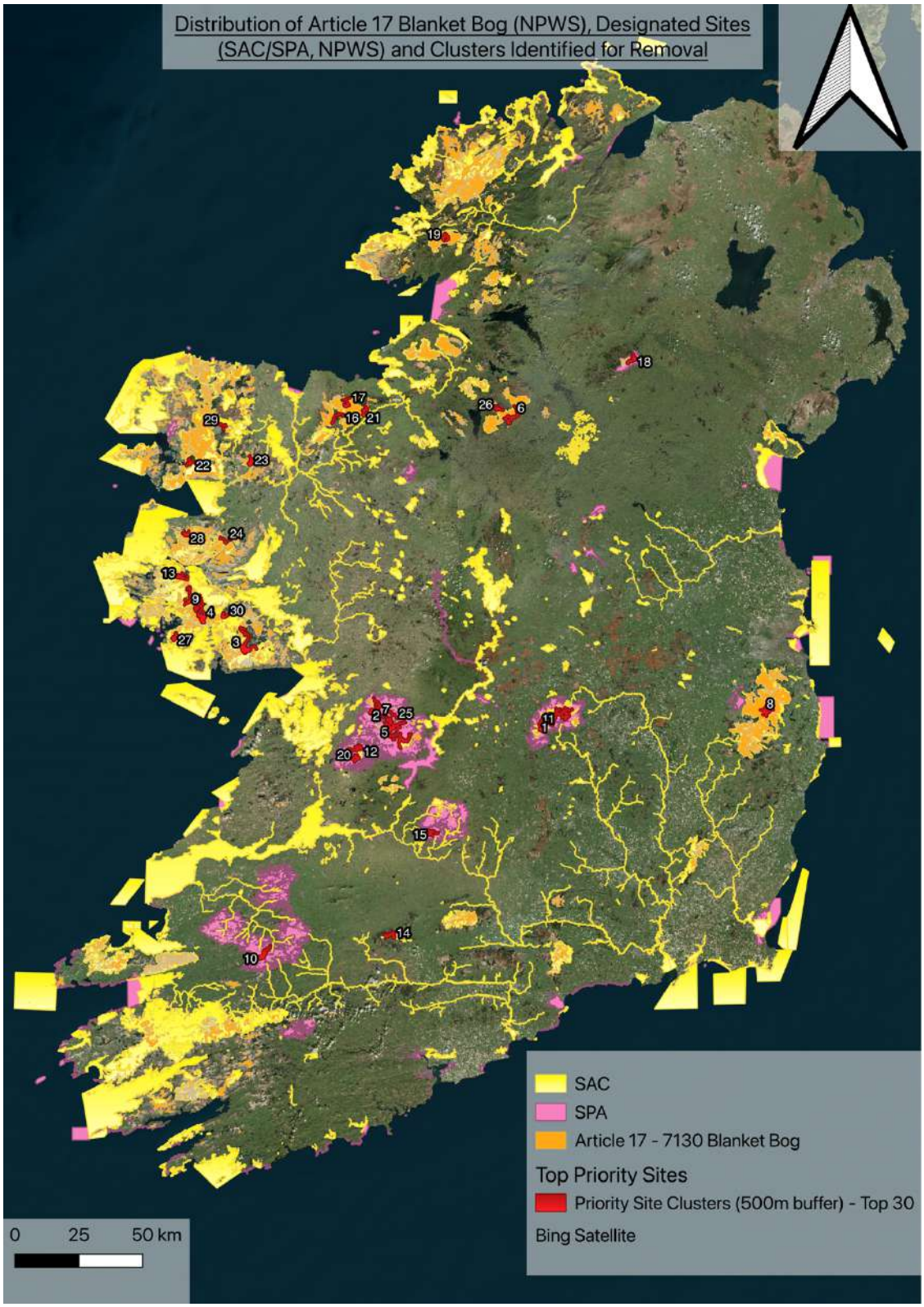


Figure 1.2 Distribution of Article 17 Blanket Bog (NPWS), Designated Sites (SAC/SPA, NPWS) and Clusters Identified for Forestry Removal. This map shows the results of the GIS analysis which has located the areas of forestry that overlap with the Article 17 Blanket Bog NPWS data and the designated sites that will benefit from forestry removal and restoration. The clusters are in order of size (ha).

Table 1.2 Cluster Central Location (ITM) & Forestry Area (ha) Identified

Cluster	X(ITM)	Y(ITM)	Counties	Coillte Area Under Cluster (ha)	Private Forestry Under Cluster (ha)	Total forestry Identified in GIS analysis under priority areas (ha)	Area_of_Cluster_ha
1	629371.6233	704056.1035	Laois, Offaly	1941.6	0	1941.6	3481.824
2	563310.2291	700410.8183	Galway, Clare	2108.24	351.954	2460.194	3191.562
3	506336.5977	732615.7775	Galway	1731.63	11.275	1742.905	2756.66
4	488422.1772	744938.0836	Galway	1541.91	0.615	1542.525	2633.061
5	566742.7026	694858.6999	Galway, Clare	1763.24	77.027	1840.267	2531.442
6	610752.8907	821210.3753	Cavan, Leitrim	656.488	21.942	678.43	1795.686
7	557059.3885	707076.062	Galway	1027.6	85.301	1112.901	1608.997
8	710439.7744	705853.8833	Wicklow	752.846	3.65	756.496	1547.572
9	483569.4776	750542.1281	Galway	532.516	15.286	547.802	1414.597
10	513479.9269	610703.7006	Kerry, Cork	1006.05	175.365	1181.415	1331.881
11	622313.1239	699782.3033	Laois, Offaly	465.63	32.376	498.006	1227.862
12	549182.268	690848.7646	Clare	839.616	43.902	883.518	1172.259
13	481238.7552	758193.7577	Galway	540.161	0	540.161	974.96
14	562737.4636	617782.1464	Limerick, Cork	547.884	0	547.884	961.407
15	579293.9208	657845.8039	Limerick	498.807	25.284	524.091	940.413
16	541903.2712	820824.507	Sligo, Mayo	537.57	2.136	539.706	907.369
17	545582.5234	826637.2726	Sligo	461.608	6.696	468.304	905.647
18	657567.8123	843475.556	Monaghan, Tyrone	336.645	52.137	388.782	858.817
19	584450.2993	891173.2049	Donegal	327.053	2.489	329.542	834.642
20	549242.2004	687120.1028	Clare	474.818	40.64	515.458	814.074
21	552786.9544	823305.658	Sligo	336.398	0	336.398	807.527
22	484092.0294	803005.1439	Mayo	462.667	0	462.667	788.174
23	508018.7782	803554.5365	Mayo	298.854	125.82	424.674	783.779
24	498092.4616	772563.1223	Mayo	213.137	15.581	228.718	730.004
25	563408.2514	704491.0439	Galway	515.155	28.932	544.087	715.684
26	605108.1576	824128.8364	Leitrim, Cavan	235.095	18.409	253.504	653.363
27	478257.4162	734635.9283	Galway	209.861	1.567	211.428	652.209
28	482675.0351	775096.6586	Mayo	313.88	0	313.88	623.353
29	497257.4278	817224.7701	Mayo	258.228	26.715	284.943	621.375
30	497823.2972	743051.9738	Galway	258.703	11.447	270.15	602.878

The location information for each cluster is described in Table 1.2 including the county or counties the cluster is present, the total area of forestry identified and the size of the cluster including a 500m buffer (in hectares). The data has been sorted and numbered in order of the cluster size with largest first.

The Irish Peatland Conservation Council collated information from the National Parks and Wildlife Services Site Synopses for the designated sites that the clusters have overlap with. Information such as the habitats, species and threats were input into a table alongside data from the National Biodiversity Data Centre species records for the individual sites. The Irish Peatland Conservation Council also collected data from the in-house Peatland Sites of Importance Database consisting of any information relevant to the past history including threats and damages or past restoration works. The full dataset is available in the Appendices.

Table 1.3 IPCC Ranking of Clusters and the Designated Sites Identified for Restoration

IPCC Ranking	Cluster	Protected Sites	IPCC Rationale
1	3	Connemara Bog Complex SAC, Connemara Bog Complex SPA	Massive species richness, multiple Annex I habitats, huge forestry footprint (2756 ha), extensive peatland threats, LIFE restoration history, hydrologically critical.
2	4	Connemara Bog Complex SAC, Connemara Bog Complex SPA, Maumturk Mountains SAC	Nearly identical ecological profile to Cluster 3, slightly smaller forestry footprint but still extremely high-value. Restoration leverage is enormous.
3	9	Connemara Bog Complex SAC, Maumturk Mountains SAC, The Twelve Bens/Garraun Complex SAC	pressures. One of Ireland's most important peatland landscapes.
4	1	Slieve Bloom Mountain SAC, Slieve Bloom Mountain SAC	Huge forestry footprint (3481 ha), strong Annex I bog habitats (4010, 7130, 91E0), LIFE restoration history, high species richness. Large-scale restoration potential.
5	2	Slieve Aughty Mountains SPA,	Large forestry area (3191 ha), Hen Harrier landscape, multiple peatland species, major afforestation pressures. High restoration leverage for SPA objectives.
6	5	Slieve Aughty Mountains SPA, Loughatorick South Bog SAC, Pollagoona Bog SAC	Multiple SACs, Annex I blanket bog (7130), LIFE restoration history, forestry pressures directly threatening Pollagoona. High ecological urgency.
7	7	Slieve Aughty Mountains SPA, Sonnagh Bog SAC	Strong species assemblage, Annex I bog, forestry pressures, wind farm interactions. High-value peatland under pressure.
8	11	Slieve Bloom Mountains SAC , Slieve Bloom Mountains SPA	Substantial forestry footprint (1227 ha), Annex I bog habitats, LIFE restoration history. Restoration feasible and impactful.
9	6	Cuilcagh - Anierin Uplands SAC	One of Ireland's largest intact blanket bogs, Dunlin breeding site, peat slide history, forestry footprint significant (1795 ha). Hydrologically critical upland bog.
10	16	Ox Mountains Bogs SAC	Annex I bog habitats (7130, 7140, 7150), strong species richness, major forestry damage historically, LIFE restoration history. High restoration value.
11	17	Ox Mountains Bogs SAC	Same ecological profile as 16, slightly smaller forestry footprint. High-value peatland with restoration precedent.
12	21	Ox Mountains Bogs SAC	Smaller footprint but still within the same high-value SAC complex. Strong restoration potential.
13	22	Bellacragher Saltmarsh SAC, Owenduff/Nephin Complex SAC and SPA	One of Ireland's premier intact peatland systems, species-rich flushes, major peatland threats. Restoration here has national significance.
14	24	Mweelrea/Sheeffry/Erriff Complex SAC	Extremely high Annex I habitat diversity, major peatland pressures, forestry fragmentation. High ecological value despite moderate forestry footprint.
15	27	Connemara Bog Complex SAC	Strong species richness, Annex I bog habitats, major peatland threats, LIFE restoration history. A solid restoration candidate within the Connemara complex.

This data was qualitatively assessed by the Irish Peatland Conservation Council and the top 15 clusters were selected (displayed in Table 1.3) as the most reasonable target areas for blanket bog restoration as the basis for the National Nature Restoration Plan blanket bog targets. The IPCC took into consideration the scale of the forestry, the presence of high value blanket bog habitats, designated sites importance and overlap, species richness and intactness. IPCC data on restoration history, threats, damages and landscape scale restoration leverage was also utilised.



Figure 1.3 displays the displays the location of the clusters of forestry labelled with their importance in regards to aligning with the National Restoration Plan, Article 17 obligations and National Parks & Wildlife Service restoration priorities.

Conclusion

Ireland's blanket bogs are nationally significant ecosystems that deliver essential public services, including, carbon storage, flood mitigation, biodiversity protection and climate resilience. Yet the evidence presented in this analysis demonstrates that extensive areas of these Annex I habitats remain under severe pressure from afforestation, drainage, overgrazing and historic land use decisions. The identification of 30 forestry clusters intersecting with Article 17 Blanket Bog and designated SAC/SPA/NHA sites highlights a clear and urgent need for state led intervention.

The EU Nature Restoration Law requires Ireland to restore 30% of degraded ecosystems by 2030, rising to 60% by 2040 and 100% by 2050. Blanket bogs, particularly *Active Blanket Bog (7130)* and *Degraded Blanket Bog Capable of Natural Regeneration* are explicitly prioritised under these obligations. The clusters identified in this study represent the areas where policy action will yield the highest ecological return with large scale hydrological recovery, reduced carbon emissions, improved water quality and strengthened landscape connectivity across upland peatland systems.

The ranking undertaken by the Irish Peatland Conservation Council provides a scientifically grounded basis for target selection within the National Restoration Plan. High value complexes such as the Connemara Bog Complex SAC/SPA, Slieve Bloom Mountains SAC/SPA, Slieve Aughty Mountains SPA and the Ox Mountains Bogs SAC demonstrate both the scale of forestry pressure and the strategic opportunity for restoration. Many of these sites already have LIFE project histories, NPWS restoration works or established hydrological baselines meaning policy action can build on existing momentum and deliver measurable gains within the EU's mandated timelines.

To meet national and EU obligations, Ireland must now adopt a coherent, whole of government restoration strategy that includes phased removal of inappropriate forestry within priority clusters, beginning with state owned lands. There needs to be mechanisms to address private forestry, including regulatory reform, incentives, and long term transition supports. Hydrological restoration and peatland rewetting aligned with NPWS Article 17 conservation objectives coupled with landscape scale planning to ensure connectivity between SAC/SPA peatland systems. Integration of all the available data is a must to guide site-specific restoration actions.

The findings of this analysis make clear that blanket bog restoration is an environmental necessity and also a policy opportunity. Strategic forestry removal in the identified clusters will accelerate Ireland's compliance with the Nature Restoration Law, strengthen delivery of the Climate Action Plan, and safeguard one of the country's most irreplaceable ecosystems.

Ireland now has the evidence, the legal mandate and the ecological imperative. The clusters identified in this Shadow Nature Restoration Plan should form a core component of the State's official National Restoration Plan, ensuring blanket bogs are restored at the scale required to secure their long term resilience and national value.

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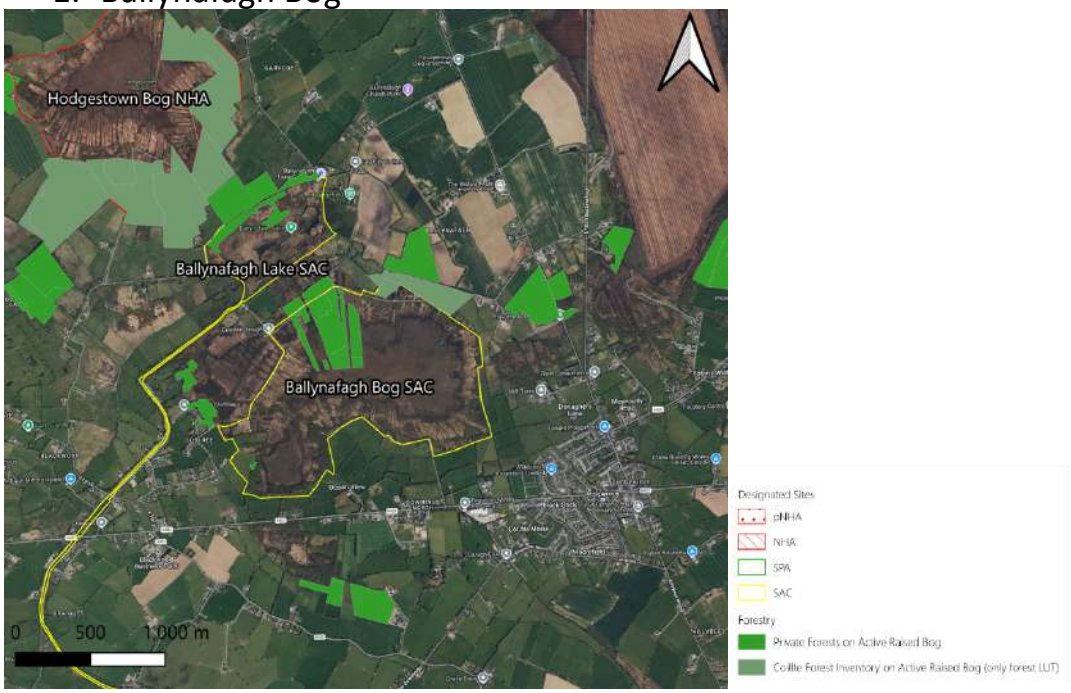
National Parks & Wildlife Service GIS Data, https://www.npws.ie/maps-and-data

Appendix A Afforested raised bogs in need of restoration

No.	DesigSite	SiteCode	X(ITM)	Y(ITM)	Size(ha)	Ha (Forestry on ARB)	County	Afforestation	Species Present (IPCC Sites DB)	NBDC	Habitat Notes	Damaged	Restoration	Threats	Notes (IPCC DB)	Notes
1	Ballynafagh Bog SAC	391	681589.2273	727982.7295	156.04	4.301	Kildare	Mostly Private on bog, Coillte present in surround areas.	White Beak-sedge, Merlin, Curlew, Snipe, vertigo sp. Marsh Fritillery,	Great repository of protected and threatened species, some endemic to raised bogs e.g Large Heath, Black Darter.		Fire, Afforestastion, Drainage, Mechanichal cutting. Sarracenia. Dumping.	Invasive species.	Fire		Forestry direct in centre of bog. No previous restoration seems to have happened.
2	Lough Oughter and Associated Loughs SAC (Drummany)	7	641100.0488	817952.7441	2139.9/4748	0.25	Cavan	Private	Otter,Needle Spike-Rush , Lesser Marshwort, Lemna gibba and Spirodela polyrhiza, Greenland White-Fronted Geese, Lapwing, Snipe, Golden Plover. Curlew. Black Darter	8 protected species of Sphagnum and Large White Moss.	Bog Woodland, Fen,eutrophic lakes,Cutover	Afforestation, housing, boating. Drainage. Road.		Fertiliser,slurry, hypertrophism. Afforestation. Fishing, hunting. housing, boating. Construction. Coillte Recreation Trail.	Best inland example of a flooded drumlin landscape in Ireland	High Priority, no notifiaction of restoration present or evident. Scrub enchroachmnet. And SAC priority is for Raised Bog, these sites are designated for Active Raised Bog and while IPCC are aware Bog Woodland is also priority. There is no restoration visible and the afforestation extetsive.
3	Slieve Aughty Mountain SPA/ Drumminamuckla South	4168	576183.9901	700491.8042	1180	0.25	Galway	Coillte x Private	Hen Harrier, Merlin, Red Grouse, Whooper Swans, White-beaked Sedge, Sheep's Fescue	Great repository of protected and threatened species within the SPA.	Upland, sitka spruce/lodgepole pine plantations, clearfell, blanket bog, wet and dry heath, moorland, regenerating cutover.Flushes, in-filling lakes, acid grassland	over 50% afforested, peat cutting, agriculture, burning, wind energy/renewables		Forestry, peat cutting, mechanical, drainage, grazing, dumping, burning, agricultural reclamation, hunting/shooting.Windfarm, recreation	Waymarked Trail	Hen Hrrier a priority species, forestry has been removed but there is still stands present Defforestation would benefit the Cloonmoylen SAC and the SPA. .
4	Mount Hevey Bog SAC	2342	662207.2401	747702.1822	190	32.26	Meath	Coillte	White Beak-sedge, S. auriculatum	Dingy Skipper, Snipe, Common Frog, Irish Hare.	Rhynchosporion, wet quaking, infilled lake, soak system, forestry, cutover, peat forming.regenerating cutover, flush	Forestry, peat-cutting, conifers, agricultural reclamation, hand and mechanical cutting. Rhodendendron	4/8/2021 received notification that npws will be doing restoration works on state owned land. 6/11/2024 received info and map of restoration works, NPWS undertaking conservation measure on bog Tree felling drainblocking.	Afforestation. Conifers, agricultural reclamation, hand and mechanical cutting.Invasive species.	modern peat extraction, failed conifer plantation, because management over this area can greatly effect the hydrology of the rest of the bog area.	Has had restoration already. But Even after restoration , google imagry shows regrowth since 2024, this needs more work. Etra regrowth is not comatible with conservation and more restoration is required. Is a large site.
5	River Shannon Callows SAC (Cloniff Bog)	216	598095	726725	72 (approx area within the SAC. SAC Total = 1490ha	0.01	Offaly	Private	Whooper Swan, Wigeon, Corncrake,Golden Plover, Lapwing, Black-tailed Godwit and Black-Headed Gull. GWF. Hen Harrier, snipe, Curlew golden plover merlin.	Large number of species associated with this site such as Golden Plover, Curlew , Hen Harrier, Lapwing, Meadow Pippit, Red Grouse, Merlin etc.	Fen/Raised Bog/scrub/river/stream/riparian/ Wet woodland, lowland dry grassland/freshwater marshes	Afforestation		Afforestation/Drainage/Peatcutting.	Sitecode 2138 is no longer valid, was probably from when the site was pNHA but now the site is within the 216 SAC designation.	no apparent restoration. Huge wetland bird supporting habitat.
6	Drumalough Bog SAC (West) Cloonmaul Bog	207	561852	782749	277.87	10	Roscommon	Coillte & Private	Pleurozia purpurea , Marsh Lousewort, Devil's-bit Scabious , Dioecious Sedge, Red Grouse	A large number of protected species have been recorded. Historically, Hen Harrier, Curlew, numerous Sphagnum species, whorl snails, Black Darter, Marsh Fritillary, White Fronted Geese, Snipe etc	wet grassland, quaking, flushes, cutover, freshwater marsh, Rhynchosporion, soaks, calcareous flush, lake	Agriculture, peat-cutting, afforestation, drainage. Turbary.Dumping/infilling	2004-2008 Coillte Restoration project LIFE, dams, tree removal, windrowing. NPWS notification of restoration 12/7/24 on state owned land	Over Grazing., turbary, burning.		Afforestation has been removed. And is staying managed. Looks like no regrowth.
7	Killsallagh Bog SAC	285	567316.4991	767119.7813	279.13	9.34	Galway	Coillte	Red Grouse	Golden Plover, Red Grouse, Snipe, Sparrowhawk, Twite, Water Fern, Irish Hare.	flushed. Raised Bog, Rhyncosporian.	conifer plantation, drainage, peat extraction.		intermittent fire	Replacement LIFE Site as Derinea is to be removed. 100% understorey of Bog Mosses.central 15% of the bog is of outstanding quality.	Felling has occurred.Cell bunding.. All improving prospects.
8	Cloonshanville Bog SAC	614	575113.3996	791560.7279	240.8	4.0239	Roscommon	Coillte & Private	Sphagnum pulchrum/fuscum, imbricatum, Snipe, GWF Geese, Mallard	Common Frog, Smooth Newt, Black Darter, Common Lizard, Irish Hare, Scarce Blue-Tailed Dragonfly.	Flushes, transition from reedbed to bog dome, supports bog woodland ANNEXI	Aforestation, Drainage, Mechanical cutting	Drains on bog filled, forestry removed	Dainage, mechanical cutting,Recreation		Forestry already removed. Beside Active raised bog area. Needs ongoing maintenance.
9	Carn Park SAC	2336	611442.1215	741659.7838	208	3.15092	Westmeath	Coillte & Private (mostly private)	Sphagnum pulchrum, imbricatum, fuscum. White beaked Sedge.	Common Lizard, Sphagnum spp.	Cutover	Tears, afforestation (plantations,) mechanical/hand cutting, agriculture. Scots pine. Burning. Has dramatic series of tears near southern boundary of unknown origin and may be causing damage. Forestry plantations, mechanical peat cutting. Turf Cutting. Afforestation, burning, mechanical cutting, agricultural reclamation.	Coillte Restoration in 2004-2008 - drains filled, forestry removed. Notification of Restoration 21/6/2023, NPWS Peatland Conservation Unit	Boardwalk (Coillte Life Site), Roads, Scots Pine. Boardwalk.	50% Forested. Extentsive tears. Regional importance. Bog bursts, tears.	Forestry removal within SAC under way.
10	Carrowbehy/Caher Bog SAC	597	557076.5452	782976.0058	276	0.2614	Roscommon	Coillte & Private	Sphagnum auriculatum var. auriculatum. S. recurvum var. mucronatum, and var. tenue.quaking areas. Sphagnum teres. Brown Beak-sedge. lagg' zone. Marsh Frit.	Whooper Swan, Marsh Fritillary, Black Darter, numerous Sphagnum species, Irish Hare, Otter.		peat cutting, afforestation, burning.	Dams constructed, blocking of high drains. NPWS LIFE Site.	peat cutting, drainage	It was the most species-rich bog surveyed and thought highly worthy of conservation.	No evidence of forestry on high bog from aerial photos.
11	Drumalough Bog SAC Cloonmaul Bog	2338	561851.6893	782749.4907	207	0.25	Roscommon	Coillte & Private	Pleurozia purpurea , Marsh Lousewort, Devil's-bit Scabious , Dioecious Sedge, Red Grouse	Many Peatland and wetland species recorded including Sphagnum spp. , Whorl snails, Marsh fritillary, Green Hairstreak, Skylark, Snipe etc.	wet grassland, quaking, flushes, cutover, freshwater marsh, Rhynchosporion, soaks, calcareous flush, lake	Agriculture, peat-cutting, afforestation, drainage. Turbary.Dumping/infilling	2004-2008 Coillte Restoration project LIFE, dams, tree removal, windrowing. NPWS notification of restoration 12/7/24 on state owned land)	Over Grazing., turbary, burning.		Forestry within SAC removed.
12	River Moy SAC (Sessaegarry Bog)	2298	548036.7387	814866.2571	773	0.2	Roscommon, Sligo, Mayo	Coilte	Atlantic Salmon, Otter, Sea Lamprey and White-clawed Crayfish, Narrow-leaved Helleborine, Juniper , sessile oak, nternediate Wintergreen, Lesser Twayblade , White Beaked-sedge, White Beaked-sedge. Heath Cudweed (Omalotheca sylvatica), Great Burnet (Sanguisorba). Pine Marten, Badger, Irish Hare and Daubenton's Bat. Common Frog, officinalis) and Irish Lady's-tresses (Spiranthes romanzoffiana). (Red Data Book). Greenland White-fronted Geese, whooper swan, Lapwing (>1,000) and Curlew 464. Golden Plover	Various Sphagnum species, Whorl snails, Curlew, Golden Plover, Hen Harrier, Kestrel, Meadow Pippit, Red Grouse, Skylark, Snipe, Whooper Swan	old oak woodlands, lakes, fen, cutover, blanket bog, quaking mats	peat cutting, arterial drainage, drainage, afforestation, wet regenerating cutover bog	4/6/24 Notification of restoration works from NPWS (Gowlaun Bog), 22/2/2024 Notification of restoration works from NPWS,(Tawnaghbeg Bog)	afforestation, agricultural reclamation, burning, drainage, hand cutting, mech. Cutting, overgrazing, water pollution.	These are examples of raised bogs at the north-western edge of the spectrum . Natural regeneration with peat-forming capability will be possible over time with some restorative measures.	There is scrub enchroachment but only small amount of ARB in southern east corner with afforestation.
13	Nore Valley Bogs NHA (Timoney)	1853	616818.8482	684679.8768	270	4.2	Tipperary		White Beak-sedge. Hen Harrier, Hare, Otter.	Snipe.	Cutover. Woodland.Flush in acid bog.	Peat cutting. Road. Scots Pine.		Recreation: The South Leinster Way (National Waymarked Trail).	Aerial photographs taken by Duchas show extensive drainage to appox 150 ha on western side of bog. Drainage occurred between 2000 and 2003. Area exceeds EIA threshold of 30ha, but no EIA was made.	needs restoration. Extentsive drainage, bare peat and forestry development.
14	Lough Gowna pNHA	992	632363.9644	791075.6735	932.2885 (Section identified= ~65ha)	0.01	Cavan		Whooper Swan (29) and Golden Plover	Many peatland/wetland species including Sphagnum Spp., Whooper Swan, Snipe, Skylark, Meadow Pippit, Lapwing, Kesterel, Golden Plover, Curlew (2001, historical) and Common frog.	upland Lemon-scented					Is a good target for restoration. Lots of afforestation over most of the site. Not fully designated.
15	Kilnaborris Bog NHA	284	596526.4975	717599.169	237	1	Galway	Private	Sphagnum auriculatum	Skylark	Wet quaking. Flush.	Eutrophication.bog burst, tears. Scots Pine.Peat cutting.		conifer seedlings/invasive species, cutting, burning.		Forested on south boundary No Restoration visible. Doesn't seem to have had restoration yet. Forestry enchroaching further and drying out bog, visibly on aerial imagery.

Appendix B – Top 15 Raised Bog Sites in Need of Forestry Removal

1. Ballynafagh Bog



Site Code	000391
County	Kildare
Size	156.4Ha
Location(ITM)	681589.2273 727982.7295
Afforestation	Private = 81.585Ha
	Coillte = 88.72Ha
Forestry on Article 17 RB	4.301Ha

Notes.

Forestry direct in centre of bog and there does not seem to be evidence of previous habitat restoration. The forestry is impacting on a number of sites and restoration (deforestation) would also benefit Ballynafagh Lake SAC and Hodgestown Bog NHA. Historically, Ballynafagh has been known to support peatland species such as marsh fritillary, snipe and curlew. The site is also under threat from drainage and mechanical cutting.

2. Lough Oughter and Associated Loughs SAC (Drummany)

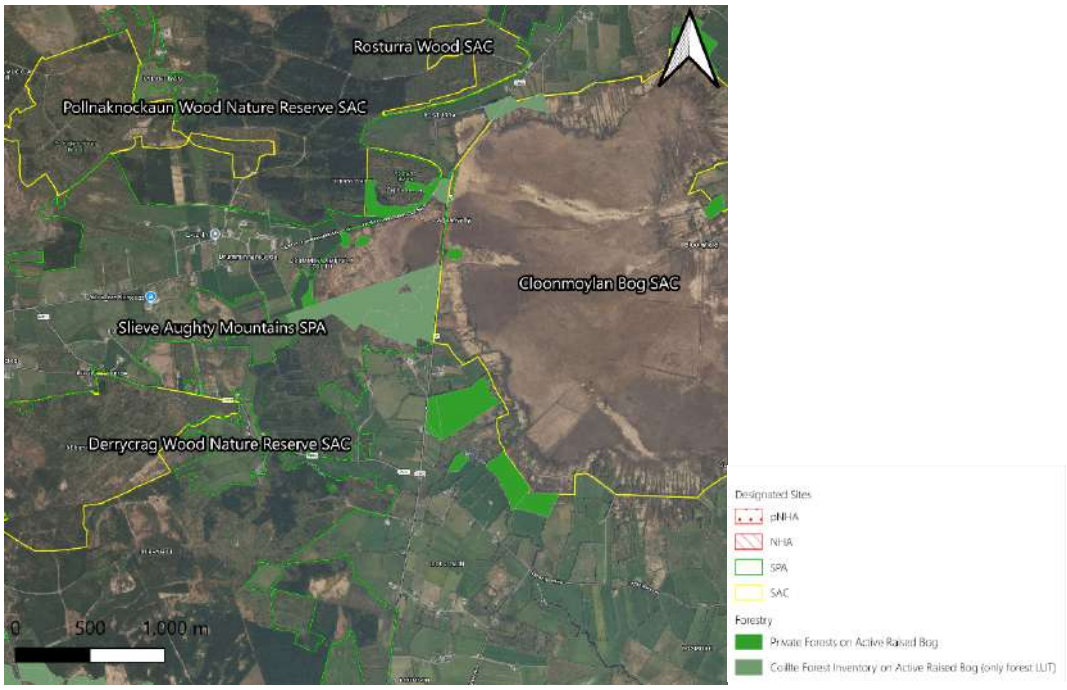


Site Code	000007
County	Cavan
Size	4748Ha
Location(ITM)	641100.0488 817952.7441
Afforestation	Private = 112.235Ha
	Coillte = 1.74Ha
Forestry on Article 17 RB	0.25Ha

Notes.

This cluster of forestry is impacting on a variety of habitats within and bordering the Special Area of Conservation. This is a high priority site and IPCC can see no evidence of previous restoration. There is visible scrub encroachment and while IPCC are aware there is bog woodland present which is also a priority habitat and needs recognition the industrial afforestation is directly impacting raised bog.

3. Slieve Aughty Mountain SPA/ Drumminamuckla South



Site Code	004168
County	Galway
Size	1180Ha
Location(ITM)	576183.9901 700491.8042
Afforestation	Private = 31.84Ha
	Coillte = 31.88Ha
Forestry on Article 17 RB	0.25Ha

Notes.

This cluster of afforestation impacts on a number of designated sites including Cloonmoylen Bog SAC, Slieve Aughty Mountains SPA and some sites designated for ancient woodland i.e. Derrycrag Wood Nature Reserve, Polinaknockaun Wood Nature Reserve SAC and Rosturra Wood SAC. There is a large number of priority species historically recorded utilising the site which would benefit from habitat restoration including hen harrier and merlin. Some deforestation is evident within the SPA but there are still stands present. There is also many threats such as turf cutting, drainage, dumping burning, agricultural reclamation and shooting.

4. Mount Heavey Bog SAC



Site Code	002342
County	Meath
Size	190Ha
Location(ITM)	662207.2401 747702.1822
Afforestation	Private = 21.0289Ha
	Coillte = 82.31Ha
Forestry on Article 17 RB	32.26Ha

Notes.

Mount Heavey SAC contains priority Active Raised Bog and while the site has had restoration already Google Maps shows that regrowth since 2024. This needs more work as it is not compatible with conservation. Mount Heavey is a large site with damage evident from forestry, peat cutting, drainage and reclamation. Species associated with peatland are present such as the dingy skipper, common frog and Irish hare. The habitats present are described to be wet and quaking, infilled lake, soak systems, flush, cutover and regenerating cutover, which would all benefit from deforestation where appropriate.

5. River Shannon Callows SAC (Cloniff Bog)

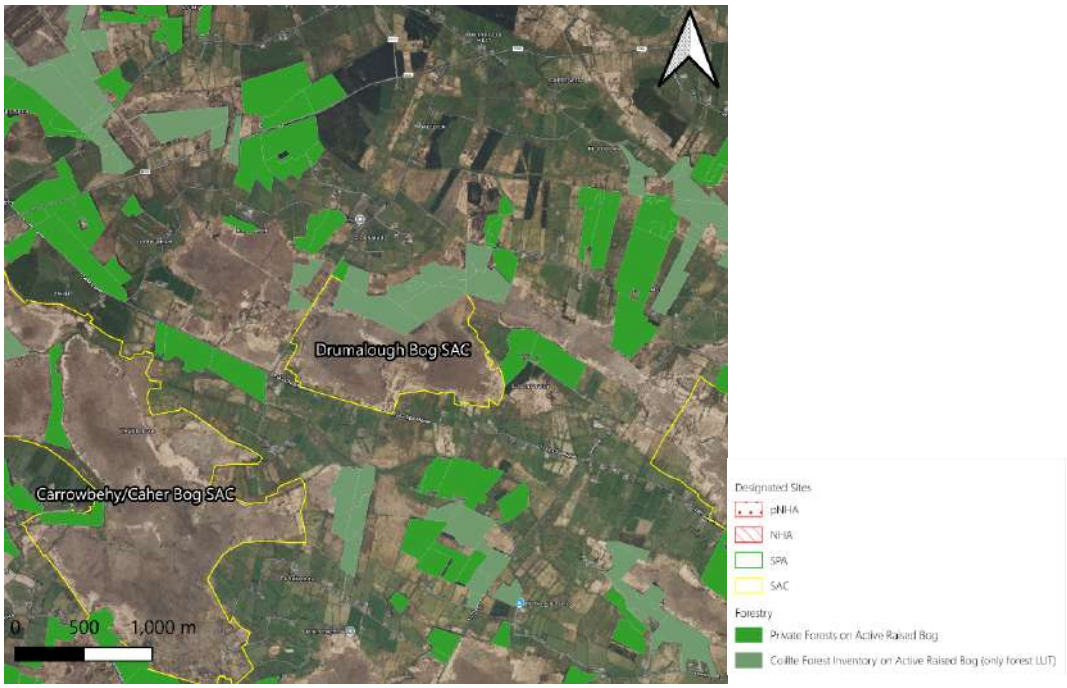


Site Code	000216
County	Offaly
Size	~72Ha within SAC (1490Ha)
Location(ITM)	598095 726725
Afforestation	Private = 28.1886Ha
	Coillte = 0Ha
Forestry on Article 17 RB	0.01Ha

Notes.

There is a large number of species recorded utilising this site and within the larger Special Area of Conservation designation. Whooper swan, golden plover, lapwing, Greenland white-fronted geese, hen harrier and curlew would benefit from habitat restoration. There is also a large number of associated habitats such as fen, river/streams, wet woodland and fresh-water marshes. Threat have been recorded as being afforestation, drainage and peat cutting. There does not seem to be any previous restoration attempted.

6. Drumalough Bog SAC (West) Cloonmaul Bog



Site Code	000207
County	Roscommon
Size	277.87Ha
Location(ITM)	561852 782749
Afforestation	Private = 158.313Ha
	Coillte = 96.05Ha
Forestry on Article 17 RB	10Ha

Notes.

Drumalough Bog (Cloonmaul) SAC sits within a groip of raised bog sites such as Carrowbehy/Caher Bog SAC and Drumalough Bog East SAC. Many species associated with peatland have been recorded such as devil's bit scabious and red grouse. Many protected species are also recorded as utilising the site. Hen harrier, curlew and numerous sphagnum species. Endemic species to raised bog are also found such as the black darter. While felling has occurred which directly improving prospects for the raised bog habitat, the many clusters of afforestation in the area are detrimental to the wider conservation of the landscape.

7. Killsallagh Bog SAC



Site Code	000285
County	Galway
Size	279.13Ha
Location(ITM)	567316.4991 767119.7813
Afforestation	Private = 13.0283Ha
	Coillte = 88.53Ha
Forestry on Article 17 RB	9.34Ha

Notes.

Killsallagh Bog SAC has received de-forestation habitat restoration measures but the wider area has a large cluster of Coillte forestry impacting on the peatland landscape. Golden plover, red grouse, snipe and the Irish hare have all been recorded utilising the Special Area of Conservation and would benefit further from habitat management and tree-felling. The bog has been identified as being of outstanding quality therefore habitat protection measures are necessary to further inhibit degradation.

8. Cloonshanville Bog SAC



Site Code	000614
County	Roscommon
Size	240.8Ha
Location(ITM)	575113.3996 791560.7279
Afforestation	Private = 108.659Ha
	Coillte = 148.09Ha
Forestry on Article 17 RB	4.0239Ha

Notes.

While forestry has been removed from the main raised bog area the surrounding the afforestation is having a detrimental affect on the supporting habitats and causes further encroachment. This will need ongoing maintenance and further de-forestation. The site has already received damage from drainage and mechanical peat cutting which has had detrimental affects to the habitats associated with the site, such as flushes, reedbeds and also a high priority habitat bog woodland. Species recorded to be associated with this site include a species endemic to raised bog, the black darter. Snipe and Greenland white-fronted geese are also associated with Cloonshanville Bog SAC.

9. Carn Park Bog SAC



SiteCode	002336
County	Westmeath
Size	208Ha
Location(ITM)	611442.1215 741659.7838
Afforestation	Private = 61.8194Ha
	Coillte = 252.04Ha
Forestry on Article 17 RB	3.15092Ha

Notes.

The afforestation on Carn Park Bog SAC has been extensive with over 50% of the site planted. Restoration occurred under the Coillte LIFE Restoration Project in 2004 and IPCC have received notification that felling has occurred more recently. There is still much afforestation present within the landscape that needs attention and would benefit the neighbouring raised bog Crosswood Bog SAC.

10. Carrowbehy/Caher Bog SAC



SiteCode	000597
County	Roscommon
Size	276Ha
Location(ITM)	557076.5452 782976.0058
Afforestation	Private = 61.8194Ha
	Coillte = 283.489Ha
Forestry on Article 17 RB	0.2614Ha

Notes.

While forestry has been removed from the bog surface the surround landscape is heavily forested and the landscape would benefit from restoration and management. The site is important in terms of biodiversity as species endemic to raised bogs, such as the black darter have been recorded. The site has been deemed as one of the most species rich raised bogs surveyed and it is important that this is upheld.

11. Drumalough Bog East SAC

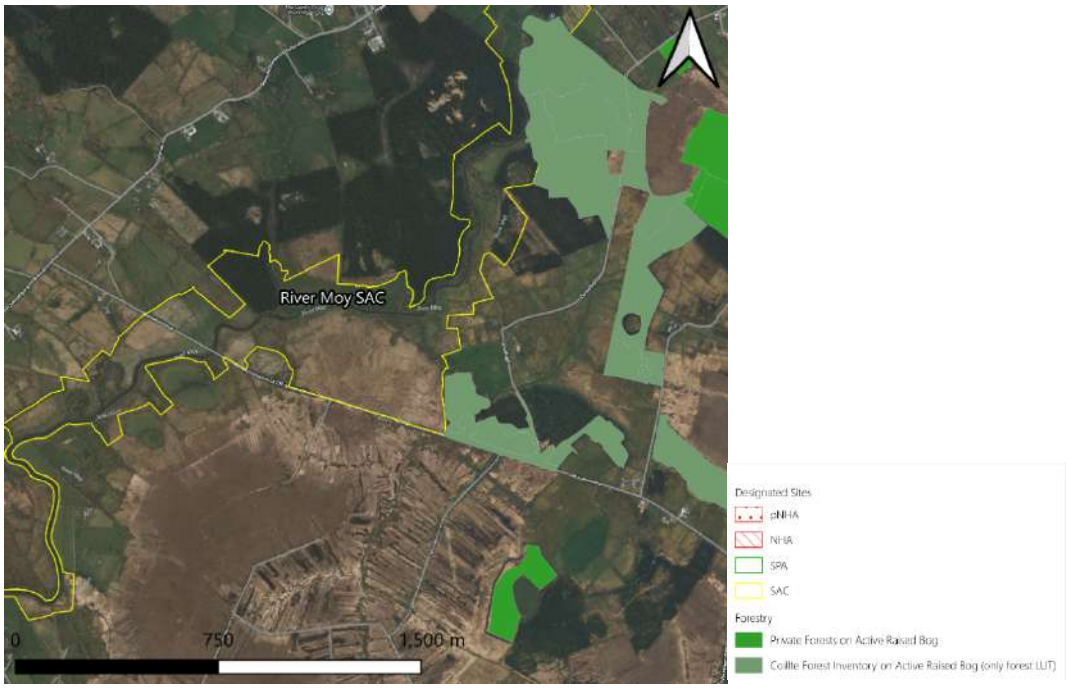


Site Code	002338
County	Roscommon
Size	207Ha
Location(ITM)	561851.6893 782749.4907
Afforestation	Private = 201.496Ha
	Coillte = 188.64Ha
Forestry on Article 17 RB	0.25Ha

Notes.

While forestry has been removed from within the SAC the landscape still needs extensive felling to improve the prospects for the designated site. Deforestation would also benefit Cloonchambers Bog SAC and Drumalough Bog West SAC. The site, while it has had restoration is still under threat from drainage, overgrazing and turbary. There are many peatland species recorded such as marsh fritillary, whorl snails and the green hairstreak. Peatland bird species are also well represented with skylark and snipe both utilising the site.

12. River Moy SAC (Sessuegarry Bog)



Site Code	002298
County	Roscommon, Sligo, Mayo
Size	773Ha
Location(ITM)	548036.7387 814866.2571
Afforestation	Private = 201.496Ha
	Coillte = 166.414Ha
Forestry on Article 17 RB	0.2Ha

Notes.

The forestry borders and impacts Sessuegarry Bog, which a portion of which sits within the River Moy SAC. Forestry is also impacting on neighbouring undesignated Corsallagh Bog and extensively along the River Moy SAC. Aside afforestation, agricultural reclamation, turbary, burning and drainage have been listed as threats for this site. The National Biodiversity Data Centre lists a high number of protected species recorded for the site including golden plover and hen harrier.

13. Nore Valley Bogs NHA (Timoney)



Site Code	001853
County	Tipperary
Size	270Ha
Location(ITM)	616818.8482 684679.8768
Afforestation	Private = 186.281Ha
	Coillte = 304.75Ha
Forestry on Article 17 RB	4.2Ha (West) East ~150Ha

Notes.

The Nore Valley Bogs and surround landscape features heavy afforestation, including private forestry directly on the bog. The larger area of Coillte forestry north of the bog also borders Monaincha/Ballaghmore Bog NHA. Hen harrier, Irish hare and otter have been recorded using the designated site and it also contains EU Annexed habitat degraded raised bog. There is extensive drainage, bare peat and the site and surrounding landscape would benefit from deforestation and restoration increasing connectivity between the two NHAs.

14. Lough Gowna pNHA



Site Code	000992
County	Cavan
Size	~65Ha
Location(ITM)	632363.9644 791075.6735
Afforestation	Private = 18.8615Ha
	Coillte =
Forestry on Article 17 RB	0.01Ha

Notes.

Lough Gowna (Swan Lough) pNHA, while not fully designated was identified for protection as it contains the EU Annexed habitat degraded raised bog capable of natural regeneration. It is surrounded by private afforestation and forestry directly on the raised bog habitat. Whooper swan, golden plover, skylark and several high priority species have been recorded utilising the site. There is a high number of wetland habitats in the landscape, including Swan Lough increasing the importance of landscape management. Removal of industrial forestry would improve connectivity between conservation worthy sites and habitats.

15. Kilnaborris Bog NHA



Site Code	000284
County	Galway
Size	237Ha
Location(ITM)	632363.9644 791075.6735
Afforestation	Private = 63.2313Ha
	Coillte =
Forestry on Article 17 RB	1Ha

Notes.

Kilnaborris Bog NHA is separated from the Middle Shannon Callows SPA/River Shannon Callows SAC by private afforestation. The Natural Heritage Area is recorded within the IPCC Sites Database as containing *Sphagnum auriculatum*, skylark and habitats of note include quaking and flush areas. Damage evident ranges from eutrophication, bog bursts, tears and scots pine. Turbary has also damaged the site. The site does not seem to have had restoration, and forestry is further encroaching. The conservation worthy network of designated sites would benefit from landscape management.

Noteworthy Additions

16. Money Beg and Claire Island SAC



Site Code	002340
County	Meath/Westmeath
Size	364.1Ha
Location(ITM)	643986.8 781562.1
Afforestation	Private = 54.7465Ha
	Coillte = 55.46Ha

Forestry on Article 17 RB

Notes.

Afforestation separates the two lobes of raised bog and surrounds and encroaches on the eastern lobe. The landscape features several protected sites, Lough Sheelin SPA borders Money Beg and Clare Island Bog SAC. The site is visibly impacted by turbary and development. Records held by the National Biodiversity Data Centre include the black darter, a raised bog specialist highlighting the importance of conserving this site. Removing the industrial afforestation would benefit the network of habitats, improving water quality, biodiversity and improve the prospects of creating a buffer for climate change.

17. Ardagullion Bog SAC



Site Code	002340
County	Longford
Size	116.4Ha
Location(ITM)	631418.3 775264.9
Afforestation	Private = 116.536Ha
	Coillte = 88.58Ha

Forestry on Article 17 RB

Notes.

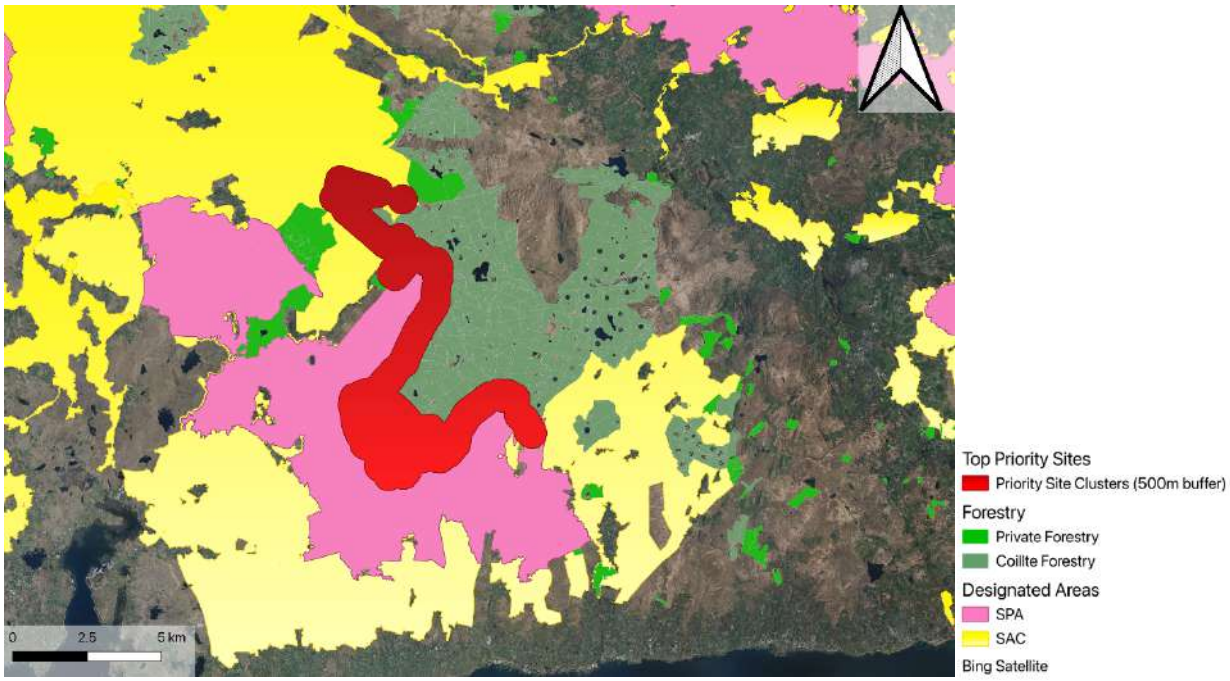
This site highlights where cooperation between state organisations can be hugely beneficial and may have synergistic effects for biodiversity recovery. The raised bog has been receiving restoration after industrial extraction and has some good peatlands habitat prospects, with some felling already occurring, but the neighbouring SAC is separated by afforestation. Landscape management with tree felling to increase the connectivity between the sites including the afforestation surrounding the former industrial would set both sites on a better recovery trajectory.

Apendix C Cluster Central Location (ITM) & Forestry Area (ha) Identified and Site Data

Cluster	X(ITM)	Y(ITM)	Counties	Coillte Area Under Cluster (ha)	Private Forestry Under Cluster (ha)	Total forestry Identified in GIS analysis under priority areas (ha)	Area_of_Cluster_ha	Protected Sites	NPWS Species	NPWS Habitats	NBDC Annexed Species	NBDC Red List	Threats	IPCC Notes (IPCC_SitesDB)	IPCC Threats	IPCC_Restoration Notes
1	629371.623	704056.1035	Laois, Offaly	1941.6	0	1941.6	3481.824	Slieve Bloom Mountain SAC, Slieve Bloom Mountain SAC	Hen Harrier, Peregrine, Merlin, Red Grouse	[4010], [7130],[91E0]	Common Frog, **Golden Plover,** Jack Snipe, **Lapwing,** Mallard, Pheasent, **Red Grouse,** Rock Dove, **Snipe,** Fir Clubmoss, Marsh Fritillary, Sphagnum spp., Otter, Pine Marten.	**Golden Plover,** Greywagtail, Kestrel, **Lapwing,** Meadow Pipit, **Snipe,** Swift,	Drainage, Afforestation, Forestry, Over-grazing	Waymarked Trail,demonstration site with interpretation for Coillte restoration project.	Recreation	Coillte Blanket Bog Restoration Project 2002-2006 (LIFE), Forestry Removal, windrowing, drain blocking.
2	563310.229	700410.8183	Galway, Clare	2108.24	351.954	2460.194	3191.562	Slieve Aughty Mountains SPA,	Hen Harrier, Merlin, Red Grouse	N/A	Common Frog, **Golden Plover,** Mallard, Merlin, Pheasent, **Red Grouse, Snipe, Woodcock,** White-clawed Crayfish, Marsh Fritillary, Sphagnum spp., Large White-moss, Varnished Hook-moss, Common Pipistrelle, Pine Marten, Otter, Soprano Pipistrelle,	**Golden Plover,** Grey Wagtail, Kestrel, Meadow Pipit, **Red Grouse,** Redwing, **Snipe, Woodcock,** Yellowhammer,	Foresty	East Clare Way, Waymarked trail.	Recreation, reclamation, burning, renewsble energy, mechanical cutting, afforestation and drainage.	
3	506336.598	732615.7775	Galway	1731.63	11.275	1742.905	2756.66	Connemara Bog Complex SAC, Connemara Bog Complex SPA	Cormorant, Merlin, Golden Plover, Common Gull, Marsh Fritillary, Salmon, Otter, Slender Naiad, Common Frog, Greenland Whote-fronted Goose, Common Tern, Baltic Stonewort, Rough Stonewort, Sago Pondwees, Forked Spleenwort, Parsley Fern, Bog Hair-grass, Heath Cudweed, Pilwort, Pale Dog-violet, Dorset Heath, Mackay's Heath, Green-winged Orchid	[1150], [1170], [3110], [3130], [3160], [3260], [4010], [4030], [6410], [7130], [7150], [7230], [91A0]	Common Frog, Artic Tern, Common Tern, **Curlew, Golden Plover,** Hen Harrier, Kingfisher, Mallard, Merlin, Perergrine, Pheasant, **Red Grouse, Red Kite,** Red Breasted Merganser, Sandwich Tern, **Snipe**, Teal, Tuffed Duck, White Fronted Goose, **White Tailed Eagle**, Whooper Swan, **Woodcock**, Fir Club Moss, Marsh Club Moss, Floating Water-plantain, Slender Naiad, Marsh Fritillary, Grey Seal, Kerry Slug, Sphagnum Sp., Large White Moss, Common Pipistrellus, Daubentons Bat, Leislers Bat, Pine Martin, Pipostrelle, Soprano Pipistrelle	**Curlew**, Dunlin, **Golden Plover,** Grey wagtail, Kestrel, Meadow Pipit, Oyster catcher, **Red Grouse, Red Kite,** Redshank, Redwing, **Snipe,** Snowy Owl, Swift, Whinchat, **White-tailed Eagle, Woodcock**	Peat cutting, Over-grazing, Afforestation, Machine peat extraction, Hand-cut peat extraction, Poaching, Erosion, Land drainage, Land reclamation, Fertilization, Quarrying, Dumping	Listed in County Development Plan, visitor centre, guided walks.	Recreation. Renewable Energy, ESB station, Forestry Plantations	Coillte Blanket Bog Restoration, Drain Blocking, Forestry removal.LIFE project.
4	488422.177	744938.0836	Galway	1541.91	0.615	1542.525	2633.061	Connemara Bog Complex SAC, Connemara Bog Complex SPA, Maumturk Mountains SAC	Cormorant, Merlin, Golden Plover, Common Gull, Marsh Fritillary, Salmon, Otter, Slender Naiad, Common Frog, Greenland White-fronted Goose, Common Tern, Baltic Stonewort, Rough Stonewort, Sago Pondwees, Forked Spleenwort, Parsley Fern, Bog Hair-grass, Heath Cudweed, Pilwort, Pale Dog-violet, Dorset Heath, Mackay's Heath, Green-winged Orchid	[1150], [1170], [3110], [3130], [3160], [3260], [4010], [4030], [6410], [7130], [7150], [7230], [91A0]	Common Frog, Artic Tern, Common Tern, **Curlew, Golden Plover,** Hen Harrier, Kingfisher, Mallard, Merlin, Perergrine, Pheasant, **Red Grouse, Red Kite,** Red Breasted Merganser, Sandwich Tern, **Snipe**, Teal, Tuffed Duck, White Fronted Goose, **White Tailed Eagle**, Whooper Swan, **Woodcock**, Fir Club Moss, Marsh Club Moss, Floating Water-plantain, Slender Naiad, Marsh Fritillary, Grey Seal, Kerry Slug, Sphagnum Sp., Large White Moss, Common Pipistrellus, Daubentons Bat, Leislers Bat, Pine Martin, Pipostrelle, Soprano Pipistrelle, Otter, Pine Marten	**Curlew**, Dunlin, **Golden Plover,** Grey wagtail, Kestrel, Meadow Pipit, Oyster catcher, **Red Grouse, Red Kite,** Redshank, Redwing, **Snipe,** Snowy Owl, Swift, Whinchat, **White-tailed Eagle, Woodcock**	Peat cutting, Over-grazing, Afforestation, Machine peat extraction, Hand-cut peat extraction, Poaching, Erosion, Land drainage, Land reclamation, Fertilization, Quarrying, Dumping	Listed in County Development Plan, visitor centre, guided walks. The Western Way Waymarked Trail (& interpretation).	Recreation. Renewable Energy, ESB station, Forestry Plantations. Maumturk, peat cutting, dumping, afforestation damaged Maam Cross, hand cutting caused damage.	Coillte Blanket Bog Restoration, Drain Blocking, Forestry removal.LIFE project. No restoration on Maumturk.
5	566742.703	694858.6999	Galway, Clare	1763.24	77.027	1840.267	2531.442	Slieve Aughty Mountains SPA, Loughatorick South Bog SAC, Pollagoona Bog SAC	Hen Harrier, Merlin, Red Grouse, Snipe	[7130]	Common Frog, **Golden Plover,** Mallard, Merlin, Pheasent, **Red Grouse, Snipe, Woodcock,** White-clawed Crayfish, Marsh Fritillary, Sphagnum spp., Large White-moss, Varnished Hook-moss, Common Pipistrelle, Pine Marten, Otter, Soprano Pipistrelle,	**Golden Plover,** Grey Wagtail, Kestrel, Meadow Pipit, **Red Grouse,** Redwing, **Snipe, Woodcock,** Yellowhammer,	Foresty	East Clare Way Walking Route. Pollagoona has suffered damage from previous forestry planting.	Recreation. Afforestation, mechanical cutting, burning, wind farm. Has also suffered damage from these. Lough Atorick - shooting, invasive species, hand and mechanical cutting, drainage. Pollagoona Bog SAC may be threatened from surrounding forestry when clearfelled.	Pollagoona was part of the Coillte LIFE Blanket Bog Restoration Project 2002-2006 where drains were filled and forestry was removed.
6	610752.891	821210.3753	Cavan, Leitrim	656.488	21.942	678.43	1795.686	Cuilcagh - Anierin Uplands SAC	Salmon, Slender Naiad, *Discelium nudum,* Slender Green Feathermoss, Red Grouse, Golden Plover, Peregrine, Merlin	[3110], [4010], [4060], [7130], [7150], [8220]	Common Frog, Pheasent, **Red Grouse,** Fir Clubmoss, Sphagnum spp., Varnished Hook-moss, Otter,	Kestrel, Meadow Pipit, **Red Grouse,**	Over-grazing, Peat cutting, Afforestation, Drainage, Fertilization, Quarrying, Dumping	One of largest intact BBog in Ireland. Ring Ouzel. Breeding site for Dunlin. A peatslide occurred in 2021	Renewable energy. Erosion has caused damage.	
7	557059.389	707076.062	Galway	1027.6	85.301	1112.901	1608.997	Slieve Aughty Mountains SPA, Sonnagh Bog SAC	Hen Harrier, Merlin, Red Grouse	[7130]	Common Frog, **Golden Plover,** Mallard, Merlin, Pheasent, **Red Grouse, Snipe, Woodcock,** White-clawed Crayfish, Marsh Fritillary, Sphagnum spp., Large White-moss, Varnished Hook-moss, Common Pipistrelle, Pine Marten, Otter, Soprano Pipistrelle,	**Golden Plover,** Grey Wagtail, Kestrel, Meadow Pipit, **Red Grouse,** Redwing, **Snipe, Woodcock,** Yellowhammer,	Foresty	East Clare Way Walking Route	Recreation. Afforestation, mechanical cutting, burning, wind farm. Has also suffered damage from these. Sonnagh Bog Site damaged from hand cutting.	
8	710439.774	705853.8833	Wicklow	752.846	3.65	756.496	1547.572	Wicklow Mountains SAC, Wicklow Mountains SPA,	Peregrine, Merlin, Otter, Alpine Lady's Mantle, Alpine Saw-wort, Mountain Clubmoss, Firmoss, Starry Saxifrage, Lead Moss, Lesser Copperwort, Greater Copperwort, Parsley Fern, Marsh Clubmoss, Lanceolate Spleenwort, Small-white Orchid, Bog Orchid, Greater Broomrape, *Echinostelium colliculosum,* Arctic Char, Irish Hare, Badger, Red Grouse, Goosander,	[3110], [3160], [4010], [4030], [4060], [6130], [6230], [7130], [8110], [8210], [8220], [91A0]	Common Frog, **Curlew, Golden Plover,** Goosander, **Golden Eagle,** Hen Harrier, Kingfisher, **Lapwing,** Mallard, Merlin, Peregrine, Pheasant, **Red Grouse, Red Kite,** Rock Dove, **Shoveler, Snipe,** Spotted Crake, Whooper Swan, Wigeon, **Woodcock,** Apline Clubmoss, Fir Clubmoss, Stag's-horn Clubmoss, *Cladonia portentosa,* Sphagnum spp., Large White-moss, Brown Long-eared Bat, Common Pipistrelle, Daubenton's Bat, Leisler's Bat, Natterer's Bat, Otter, Pine Martens, Pipistrelle, Soprano Pipistrelle, Whiskered Bat,	**Curlew, Golden Plover, Golden Eagle,** Grey Wagtail, Kestrel, **Lapwing,** Meadow Pipit, **Red Grouse, Red Kite,** Redstart, Redwing, Ring Ouzel**, Shoveler, Snipe,** Snowy Owl, Stock Dove, Swift, Whinchat, Wood Warbler, **Woodcock**	Peat Cutting, Over-grazing,	Wickow Way Trail, Coillte recreation trails, mountain access routes, deerpark walks. Lots of interpretation.	Recreation. TV mast. Coillte and private afforestation. Infrastructure. Dumping/infilling. Burning, drainage. Damaged Domestic and Building rubbish reported 2001, CAOC. Powewrcourt lands drained in mid 1990's for turf extraction. Path damage along the top of Lough Bray since mid 1990's. Annual Burning at Kippure Mountain.	NPWs & Volenteers using coir and wool repairing erosion. Drains blocked and filled (2025).
9	483569.478	750542.1281	Galway	532.516	15.286	547.802	1414.597	Connemara Bog Complex SAC, Maumturk Mountains SAC, The Twelve Bens/Garraun Complex SAC	Cormorant, Merlin, Peregrine, Golden Plover, Common Gull, Freshwater Pearl Mussle, Marsh Fritillary, Salmon, Otter, Slender Naiad, Common Frog, Greenland White-fronted Goose, Common Tern, Irish Hare,Slender Cottongrass, Marsh Clubmoss, Baltic Stonewort, Rough Stonewort, Sago Pondwees, Forked Spleenwort, Parsley Fern, Bog Hair-grass, Heath Cudweed, Pilwort, Pale Dog-violet, Dorset Heath, Mackay's Heath, Green-winged Orchid	[1150], [1170], [3110], [3130], [3160], [3260], [4010], [4030], [4060], [6410], [7130], [7140], [7150], [7230], [8110], [8210], [8220], [91A0]	Common Frog, Artic Tern, Common Tern, **Curlew,** Chough, **Golden Plover,** Goosander, Great Northern Diver, Hen Harrier, Kingfisher, Little Egret, Mallard, Merlin, Perergrine, Pheasant, **Red Grouse, Red Kite,** Red Breasted Merganser, Red-throated Diver, Rock Dove, Sandwich Tern, **Snipe**, Teal, Tuffed Duck, White Fronted Goose, **White Tailed Eagle**, Whooper Swan, Wigeon, **Woodcock**, Salmon, Fir Club Moss, Marsh Club Moss, Floating Water-plantain, Slender Naiad, Marsh Fritillary, Common Dolphin, Cuvier's Beaked Whale, Long-finned Pilot Whale, Leatherback turtle, Grey Seal, Kerry Slug, Sphagnum Sp., Large White Moss, Common Pipistrellus, Daubentons Bat, Leislers Bat, Pine Martin, Pipostrelle, Soprano Pipistrelle, Otter, Pine Marten	**Curlew**, Barn Owl, Dunlin, **Golden Plover,** Grey wagtail, Kestrel, Kittiwake, Meadow Pipit, Oystercatcher, Razorbill, **Red Grouse, Red Kite,** Redshank, Redwing, **Snipe,** Snowy Owl, Swift, Twinte, Whinchat, **White-tailed Eagle, Woodcock**, Yellowhammer,	Peat cutting, Over-grazing, Afforestation, Machine peat extraction, Hand-cut peat extraction, Poaching, Erosion, Land drainage, Land reclamation, Fertilization, Quarrying, Dumping	Listed in County Development Plan, visitor centre, guided walks. The Western Way Waymarked Trail (& interpretation). Twelve Bens - Boardwalk on Diamond Hill	Recreation. Renewable Energy, ESB station, Forestry Plantations. Maumturk, peat cutting, dumping, afforestation damaged Maam Cross, hand cutting caused damage. Twelve Bens -Rhodedendron, recreation. Hand cutting. Bog burst has caused damage.	Coillte Blanket Bog Restoration, Drain Blocking, Forestry removal.LIFE project. No restoration on Maumturk. Coillte Blanket Bog restoration project 2002-2006 where drains on bog were filled and forestry removed.
10	513479.927	610703.7006	Kerry, Cork	1006.05	175.365	1181.415	1331.881	Stack's to Mullaghareirk Mountains, West Limerick Hills and Mount Eagle SPA	Hen Harrier, Merlin, Short-eared Owl, Red Grouse,	N/A	Common Frog, Chough, **Curlew, Golden Plover**, Mallard, Pheasant, **Red Grouse,** Short-eared Owl, **Snipe,** Marsh Fritillary, Kerry Slug, Sphagnum spp., Common Pipistrelle, Leisler's Bat, Otter, Pine Marten, Soprano Pipistrelle	**Curlew, Golden Plover,** Grey Wagtail, Kestrel, Meadow Pipit, **Red Gourse, Snipe,**	Afforestation, Scrub Encroachment	291ha intact bbog with 17ha considered to be Active.	Overgrazing, mechanical cutting, drainage, burning	
11	622313.124	699782.3033	Laois, Offaly	465.63	32.376	498.006	1227.862	Slieve Bloom Mountains SAC , Slieve Bloom Mountains SPA	Hen Harrier, Peregrine, Merlin, Red Grouse, Lesser Twayblade	[4010], [7130], [91E0]	Common Frog, **Golden Plover,** Jack Snipe, **Lapwing,** Mallard, Merlin, Pheasant, **Red Grouse,** Rock Dove, **Snipe, Woodcock,** Fir Clubmoss, Marsh Fritillary, Sphagnum spp., Otter, Pine Marten,	**Golden Plover,** Grey Wagtail, Kestrel, **Lapwing,** Meadow Pipit, **Red Grouse, Snipe,** Stock Dove, Swift, **Woodcock,** Yellowhammer	Drainage for forestry, Afforestation, Over-grazing	Waymarked Trail,demonstration site with interpretation for Coillte restoration project.	Recreation	Coillte Blanket Bog Restoration Project 2002-2006 (LIFE), Forestry Removal, windrowing, drain blocking.
12	549182.268	690848.7646	Clare	839.616	43.902	883.518	1172.259	Slieve Aughty Mountains SPA,	Hen Harrier, Merlin, Red Grouse	N/A	Common Frog, **Golden Plover,** Mallard, Merlin, Pheasent, **Red Grouse, Snipe, Woodcock,** White-clawed Crayfish, Marsh Fritillary, Sphagnum spp., Large White-moss, Varnished Hook-moss, Common Pipistrelle, Pine Marten, Otter, Soprano Pipistrelle,	**Golden Plover,** Grey Wagtail, Kestrel, Meadow Pipit, **Red Grouse,** Redwing, **Snipe, Woodcock,** Yellowhammer,	Foresty	East Clare Way Walking Route	Recreation. Afforestation, mechanical cutting, burning, wind farm. Has also suffered damage from these. Sonnagh Bog Site damaged from hand cutting.	
13	481238.755	758193.7577	Galway	540.161	0	540.161	974.96	The Twelve Bens/Garraun Complex SAC, Maumturk Mountains SAC	Salmon, Otter, Slender Naiad, Freshwater Pearl Mussle	[3110], [3130], [4010], [4060], [7130], [7150], [8110], [8210], [8220], [91A0]	Common Frog, Arctic Tern, Chough, Common Tern, **Curlew, Golden Plover,** Goosander, Kingfisher, Little Egret, Mallard, Merlin, Peregrine, Pheasent, **Red Grouse,** Red-breasted Merganser, Red-throated Diver, Rock Dove, Sandwich Tern, **Snipe,** Teal, Tuffted Duck, White-fronted Goose, Whooper Swan, Wigeon, **Woodcock,** Salmon, Fir Clubmooss, Floating Water-plantain, Slender Naiad, Sphagnum spp., Large White-moss, Common Dolphin, Cuvier's Beaked Whale, Long-finned Pilot Whale, Leatherback Turtle, Daubenton's Bat, Leisler's Bat Otter, Pine Marten, Soprano Pipistrelle	Barn Owl, **Curlew,** Dunlin, **Golden Plover,** Grey Wagtail, Kestrel, Kittiwake, Meadow Pipit, Oystercatcher, Razorbill, **Red Grouse,** Redwing, Redshank, **Snipe,** Twite, Whinchat, **Woodcock,** Yellowhammer,	Peat Cutting, Over-grazing, Afforestation, Machine peat extraction, Drainage, Fertilization, Quarrying, Dumping,	Listed in County Development Plan, visitor centre, guided walks. The Western Way Waymarked Trail (& interpretation). Twelve Bens - Boardwalk on Diamond Hill	Recreation. Renewable Energy, ESB station, Forestry Plantations. Maumturk, peat cutting, dumping, afforestation damaged Maam Cross, hand cutting caused damage. Twelve Bens -Rhodedendron, recreation. Hand cutting. Bog burst has caused damage.	Coillte Blanket Bog Restoration, Drain Blocking, Forestry removal.LIFE project. No restoration on Maumturk. Coillte Blanket Bog restoration project 2002-2006 where drains on bog were filled and forestry removed.
14	562737.464	617782.1464	Limerick, Cork	547.884	0	547.884	961.407	Ballyhoura Mountains SAC	N/A	[4010], [4030], [7130]	**Snipe**, Marsh Fritillary	**Snipe**	Forestry	Ballyhoura Way walking route.	Recreation. Quad biking. Afforestation (Coillte and Private). Site damaged by trampling and visitors.	
15	579293.921	657845.8039	Limerick	498.807	25.284	524.091	940.413	Slievefelim to Silvermines Mountains SPA	Hen Harrier, Peregrine, Merlin, Red Grouse		**Golden Plover**, Hen Harrier, **Red Grouse**, **Snipe**, Marsh Fritillary, Sphagnum Sp., Large Whitemoss, Otter, Pine Martin	**Golden Plover**, Grey Wagtail, Kestrel, Meadow Pipit, **Red Grouse, Snipe**	Forestry	Slieve Felim Way and glenstal woods loop.	Afforestation, recreation.	
16	541903.271	820824.507	Sligo, Mayo	537.57	2.136	539.706	907.369	Ox Mountains Bogs SAC	Geyer's Whorl Snail, Marsh Saxifrage, Greenland White-fronted Geese, Golden Plover	[3110], [3160], [4010], [4030], [7130], [7140], [7150]	Common Frog, **Golden Plover**, Mallard, **Red Grouse**, Rock Dove, **Snipe,** Sphagnum Sp., Large White-moss, Daubenton's Bat, Otter, Pine Martin	**Golden Plover**, Grey Wagtail, Kestrel, Meadow pipit, **Red Grouse, Snipe**, Swift, Whinchat	Afforestation, Turbary	The Sigo Way trail. Coillte planted and drained 50% of original asi, ipcc complaint to EU, site transferred to NPWS.	Overgrazing, mechanical cutting, Afforestation (Coillte and Private), dumping, recreation, renewable energy. Site has been dmged from forestry, burning, drainage, overgrazing and trampling visitors, erosion,	Coillte Blanket Bog restoration Project 2002-2006 (LIFE), Forestry Removal, drains on bog filled. Windrowing.
17	545582.523	826637.2726	Sligo	461.608	6.696	468.304	905.647	Ox Mountains Bogs SAC	Geyer's Whorl Snail, Marsh Saxifrage, Greenland White-fronted Geese, Golden Plover	[3110], [3160], [4010], [4030], [7130], [7140], [7150]	Common Frog, **Golden Plover**, Mallard, **Red Grouse**, Rock Dove, **Snipe**, Sphagnum Sp., Large White-moss, Daubenton's Bat, Otter, Pine Martin	**Golden Plover**, Grey Wagtail, Kestrel, Meadow pipit, **Red Grouse, Snipe**, Swift, Whinchat,	Afforestation, Turbary	The Sigo Way trail. Coillte planted and drained 50% of original asi, ipcc complaint to EU, site transferred to NPWS.	Overgrazing, mechanical cutting, Afforestation (Coillte and Private), dumping, recreation, renewable energy. Site has been dmged from forestry, burning, drainage, overgrazing and trampling visitors, erosion,	Coillte Blanket Bog restoration Project 2002-2006 (LIFE), Forestry Removal, drains on bog filled. Windrowing.
18	657567.812	843475.556	Monaghan, Tyrone	336.645	52.137	388.782	858.817	Slieve Beagh SPA	Hen Harrier, Peregrine, Merlin	N/A	Common Frog, Coot, **Curlew**, **Golden Plover** Hen Harrier, Jack Snipe, Lapwing, Mallard, Merlin, **Red Grouse**, Rock Dove, Ruff, Short-eared Owl, **Snipe**, Tufted Duck, White-fronted Goose, Whooper Swan, **Woodcock**, Fir Clubmoss, Marsh Fritillary, Sphagnum Sp., Large White-moss, Pine Martin	**Curlew**, **Golden plover**, Kestrel, Lapwing, Meadow Pipit, **Red Grouse, Snipe, Woodcock**	Forestry	Cross border site, largest intact upland habitat in the North.	Renewable energy, multiple windfarms proposed. Incinerator development. Afforestation, drainage, mechanical cutting, overgrazing. IPCC reported illegal turfcutting to NI. Site is damaged by agricultural reclamation. Recreation.	
19	584450.299	891173.2049	Donegal	327.053	2.489	329.542	834.642	Lough Nillan Bog SPA and SAC	Hen Harrier, Merlin , Golden Plover, Dunlin, Red-throated Diver, Red Grouse, Badger, Irish Hare, Sphagnum teres	[3110], [7130]	**Golden Plove**r, Mallard, Merlin, Pheasant, **Red Grouse, Snipe**, Whooper Swan, Sphagnum Sp.,	**Golden Plover, Red Grouse, Snipe**	Over grazing, Turf-cutting, Forestry		Erosion, drainage, afforestation (private), mechanical cutting and overgrazing, handcutting. Site Damaged from all the same impacts.	
20	549242.2	687120.1028	Clare	474.818	40.64	515.458	814.074	Slieve Aughty Mountains SPA and Glendree Bog SAC	Hen Harrier, Merlin ,Red Grouse, Snipe, Irish Hare, Common Frog, Common Lizard, Greenland White-fronted Geese, Quillwort	[7130]	**Red Grouse**, Sphagnum Sp., **Golden Plover**, Hen Harrier, Kingfisher, Mallard, Merlin, Pheasant, **Snipe**, Woodcock, White-clawed Crayfish, Marsh Fritillary, Large Whitemoss, Varnished Hook-moss, Common Pipistrelle, Otter, Pine Martin Soprano Pipistrelle	Meadow Pipit, **Red Grouse**, **Golden Plover**, Grey Wagtail, Kesterl, Redwing, **Snipe**, Woodcock, Yellow Hammer	Forestry, Peat cutting	East Clare Way Walking Route	Recreation. Afforestation, mechanical cutting, burning, wind farm. Has also suffered damage from these.	
21	552786.954	823305.658	Sligo	336.398	0	336.398	807.527	Ox Mountains Bogs SAC	Geyer's Whorl Snail, Marsh Saxifrage, Greenland White-fronted Geese, Golden Plover	[3110], [3160], [4010], [4030], [7130], [7140], [7150]	Common Frog, **Golden Plover**, Mallard, **Red Grouse**, Rock Dove, **Snipe,** Sphagnum Sp., Large White-moss, Daubenton's Bat, Otter, Pine Martin	**Golden Plover**, Grey Wagtail, Kestrel, Meadow pipit, **Red Grouse**, **Snipe**, Swift, Whinchat	Afforestation, Turbary	The Sigo Way trail. Coillte planted and drained 50% of original asi, ipcc complaint to EU, site transferred to NPWS.	Overgrazing, mechanical cutting, Afforestation (Coillte and Private), dumping, recreation, renewable energy. Site has been dmged from forestry, burning, drainage, overgrazing and trampling visitors, erosion,	Coillte Blanket Bog restoration Project 2002-2006 (LIFE), Forestry Removal, drains on bog filled. Windrowing.
22	484092.029	803005.1439	Mayo	462.667	0	462.667	788.174	Bellacragher Saltmarsh SAC, Owenduff/Nephin Complex SAC and SPA	Salmon, Otter, Merlin, Golden Plover, Greenland White-fronted Geese, Marsh Saxifrage, Drepanocladus (Hamatocaulis) vernicosus, Slender Green Feather-moss, Tomentypnum nitens), Ivy-leaved Bellflower, Orchid, Marsh Clubmoss	[3110], [3160], [3260], [4010], [4060], [5130], [7130], [7140], [1330], [1410]	Common Frog, **Curlew**, **Golden Plover**, **Goldeneye**, Hen Harrier, Mallard, Merlin, Peregrine, **Red Grouse**, **Snipe**, Teal, White-fronted Goose, **White-tailed Eagle, Woodcock**, Atlantic Salmon, Fir Clubmoss, Sphagnum Sp., Varnished Hook-moss, Otter, Pine Martin, Soprano Pipistrelle, Jack Snipe, King Fisher, Pheasant, Red-breasted Merganser, Tufted Duck, Bottle-nosed Dolphin	**Curlew**, **Golden Plover**, **Goldeneye**, Grey Wagtail, Kestrel, Kittiwake, Meadow Pipit, Razorbill, **Red Grouse**, Redwing, **Snipe**, **White-tailed Eagel, Woodcock**	Over-grazing, Tourism, Fishing, Game shooting	Species rich flushes	Drainage, mechanical cutting, wind farm development and recreation.Turf cutting most significant issue. Site damaged from the mechanical cutting and drainage.	
23	508018.778	803554.5365	Mayo	298.854	125.82	424.674	783.779	Newport River SAC	Freshwater Pearl Mussel, Salmon, Otter, Badger, Irish Hare, Common Frog, Common Lizard, Kingfisher, Red Grouse	[4010]	**Curlew**	**Curlew**	Nutrient enrichment, Afforestation, Fishing pressure on Freshwater Pearl Mussel			
24	498092.462	772563.1223	Mayo	213.137	15.581	228.718	730.004	Mweelrea/Sheeffry/Erriff Complex SAC	Geyer's Whorl Snail, Narrow-mouthed Whorl Snail, Freshwater Pearl Mussel, Salmon, Otter, Petalwort, Slender Naiad, Purple Saxifrage, Alpine Saw-wort, Amphidium lapponicum, Bazzania pearsonii, Bryum riparium, Dicranodontium uncinatum, Ditrichum zonatum, Fissidens serrulatus, Hygrohypnum duriusculum, Lejeunea flava subsp. moorei, Lophozia opacifolia, Oedipodium griffithianum, Philonotis cernua, P. rigida, P. tomentella,Plagiochila carringtonii, Pogonatum nanum, Ptilium crista-castrensis, Racomitrium macounii subsp. alpinum, Scapania ornithopodioides, Marsh Helleborine, Narrow-leaved Helleborine, Irish Lady's-tresses, Starry Stonewort, unconfirmed , Arctic Char, Whooper Swan, Barnacle Goose, Golden Plover, Dunlin, Curlew, Chough, Greenland White-fronted Goose	[1150], [1210], [1330], [1410], [2110], [2120], [2130], [2150], [2170], [2190], [21A0], [3110], [3130], [3160], [3260], [4010], [4030], [4060], [5130], [6430], [7130], [7140], [7150], [7220], [7230], [8110], [8210], [8220]	Common Frog, Artic Tern, **Bar-tailed Godwit**, Cough, Common Tern, Coot, **Curlew, Curlew Sandpiper, Golden Plover,** Goosander, Great Northern Diver, Jack Snipe, King Fisher, Lapwing, Little Egret, Little Tern, Mallard, Merlin, Pheasant, **Red Grouse**, Red-breatsed Merganser, Ruff, Sandwich Tern, Short-eared Owl, **Snipe**, Teal, Tufted Duck, White-fronted Goose, Whooper Swan, Wigeon, **Woodcock**, Alpine Clubmoss, Fir Clubmoss, Slender Naiad, Cladonia portentosa, Petalwort, Bottle-nose Dolphin, Common Dolpin, Common Porpoise, Long-finned Pilot Whale, Minke Whale, True's Beaked Whale, Geyer's Whorl Snail, Narrow-mouthed Whorl Snail, Sphagnum Sp., Large White-moss, Otter, Pine Martin	**Bar-tailed Godwit, Curlew, Curlew Sandpiper**, Dunlin, **Golden Plover**, Grey Wagtail, Kestrel, Kittiwake, Lapwing, Meadow Pipit, Oystercatcher, Purple Sandpiper, Razorbill, **Red Grouse**, Red Shank, Redwing, **Snipe, Woodcock**, Yellowhammer	Overgrazing, Peat erosion, Fragmentation by conifer forestry plantations	The Western Way Mayo walking route.	Erosion, gold mining, afforestation (coillte and private), agricultural reclamation, burning, drainage, hand and mechanical cutting, overgrazing, recreation. Site damaged by all the same impacts including a bog burst.	Glencullen Lower part of the LIFE Coillte Blanket Bog Restoration Project 2002-2006 where drains were filled and forestry removed.
25	563408.251	704491.0439	Galway	515.155	28.932	544.087	715.684	Slieve Aughty Mountains SPA,	Hen Harrier, Merlin, Red Grouse	N/A	Common Frog, **Golden Plover,** Mallard, Merlin, Pheasent, **Red Grouse, Snipe, Woodcock,** White-clawed Crayfish, Marsh Fritillary, Sphagnum spp., Large White-moss, Varnished Hook-moss, Common Pipistrelle, Pine Marten, Otter, Soprano Pipistrelle,	**Golden Plover,** Grey Wagtail, Kestrel, Meadow Pipit, **Red Grouse,** Redwing, **Snipe, Woodcock,** Yellowhammer,	Foresty	East Clare Way Walking Route	Recreation. Afforestation, mechanical cutting, burning, wind farm. Has also suffered damage from these.	
26	605108.158	824128.8364	Leitrim, Cavan	235.095	18.409	253.504	653.363	Anierin Uplands SAC	Slender Green Feather-moss, Drepanocladus vernicosus,Golden Plover, Peregrine, Merlin, Dunlin, Ring Ouzel, Red Grouse, Curlew	[3110], [3160], [4010, [4030], [4060], [6230], [7130], [7140], [7220], [8110], [8220]	Common Frog, Pheasant, **Red Grouse**, Fir Clubmoss, Sphagnum Sp., Varnished Hook-moss, Otter,	Kestrel, Meadow Pipit, **Red Grouse**,	None listed		Wind energy has been investigated as a possible use of the site. Site damaged by erosion and bog burst (in 2021)	
27	478257.416	734635.9283	Galway	209.861	1.567	211.428	652.209	Connemara Bog Complex SAC	Marsh Fritillary, Salmon, Otter, Slender Naiad, Pillwort, Slender Cottongrass, Dorset Heath, Mackay's Heath, Green-winged Orchid, Arctic Char, Irish Hare, Common Frog, Greenland White-fronted Goose, Golden Plover, Merlin, Common Terns, Choughs	[1150], [1170], [3110, [3130], [3160], [3260], [4010], [4030], [6410, [7130], [7140], [7150, [7230], [91A0]	Common Frog, Artic Tern, Common Tern, **Curlew**, **Golden Plover**, Hen Harrier, Kingfisher, Mallard, Merlin, Perergrine, Pheasant, **Red Grouse**, **Red Kite**, Red Breasted Merganser, Sandwich Tern, **Snipe**, Teal, Tuffed Duck, White Fronted Goose, **White Tailed Eagle**, Whooper Swan, **Woodcock**, Fir Club Moss, Marsh Club Moss, Floating Water-plantain, Slender Naiad, Marsh Fritillary, Grey Seal, Kerry Slug, Sphagnum Sp., Large White Moss, Common Pipistrellus, Daubentons Bat, Leislers Bat, Pine Martin, Pipostrelle, Soprano Pipistrelle	**Curlew**, Dunlin, **Golden Plover**, Grey wagtail, Kestrel, Meadow Pipit, Oyster catcher, **Red Grouse**, **Red Kite**, Redshank, Redwing, **Snipe**, Snowy Owl, Swift, Whinchat, **White-tailed Eagle, Woodcock**	Peat cutting, Over-grazing, Afforestation, Machine peat extraction, Hand-cut peat extraction, Poaching, Erosion, Land drainage, Land reclamation, Fertilization, Quarrying, Dumping	Listed in Galway County Development Plan as it is is within 15km buffer zone set by NPWS	Afforestation (Coillte and Private), Ag. Reclamation, drainage, hand cutting, mechanical cutting, overgrazing, wind farms, quarrying, recreation, infrastructure development, dumping/infilling. Proposals to remove Bovroughan Bog from SAC to allow development of esb station. Half of Derrygoogh North under forestry. Site damaged by afforestation, burning, drainage, dumping, overgrazing and cutting.	Coillte Blanket Bog Restoration Project where drains were filled and forestry removed. Windrowing also carried out.
28	482675.035	775096.6586	Mayo	313.88	0	313.88	623.353	Mweelrea/Sheeffry/Erriff Complex SAC	Geyer's Whorl Snail, Narrow-mouthed Whorl Snail, Freshwater Pearl Mussel, Salmon, Otter, Petalwort, Slender Naiad, Purple Saxifrage, Alpine Saw-wort, Amphidium lapponicum, Bazzania pearsonii, Bryum riparium, Dicranodontium uncinatum, Ditrichum zonatum, Fissidens serrulatus, Hygrohypnum duriusculum, Lejeunea flava subsp. moorei, Lophozia opacifolia, Oedipodium griffithianum, Philonotis cernua, P. rigida, P. tomentella,Plagiochila carringtonii, Pogonatum nanum, Ptilium crista-castrensis, Racomitrium macounii subsp. alpinum, Scapania ornithopodioides, Marsh Helleborine, Narrow-leaved Helleborine, Irish Lady's-tresses, Starry Stonewort, unconfirmed , Arctic Char, Whooper Swan, Barnacle Goose, Golden Plover, Dunlin, Curlew, Chough, Greenland White-fronted Goose	[1150], [1210], [1330], [1410], [2110], [2120], [2130], [2150], [2170], [2190], [21A0], [3110], [3130], [3160], [3260], [4010], [4030], [4060], [5130], [6430], [7130], [7140], [7150], [7220], [7230], [8110], [8210], [8220]	Common Frog, Artic Tern, **Bar-tailed Godwit**, Cough, Common Tern, Coot, **Curlew**, **Curlew Sandpiper** **Golden Plover**, Goosander, Great Northern Diver, Jack Snipe, King Fisher Lapwing, Little Egret, Little Tern, Mallard, Merlin, Pheasant, **Red Grouse**, Red-breatsed Merganser, Ruff, Sandwich Tern, Short-eared Owl, **Snipe**, Teal, Tufted Duck, White-fronted Goose, Whooper Swan, Wigeon, **Woodcock**, Alpine Clubmoss, Fir Clubmoss, Slender Naiad, Cladonia portentosa, Petalwort, Bottle-nose Dolphin, Common Dolpin, Common Porpoise, Long-finned Pilot Whale, Minke Whale, True's Beaked Whale, Geyer's Whorl Snail, Narrow-mouthed Whorl Snail, Sphagnum Sp., Large White-moss, Otter, Pine Martin	**Bar-tailed Godwit, Curlew, Curlew, Sandpiper**, Dunlin, **Golden Plover**, Grey Wagtail, Kestrel, Kittiwake, Lapwing, Meadow Pipit, Oystercatcher, Purple Snadpiper, Razorbill, **Red Grouse**, Red Shank, Redwing, **Snipe**, **Woodcock**, Yellowhammer	Overgrazing, Peat erosion, Fragmentation by conifer forestry plantations	The Western Way Mayo walking route.	Erosion, gold mining, afforestation (coillte and private), agricultural reclamation, burning, drainage, hand and mechanical cutting, overgrazing, recreation. Site damaged by all the same impacts including a bog burst.	Glencullen Lower part of the LIFE Coillte Blanket Bog Restoration Project 2002-2006 where drains were filled and forestry removed.
29	497257.428	817224.7701	Mayo	258.228	26.715	284.943	621.375	Bellacorick Bog Complex SAC	Geyer's Whorl Snail, Marsh Saxifrage	[3160], [4010], [7130], [7150], [7230]	**Golden Plover,** Mallard, **Red Grouse**, **Snipe**, Teal, **Woodcock**, Geyer's Whorl Snail, Sphagnum Sp., Otter, Pine Martin,	**Golden Plover**, Kestrel, **Red Grouse**, Red Shank, **Snipe**, **Woodcock**,	Turf cutting, Afforestation, Over-grazing	The Western Way Mayo walking route.	Afforestation (Coillte and Private), drainage, cutting, overgrazing, invasive species (Sarracenia), recreation. Doobehy may have been developed by Bord na Mona. Site damaged by afforestation, burning, drainage, mechanical and hand cutting, overgrazing and 50% of Bellacorrick East damaged from forestry and Doobehy fertilised in error by coillte.	Drains on bog filled and forestry removed - LIFE - Part of Coillte Blanket Bog Restoration Project 2002- 2006
30	497823.297	743051.9738	Galway	258.703	11.447	270.15	602.878	Connemara Bog Complex SAC	Marsh Fritillary, Salmon, Otter, Slender Naiad, Pillwort, Slender Cottongrass, Dorset Heath, Mackay's Heath, Green-winged Orchid, Arctic Char, Irish Hare, Common Frog, Greenland White-fronted Goose, Golden Plover, Merlin, Common Terns, Choughs	[1150], [1170], [3110, [3130], [3160], [3260], [4010], [4030], [6410, [7130], [7140], [7150, [7230], [91A0]	Common Frog, Artic Tern, Common Tern, **Curlew**, **Golden Plover** Hen Harrier, Kingfisher, Mallard, Merlin, Perergrine, Pheasant, **Red Grouse**, **Red Kite**, Red Breasted Merganser, Sandwich Tern, **Snipe**, Teal, Tuffed Duck, White Fronted Goose, **White Tailed Eagl**e, Whooper Swan, **Woodcock,** Fir Club Moss, Marsh Club Moss, Floating Water-plantain, Slender Naiad, Marsh Fritillary, Grey Seal, Kerry Slug, Sphagnum Sp., Large White Moss, Common Pipistrellus, Daubentons Bat, Leislers Bat, Pine Martin, Pipostrelle, Soprano Pipistrelle	**Curlew**, Dunlin, **Golden Plover**, Grey wagtail, Kestrel, Meadow Pipit, Oyster catcher, **Red Grouse, Red Kite**, Redshank, Redwing, **Snipe**, Snowy Owl, Swift, Whinchat, **White-tailed Eagle, Woodcock**	Peat cutting, Over-grazing, Afforestation, Machine peat extraction, Hand-cut peat extraction, Poaching, Erosion, Land drainage, Land reclamation, Fertilization, Quarrying, Dumping	Listed in Galway County Development Plan as it is is within 15km buffer zone set by NPWS	Afforestation (Coillte and Private), Ag. Reclamation, drainage, hand cutting, mechanical cutting, overgrazing, wind farms, quarrying, recreation, infrastructure development, dumping/infilling. Proposals to remove Bovroughan Bog from SAC to allow development of esb station. Half of Derrygoogh North under forestry. Site damaged by afforestation, burning, drainage, dumping, overgrazing and cutting.	Coillte Blanket Bog Restoration Project where drains were filled and forestry removed. Windrowing also carried out.

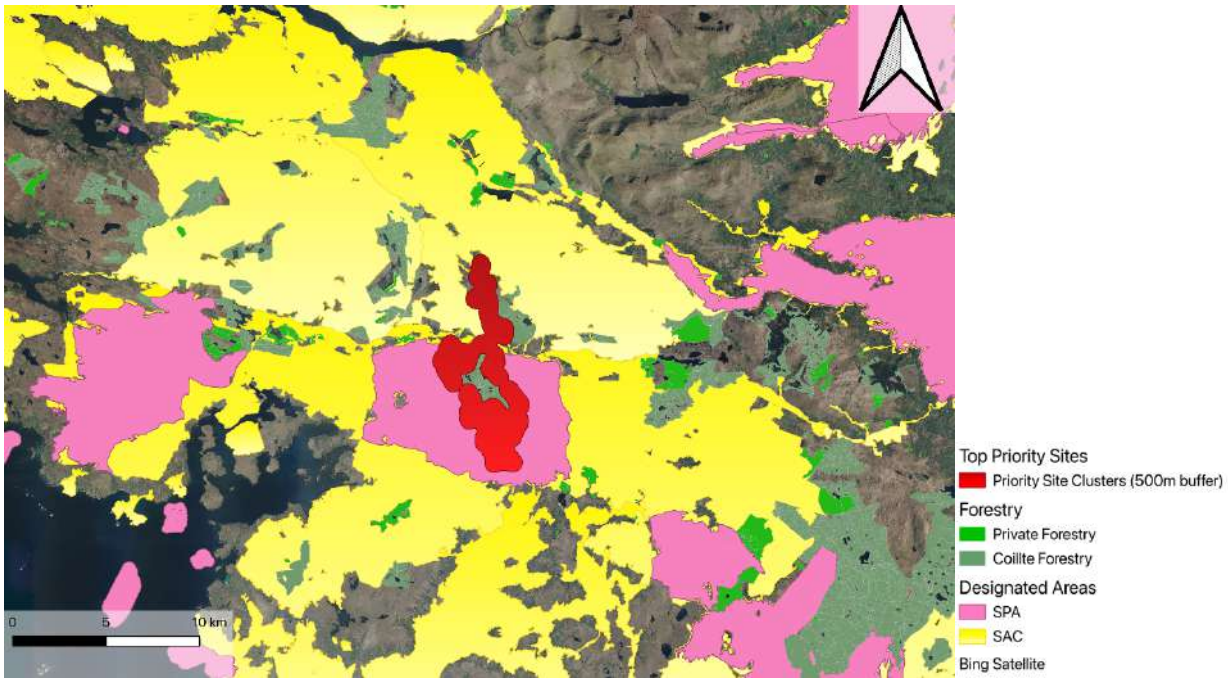
Appendix D – Top 15 Blanket Bog Opportunities for Forestry Removal

IPCC Ranking 1 - Cluster 3- Connemara Bog Complex SAC & SPA



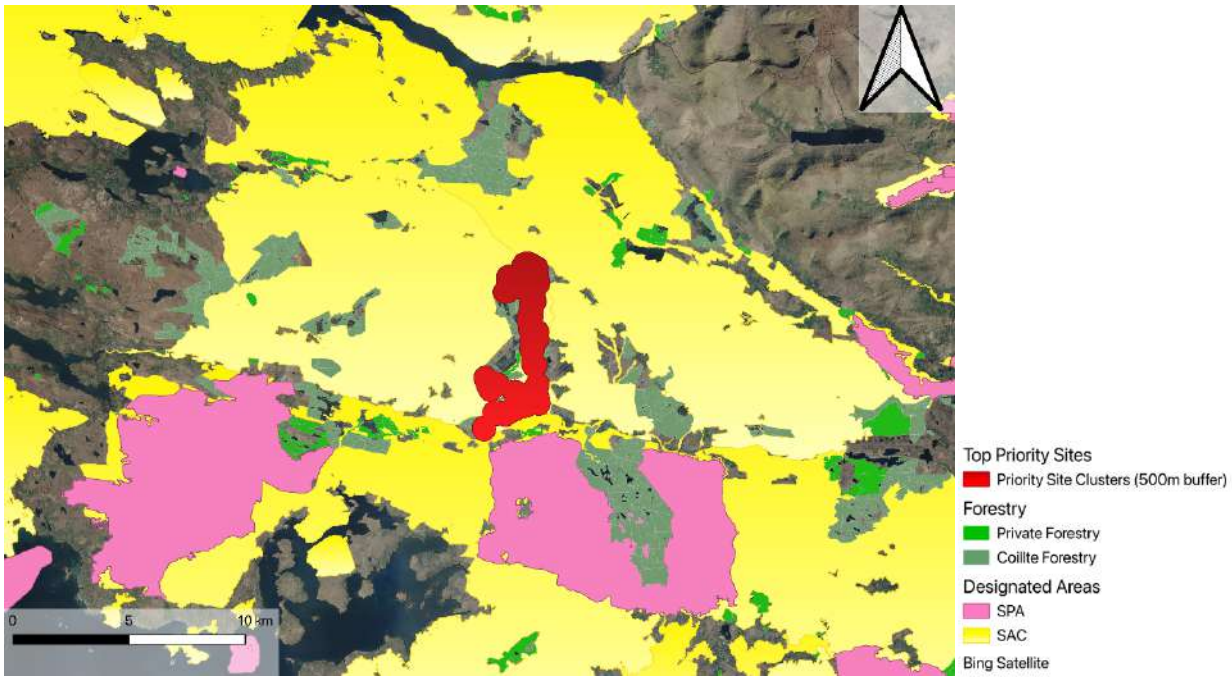
IPCC Ranking	1
Cluster	3
Protected Sites	Connemara Bog Complex SAC; Connemara Bog Complex SPA
Key Species	Golden Plover, Merlin, Marsh Fritillary, Otter, Salmon, Greenland White-fronted Goose
Key Habitats	Coastal lagoon (1150), reefs (1170), oligotrophic lakes (3110), blanket bog (7130), depressions on peat substrates (7150)
Key Threats	Peat cutting, afforestation, over-grazing, drainage, land reclamation
Site Highlights	Visitor centre, guided walks, County Development Plan designation
Current Pressures	Recreation, renewable energy infrastructure, forestry plantations
Restoration Actions	Coillte Blanket Bog Restoration, drain blocking, forestry removal, LIFE Project

IPCC Ranking 2 - Cluster 4 - Connemara Bog Complex & Maumturk Mountains



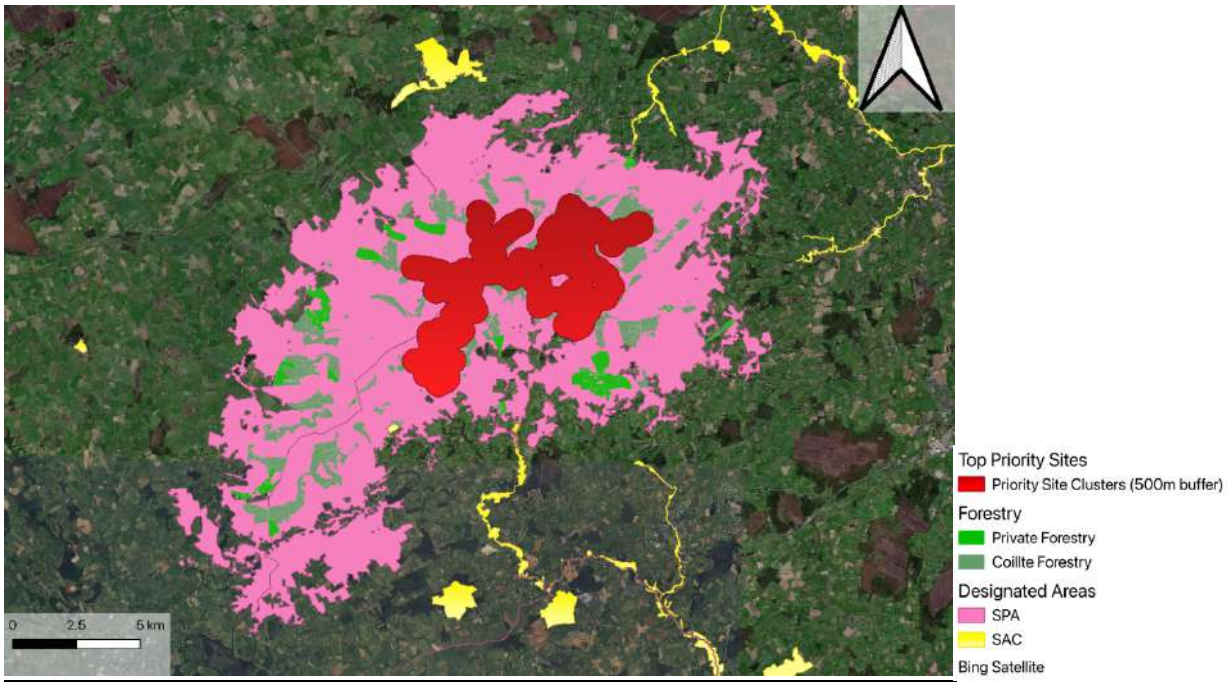
IPCC Ranking	2
Cluster	4
Protected Sites	Connemara Bog Complex SAC & SPA; Maumturk Mountains SAC
Key Species	Golden Plover, Merlin, Marsh Fritillary, Otter, Pine Marten
Key Habitats	Blanket bog, wet heath, oligotrophic lakes, active peatland systems
Key Threats	Peat cutting, drainage, afforestation, dumping, over-grazing
Site Highlights	Western Way Waymarked Trail, visitor facilities, interpretation
Current Pressures	Recreation, renewable energy, forestry plantations
Restoration Actions	LIFE restoration works, drain blocking, forestry removal. No major restoration on Maumturk.

IPCC Ranking 3 - Cluster 6 – Connemara/Maumturk/Twelve Bens Complex



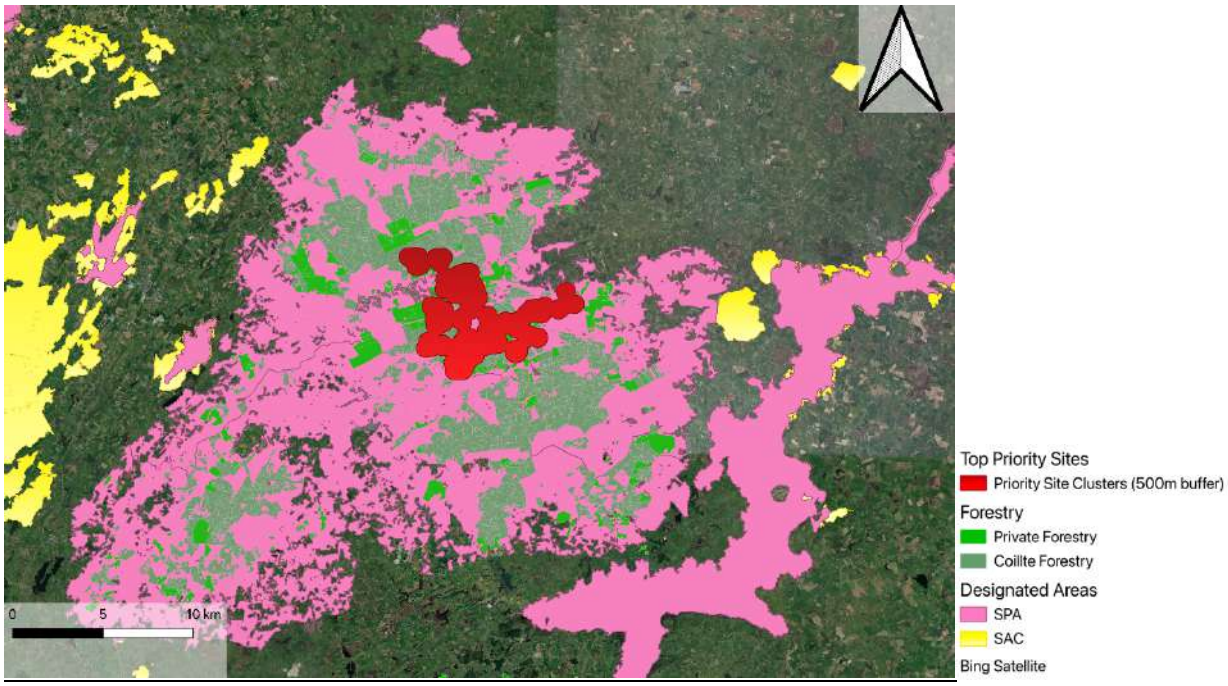
IPCC Ranking	3
Cluster	9
Protected Sites	Connemara Bog Complex SAC; Maumturk Mountains SAC; Twelve Bens/Garraun Complex SAC
Key Species	Freshwater Pearl Mussel, Peregrine, Golden Plover, Marsh Fritillary, Otter
Key Habitats	Blanket bog, wet heath, alpine heath, scree and cliff habitats
Key Threats	Peat extraction, afforestation, drainage, erosion, recreation pressure
Site Highlights	Diamond Hill Boardwalk, Western Way, visitor facilities
Current Pressures	Rhododendron invasion, recreation, forestry, renewable energy
Restoration Actions	Coillte LIFE restoration, drain blocking, forestry removal

IPCC Ranking 4 - Cluster 1 - Slieve Bloom Mountains SAC & SPA



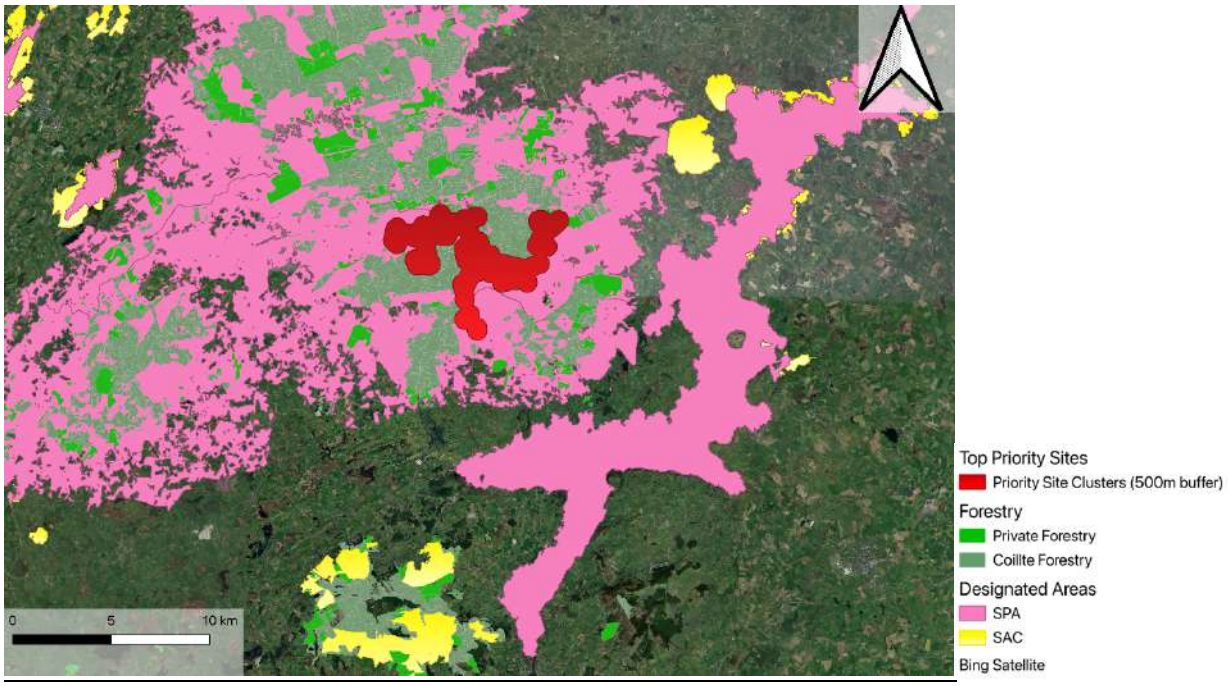
IPCC Ranking	4
Cluster	1
Protected Sites	Slieve Bloom Mountains SAC; Slieve Bloom Mountains SPA
Key Species	Hen Harrier, Peregrine, Merlin, Red Grouse
Key Habitats	Northern Atlantic Wet Heath (4010), Active Blanket Bog (7130), Alluvial Woodland (91E0)
Key Threats	Drainage, Afforestation, Commercial Forestry, Over-grazing
Site Highlights	Waymarked trail network; demonstration site showcasing blanket bog restoration; interpretation facilities linked to the Coillte restoration project
Current Pressures	Recreation and visitor use
Restoration Actions	Coillte Blanket Bog Restoration Project (2002–2006 LIFE Project); forestry removal; windrowing; drain blocking

IPCC Ranking 5 - Cluster 2 - Slieve Aughty Mountains SPA



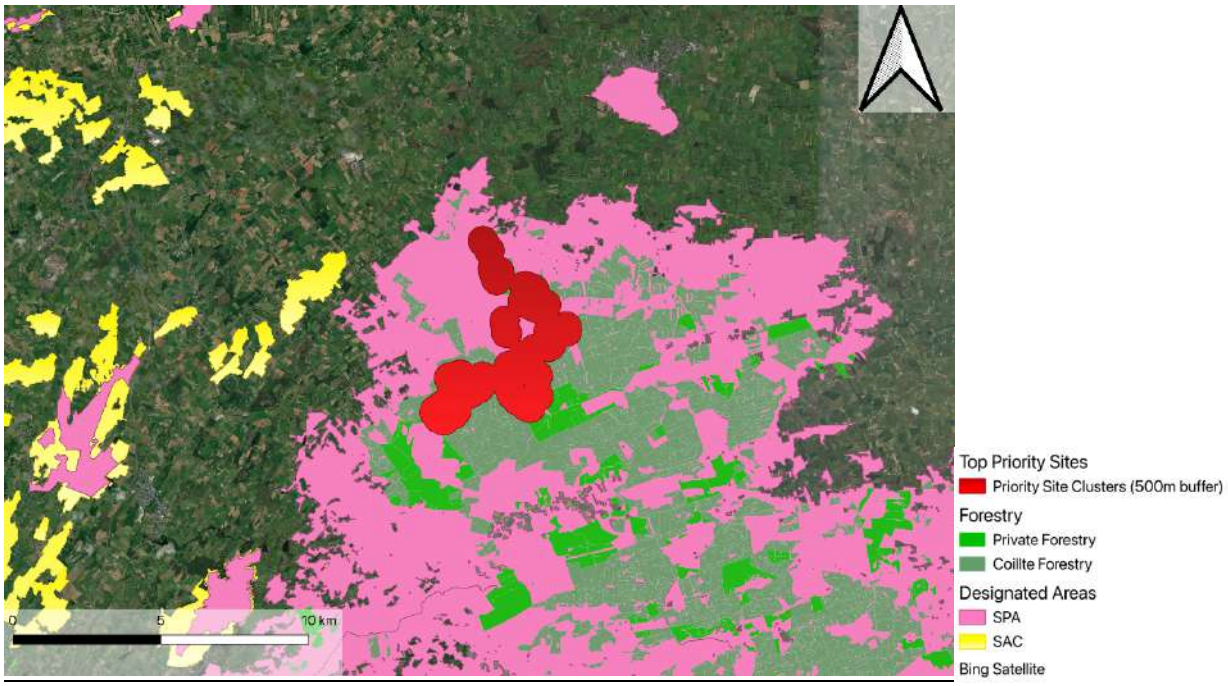
IPCC Ranking	5
Cluster	2
Protected Sites	Slieve Aughty Mountains SPA
Key Species	Hen Harrier, Merlin, Red Grouse
Key Habitats	N/A
Key Threats	Commercial forestry
Site Highlights	East Clare Way walking route; extensive upland landscape supporting important breeding bird populations
Current Pressures	Recreation, land reclamation, burning, renewable energy development, mechanical peat cutting, afforestation and drainage
Restoration Actions	No specific restoration project recorded

IPCC Ranking 6 – Cluster 5 – Slieve Aughty Mountains SPA/Lough Atoric South Bog SAC/Pollagoona Bog SAC



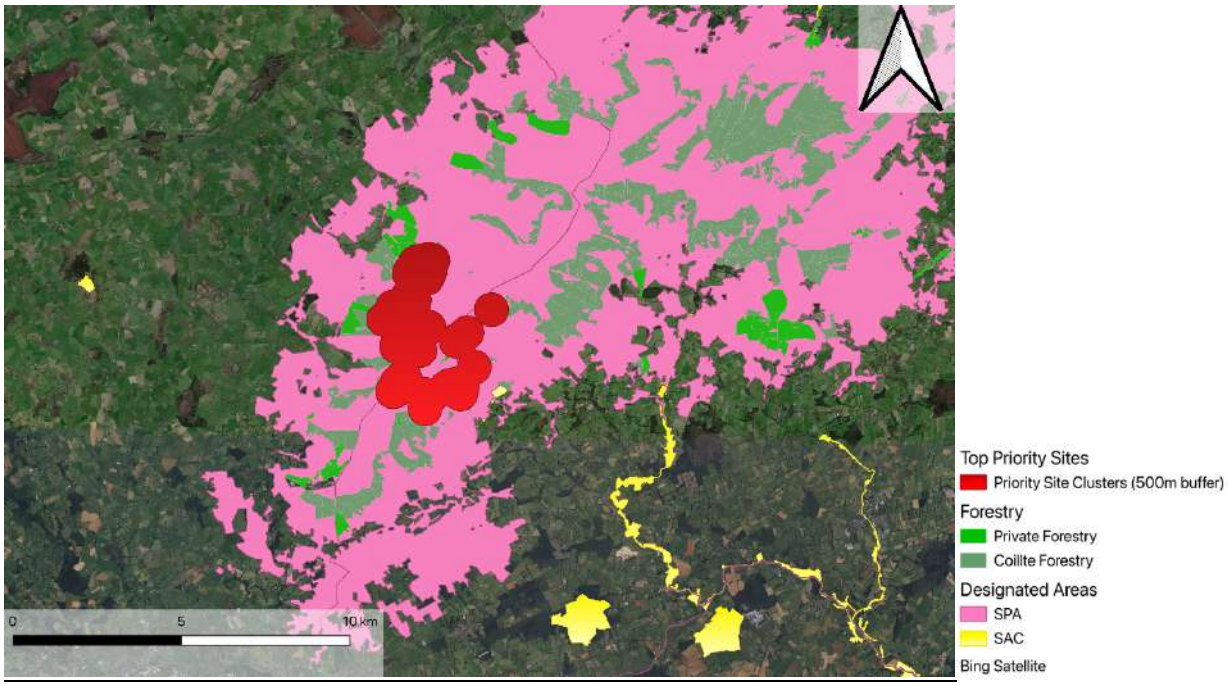
IPCC Ranking	6
Cluster	5
Protected Sites	Slieve Aughty Mountains SPA; Loughatorick South Bog SAC; Pollagoona Bog SAC
Key Species	Hen Harrier, Merlin, Red Grouse, Snipe
Key Habitats	Active Blanket Bog (7130)
Key Threats	Forestry
Site Highlights	East Clare Way Walking Route. Pollagoona Bog has experienced damage from previous forestry planting.
Current Pressures	Recreation, afforestation, mechanical peat cutting, burning, wind farm development. Loughatorick is also affected by shooting, invasive species and drainage. Pollagoona may be impacted by adjacent forestry clearfelling.
Restoration Actions	Pollagoona Bog was included in the Coillte LIFE Blanket Bog Restoration Project (2002–2006), involving forestry removal and drain blocking.

IPCC Ranking 7 – Cluster 7 – Slieve Aughty Mountains SPA/Sonnagh Bog SAC



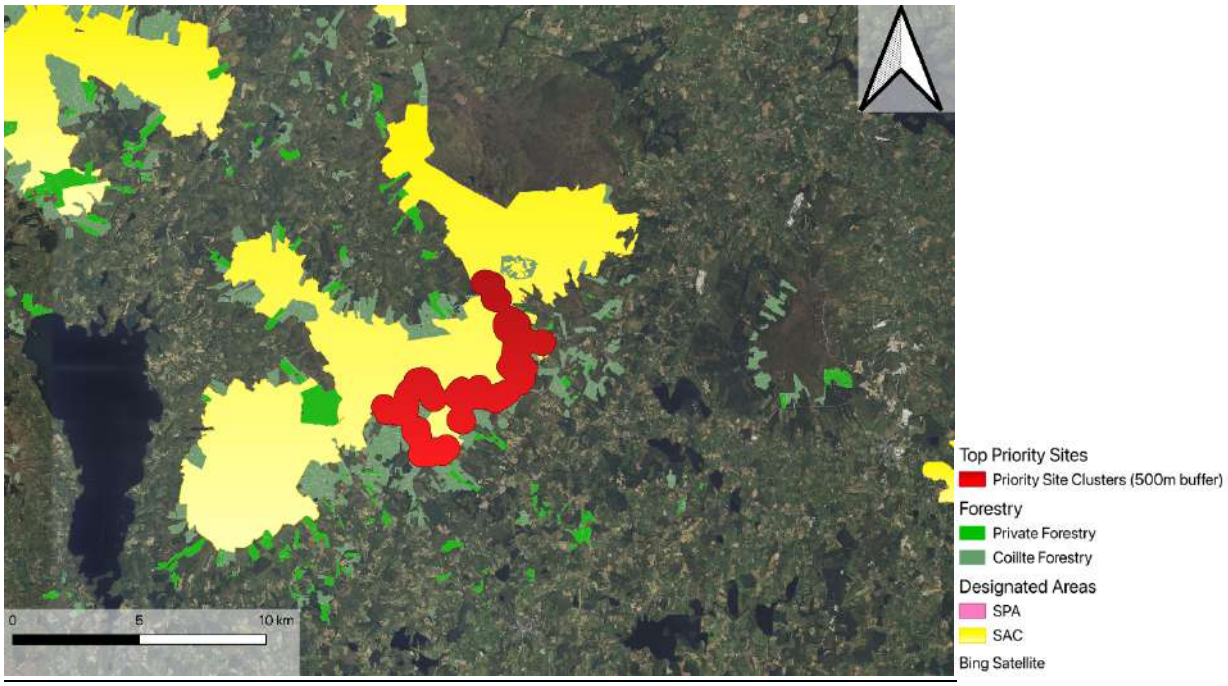
IPCC Ranking	7
Cluster	7
Protected Sites	Slieve Aughty Mountains SPA; Sonnagh Bog SAC
Key Species	Hen Harrier, Merlin, Red Grouse
Key Habitats	Active Blanket Bog (7130)
Key Threats	Forestry
Site Highlights	East Clare Way Walking Route
Current Pressures	Recreation, afforestation, mechanical peat cutting, burning, and wind farm development. The site has experienced damage from these pressures, particularly hand peat cutting at Sonnagh Bog.
Restoration Actions	No specific restoration project recorded.

IPCC Ranking 8 - Cluster 11 - Slieve Bloom Mountains SAC & SPA



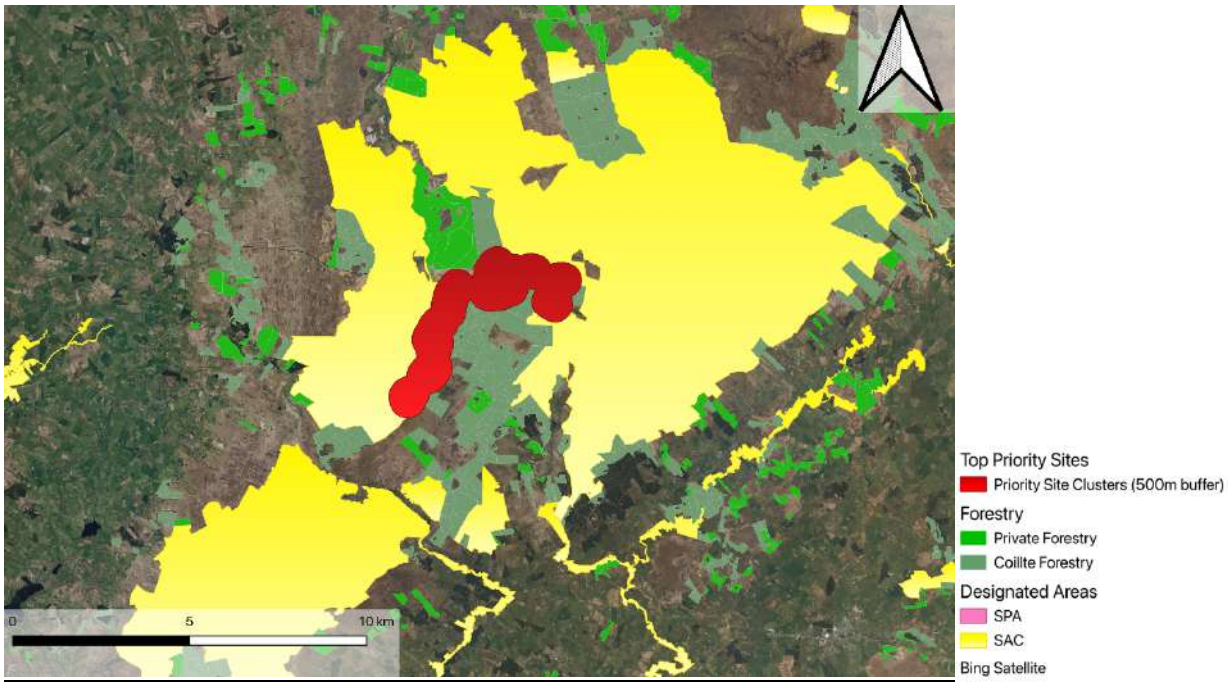
IPCC Ranking	8
Cluster	11
Protected Sites	Slieve Bloom Mountains SAC; Slieve Bloom Mountains SPA
Key Species	Hen Harrier, Peregrine, Merlin, Red Grouse, Lesser Twayblade
Key Habitats	Northern Atlantic Wet Heath (4010); Active Blanket Bog (7130); Alluvial Woodland (91E0)
Key Threats	Drainage for forestry, afforestation, over-grazing
Site Highlights	Waymarked trail network and demonstration site with interpretation associated with the Coillte blanket bog restoration project
Current Pressures	Recreation
Restoration Actions	Coillte Blanket Bog Restoration Project (2002–2006 LIFE Project), including forestry removal, windrowing and drain blocking

IPCC Ranking 9 - Cluster 6 - Cuilcagh-Anierin Uplands SAC



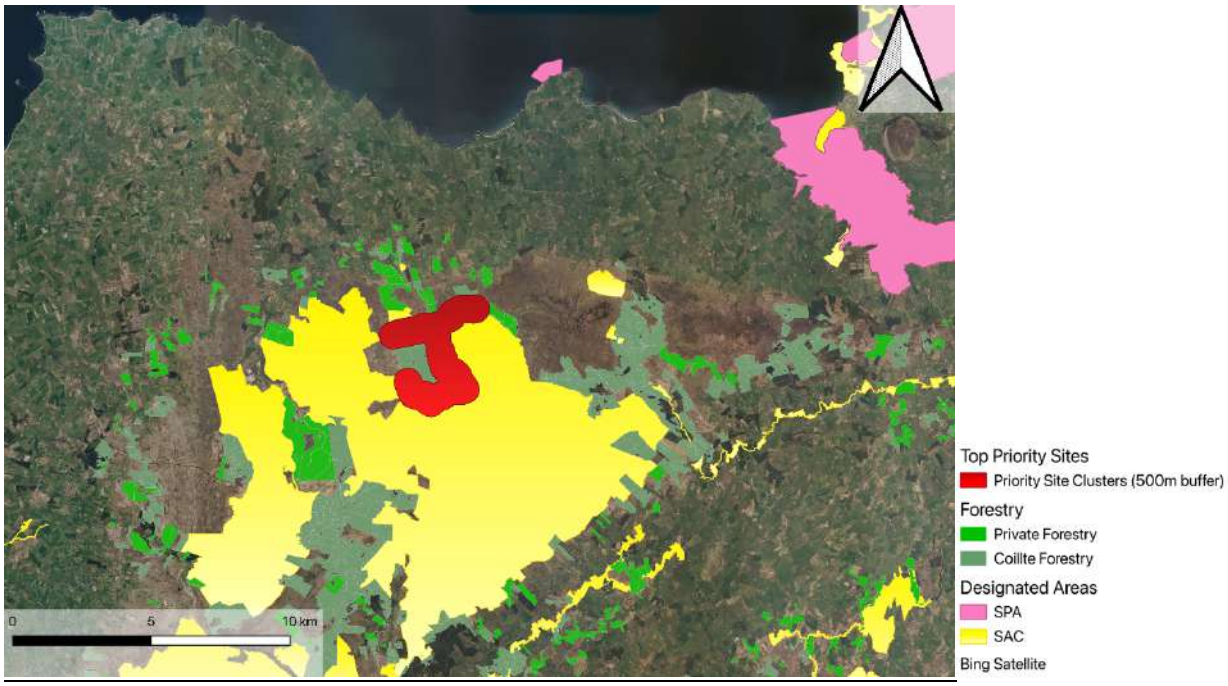
IPCC Ranking	9
Cluster	6
Protected Sites	Cuilcagh–Anierin Uplands SAC
Key Species	Salmon, Slender Naiad, Discelium nudum, Slender Green Feather-moss, Red Grouse, Golden Plover, Peregrine, Merlin
Key Habitats	Oligotrophic Waters (3110), Northern Atlantic Wet Heath (4010), Alpine & Boreal Heath (4060), Active Blanket Bog (7130), Peat Depressions (7150), Siliceous Rocky Slopes (8220)
Key Threats	Over-grazing, peat cutting, afforestation, drainage, fertilisation, quarrying and dumping
Site Highlights	One of the largest intact blanket bog systems in Ireland; supports Ring Ouzel and breeding Dunlin populations; a peat slide occurred on the site in 2021
Current Pressures	Renewable energy development and erosion impacts
Restoration Actions	No specific restoration project recorded in the dataset

IPCC Ranking 10 - Cluster 16 - Ox Mountains Bogs SAC



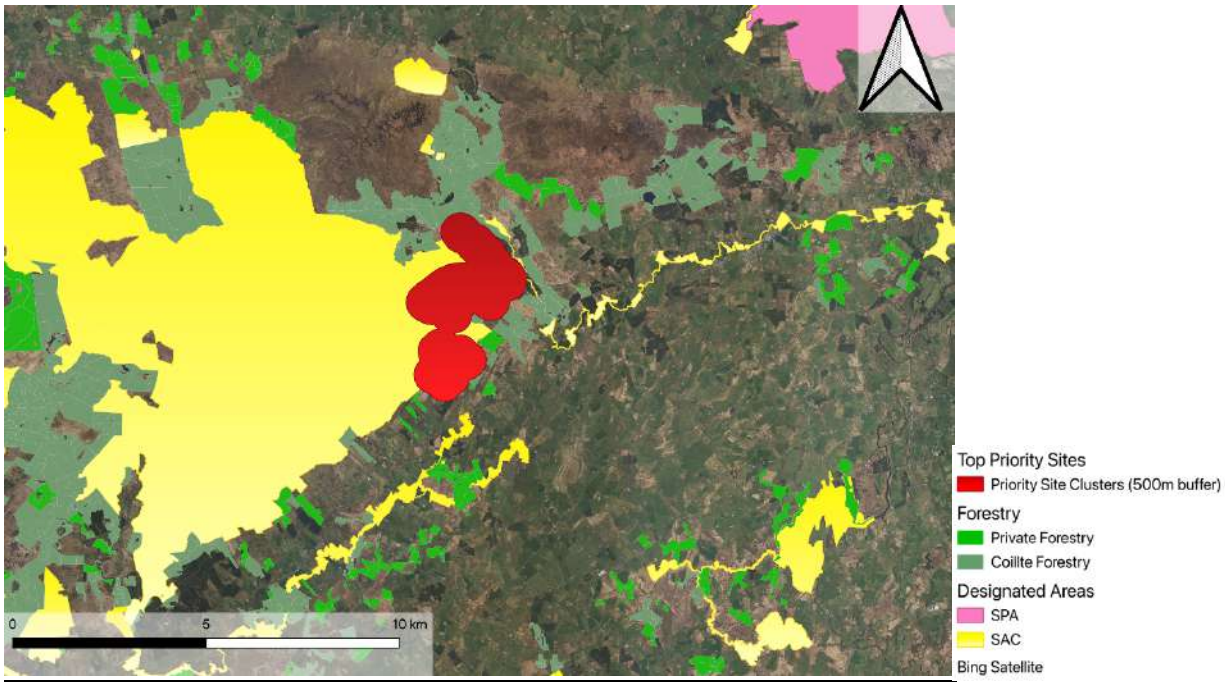
IPCC Ranking	10
Cluster	16
Protected Sites	Ox Mountains Bogs SAC
Key Species	Geyer's Whorl Snail, Marsh Saxifrage, Greenland White-fronted Goose, Golden Plover
Key Habitats	Oligotrophic Waters (3110), Dystrophic Lakes (3160), Northern Atlantic Wet Heath (4010), European Dry Heath (4030), Active Blanket Bog (7130), Transition Mires (7140), Peat Depressions (7150)
Key Threats	Afforestation, turbary (peat cutting)
Site Highlights	The Sligo Way trail passes through the site. Approximately 50% of the original area was planted and drained by Coillte before transfer to NPWS following an IPCC complaint to the EU.
Current Pressures	Overgrazing, mechanical peat cutting, afforestation (Coillte and private), dumping, recreation, renewable energy development, burning, drainage, erosion and visitor trampling.
Restoration Actions	Coillte Blanket Bog Restoration Project (2002–2006 LIFE Project), including forestry removal, drain blocking and windrowing.

IPCC Ranking 11 – Cluster 17 – Ox Mountains Bogs SAC



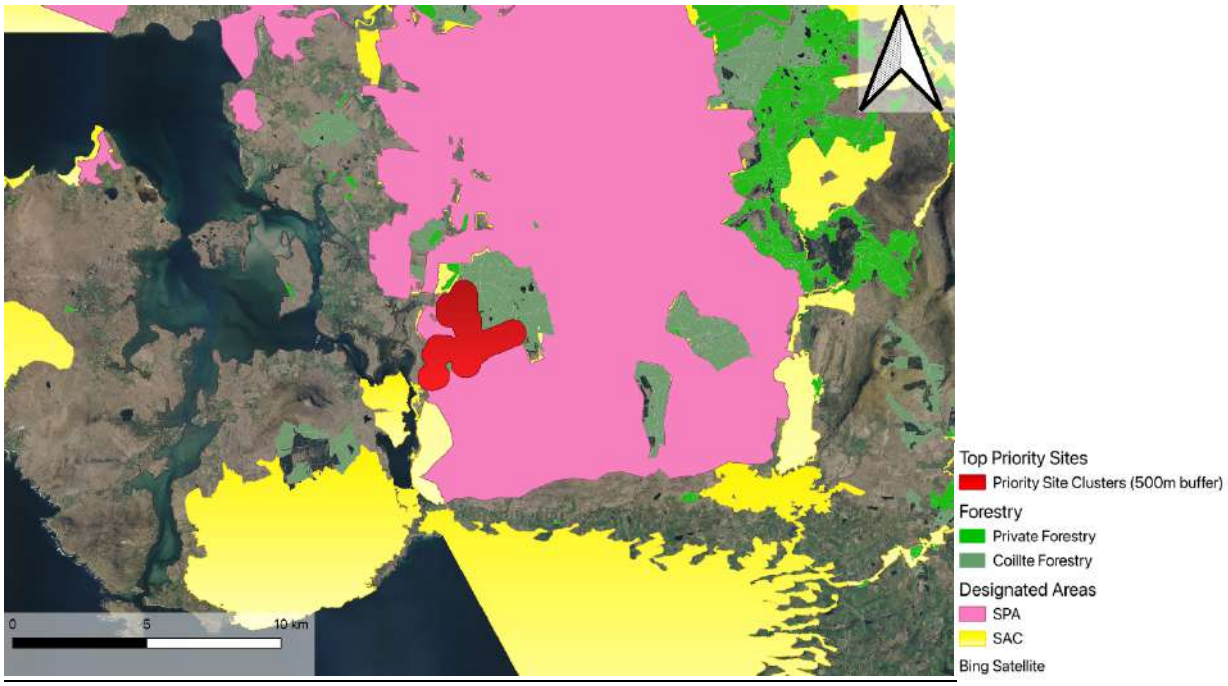
IPCC Ranking	11
Cluster	17
Protected Sites	Ox Mountains Bogs SAC
Key Species	Geyer's Whorl Snail, Marsh Saxifrage, Greenland White-fronted Goose, Golden Plover
Key Habitats	Oligotrophic Waters (3110), Dystrophic Lakes (3160), Northern Atlantic Wet Heath (4010), European Dry Heath (4030), Active Blanket Bog (7130), Transition Mires (7140), Peat Depressions (7150)
Key Threats	Afforestation, turbary (peat cutting)
Site Highlights	The Sligo Way trail passes through the site. Approximately 50% of the original area was planted and drained by Coillte before transfer to NPWS following an IPCC complaint to the EU.
Current Pressures	Overgrazing, mechanical peat cutting, afforestation (Coillte and private), dumping, recreation, renewable energy development, burning, drainage, erosion and visitor trampling.
Restoration Actions	Coillte Blanket Bog Restoration Project (2002–2006 LIFE Project), including forestry removal, drain blocking and windrowing.

IPCC Ranking 12 - Cluster 21 - Ox Mountains Bogs



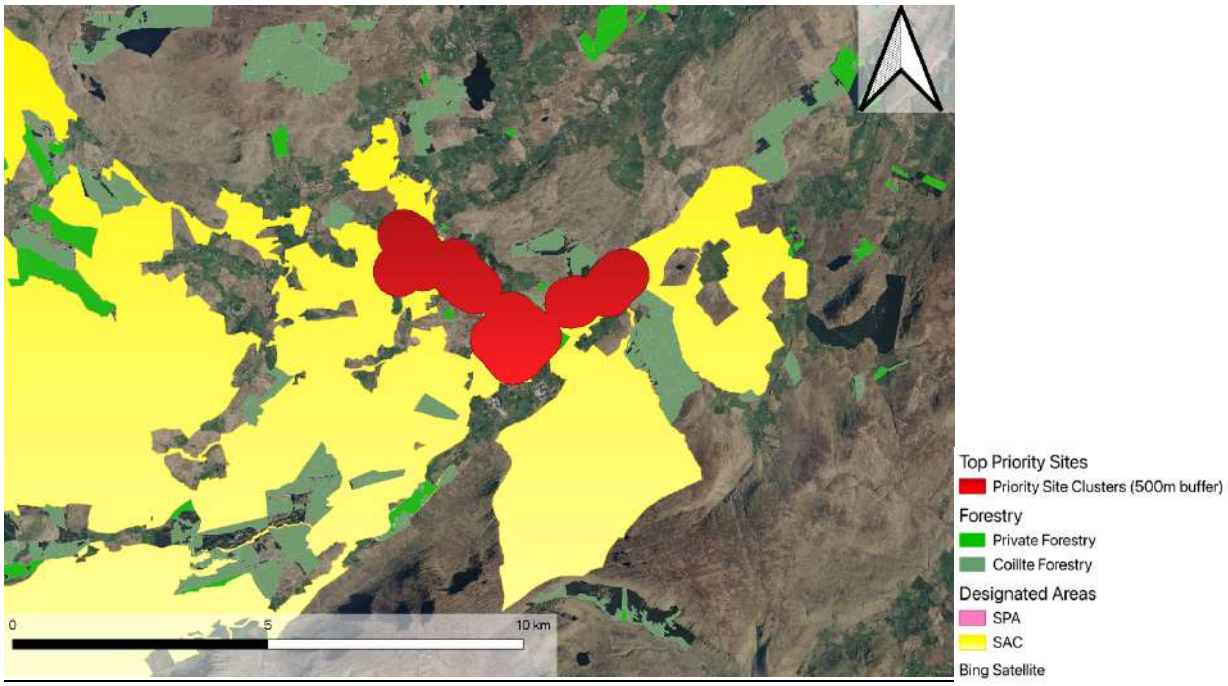
IPCC Ranking	12
Cluster	21
Protected Sites	Ox Mountains Bogs SAC
Key Species	Geyer's Whorl Snail, Marsh Saxifrage, Greenland White-fronted Goose, Golden Plover
Key Habitats	Oligotrophic Waters (3110), Dystrophic Lakes (3160), Northern Atlantic Wet Heath (4010), European Dry Heath (4030), Active Blanket Bog (7130), Transition Mires (7140), Peat Depressions (7150)
Key Threats	Afforestation, turbary (peat cutting)
Site Highlights	The Sligo Way trail passes through the site. Approximately 50% of the original area was planted and drained by Coillte before transfer to NPWS following an IPCC complaint to the EU.
Current Pressures	Overgrazing, mechanical peat cutting, afforestation (Coillte and private), dumping, recreation, renewable energy development, burning, drainage, erosion and visitor trampling.
Restoration Actions	Coillte Blanket Bog Restoration Project (2002–2006 LIFE Project), including forestry removal, drain blocking and windrowing.

IPCC Ranking 13 - Cluster 22 - BellacragherSaltmarsh SAC/Owenduff-Nephin Complex SAC & SPA



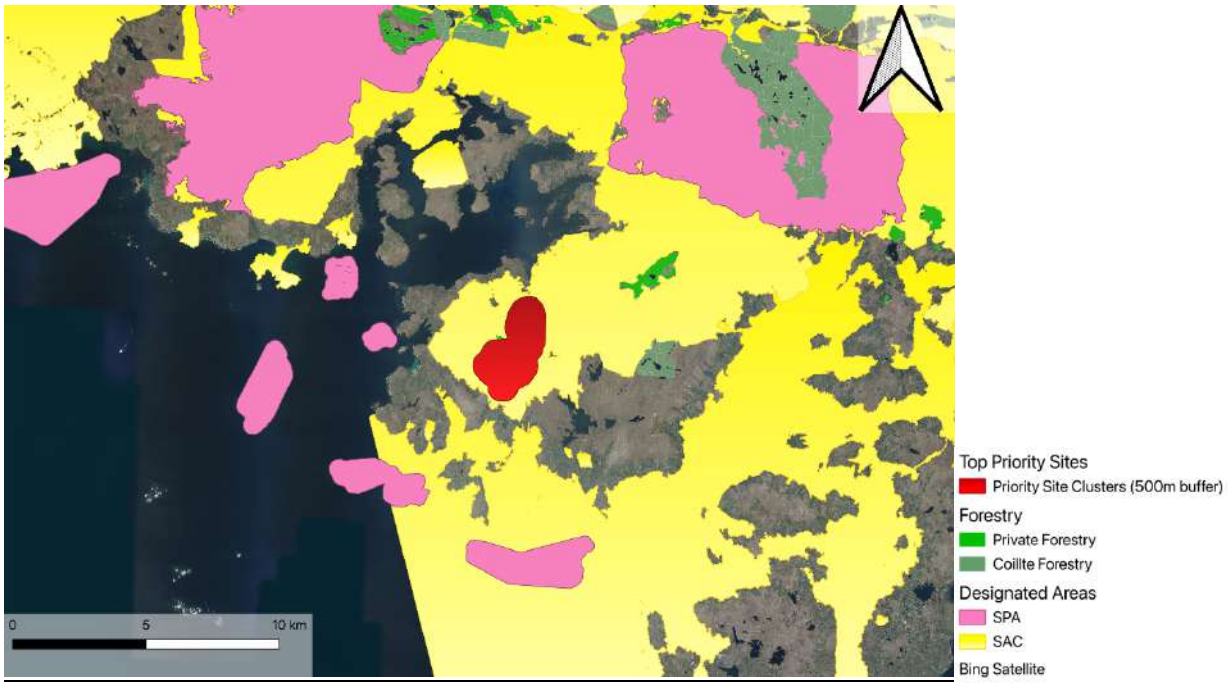
IPCC Ranking	13
Cluster	22
Protected Sites	Bellacragher Saltmarsh SAC; Owenduff/Nephin Complex SAC; Owenduff/Nephin Complex SPA
Key Species	Salmon, Otter, Merlin, Golden Plover, Greenland White-fronted Goose, Marsh Saxifrage, Ivy-leaved Bellflower, Marsh Clubmoss
Key Habitats	Oligotrophic Waters (3110), Dystrophic Lakes (3160), Watercourses (3260), Northern Atlantic Wet Heath (4010), Alpine & Boreal Heath (4060), Juniper Scrub (5130), Active Blanket Bog (7130), Transition Mires (7140), Atlantic Salt Meadows (1330), Mediterranean Salt Meadows (1410)
Key Threats	Over-grazing, tourism, fishing and game shooting
Site Highlights	Species-rich flush habitats of high ecological value
Current Pressures	Drainage, mechanical peat cutting, wind farm development and recreation. Turf cutting is identified as the most significant pressure, with site damage resulting from mechanical cutting and drainage.
Restoration Actions	No specific restoration project recorded in the dataset.

IPCC Ranking 14 - Cluster 24 - Mweelrea/Sheeffry/Erriff Complex SAC



IPCC Ranking	14
Cluster	24
Protected Sites	Mweelrea/Sheeffry/Erriff Complex SAC
Key Species	Freshwater Pearl Mussel, Salmon, Otter, Geyer's Whorl Snail, Narrow-mouthed Whorl Snail, Golden Plover, Dunlin, Curlew, Greenland White-fronted Goose
Key Habitats	Coastal Lagoons (1150), Atlantic Salt Meadows (1330), Mediterranean Salt Meadows (1410), Oligotrophic Waters (3110), Dystrophic Lakes (3160), Watercourses (3260), Northern Atlantic Wet Heath (4010), European Dry Heath (4030), Alpine & Boreal Heath (4060), Juniper Scrub (5130), Active Blanket Bog (7130), Transition Mires (7140), Peat Depressions (7150), Petrifying Springs (7220), Alkaline Fens (7230), Siliceous Scree (8110), Calcareous Rocky Slopes (8210), Siliceous Rocky Slopes (8220)
Key Threats	Overgrazing, peat erosion, fragmentation by conifer forestry plantations
Site Highlights	The Western Way Mayo walking route passes through the site. Large and diverse upland landscape supporting nationally important peatland, freshwater, coastal and montane habitats.
Current Pressures	Erosion, gold mining, afforestation (Coillte and private), agricultural reclamation, burning, drainage, hand and mechanical peat cutting, overgrazing and recreation. The site has also experienced damage from a bog burst.
Restoration Actions	Glencullen formed part of the Coillte LIFE Blanket Bog Restoration Project (2002–2006), including forestry removal and drain blocking.

IPCC Ranking 15 - Cluster 27 - Connemara Bog Complex SAC



IPCC Ranking	15
Cluster	27
Protected Sites	Connemara Bog Complex SAC
Key Species	Marsh Fritillary, Salmon, Otter, Slender Naiad, Pillwort, Slender Cottongrass, Dorset Heath, Mackay's Heath, Greenland White-fronted Goose, Golden Plover, Merlin
Key Habitats	Coastal Lagoons (1150), Reefs (1170), Oligotrophic Waters (3110), Oligotrophic Lakes (3130), Dystrophic Lakes (3160), Watercourses (3260), Northern Atlantic Wet Heath (4010), European Dry Heath (4030), Molinia Meadows (6410), Active Blanket Bog (7130), Transition Mires (7140), Peat Depressions (7150), Alkaline Fens (7230), Old Oak Woodlands (91A0)
Key Threats	Peat cutting, over-grazing, afforestation, machine and hand peat extraction, drainage, land reclamation, fertilisation, quarrying and dumping
Site Highlights	Listed in the Galway County Development Plan as being within the 15 km NPWS buffer zone surrounding the SAC.
Current Pressures	Afforestation (Coillte and private), agricultural reclamation, drainage, hand and mechanical peat cutting, overgrazing, wind farm development, quarrying, recreation, infrastructure development and dumping/infilling. Proposals have been made to remove part of Bovroughan Bog from the SAC for ESB station development. Parts of Derrygoogh North remain under forestry.
Restoration Actions	Coillte Blanket Bog Restoration Project, including forestry removal, drain blocking and windrowing to restore blanket bog hydrology and habitat condition.

Appendix E

Active Raised Bog spatial overlay analysis

The figures below represent total surface areas (in km^2) for identified raised bog habitats across Ireland, derived from spatial overlay analysis. Input datasets including the Irish Peat Soils Map (IPSM), the NPWS Article 17 Raised Bog layer, and the Irish Wetlands dataset were intersected to quantify the spatial extent of Active Raised Bog (ARB) and general raised bog habitats.

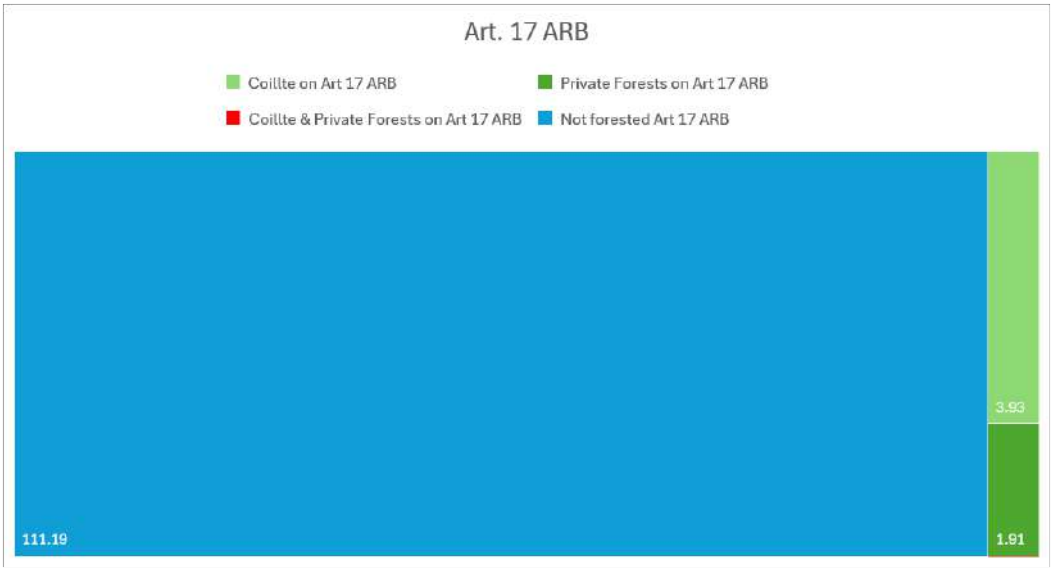
Active Raised Bog (ARB)

Art 17 ARB	117,04
Irish Wetlands with ARB	1368,29
IPSM with ARB	3096,00
Raised Bog (any type)	3402,27

The figures below summarize the spatial overlap between forestry and priority raised bog habitats (specifically NPWS Article 17 ARB and IPSM Raised Bog designations). These figures were generated by intersecting public (Coillte Forest Inventory) and private (National Map of Private Forestry) vector datasets with the habitat layers. Areas and proportions are presented in km^2 and percentage of total habitat area, respectively.

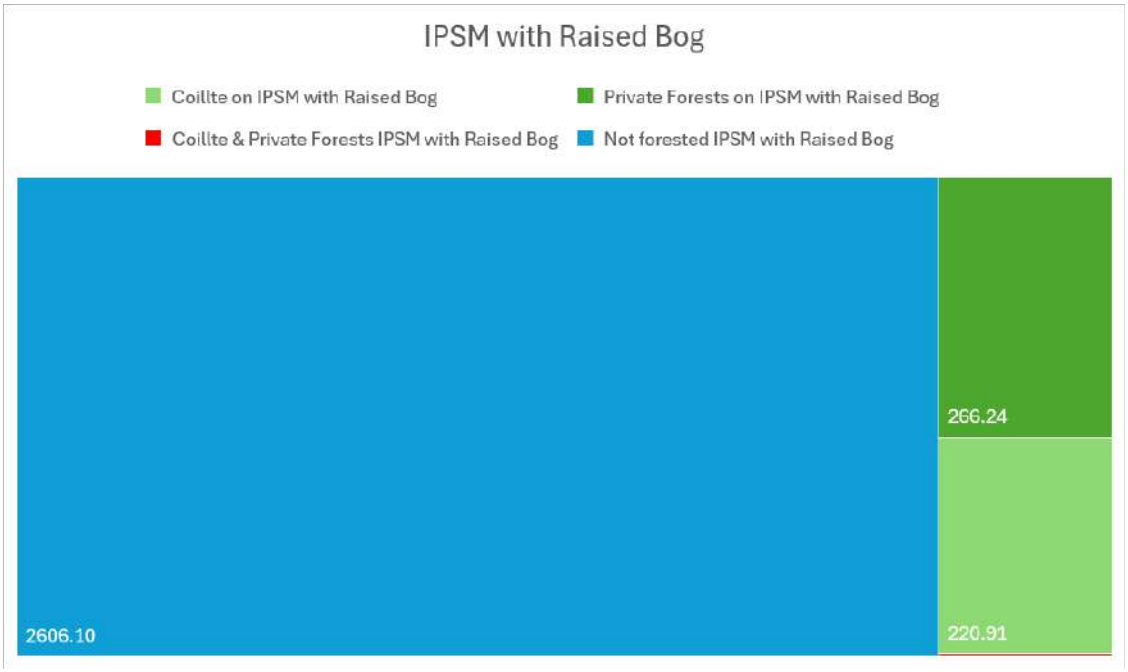
Forest on Art 17 ARB

Coillte on Art 17 ARB	3,93	3,36%
Private Forests on Art 17 ARB	1,91	1,63%
Coillte & Private Forests on Art 17 ARB	0,01	0,01%
Not forested Art 17 ARB	111,19	95,01%



Forest on IPSM with Raised Bog

Coillte on IPSM with Raised Bog	220,91	7,14%
Private Forests on IPSM with Raised Bog	266,24	8,60%
Coillte & Private Forests IPSM with Raised Bog	2,74	0,09%
Not forested IPSM with Raised Bog	2606,10	84,18%



Blanket Bog spatial overlay analysis

The figures below represent total surface areas (in km^2) for identified blanket bog habitats across Ireland, derived from spatial overlay analysis. Input datasets including the Irish Peat Soils Map (IPSM) and the NPWS Article 17 Blanket Bog layer were intersected to quantify the spatial extent of designated Article 17 Blanket Bog, IPSM Blanket Bog, and overall blanket bog habitats.

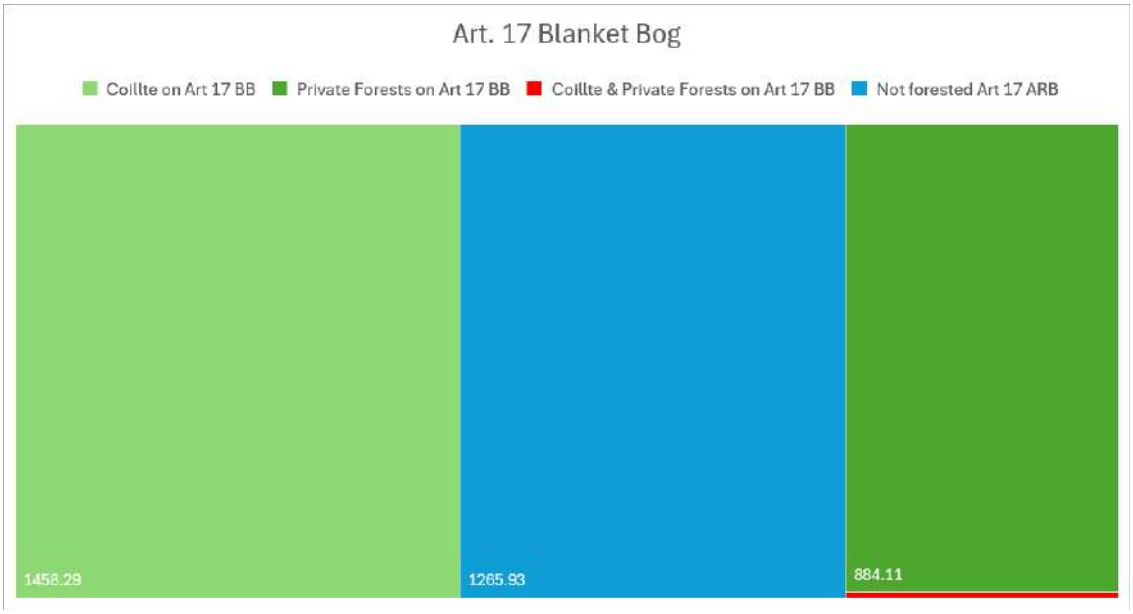
Blanket Bog (BB)

Art 17 Blanket Bog	3619,80
IPSM with Blanket Bog	7633,16
Blanket Bog (any type)	8758,94

The figures below summarize the spatial overlap between forestry and priority blanket bog habitats (specifically NPWS Article 17 Blanket Bog and IPSM Blanket Bog designations). These figures were generated by intersecting public (Coillte Forest Inventory) and private (National Map of Private Forestry) vector datasets with the habitat layers. Areas and proportions are presented in km^2 and percentage of total habitat area, respectively.

Forest on Art 17 BB

Coillte on Art 17 BB	1458,29	40,29%
Private Forests on Art 17 BB	884,11	24,42%
Coillte & Private Forests on Art 17 BB	11,47	0,32%
Not forested Art 17 ARB	1265,93	34,97%



Forest on IPSM with BB

Coillte on IPSM with Blanket Bog	939,66	12,31%
Private Forests on IPSM with Blanket Bog	504,27	6,61%
Coillte & Private Forests IPSM with Blanket Bog	6,88	0,09%
Not forested IPSM with Blanket Bog	6182,35	80,99%

