

## CHAPTER 6 FLORA AND FAUNA

- Appendix 6.1 Ecology Database

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Appendix 6.1 Ecology Database Ecology Dataset Number	Dataset Title	Type	Comments	Inclusion in NorthSouth GIS (Y/N)	Which Dataset (Habitat / Undesignated Site / Points)	Use during constraint identification	Reason for Exclusion	Evaluation Comments	Accuracy Comments
1	1140 jn883_sediment_shores_clip	Polygon	Map showing range for Mudflats and Sandflats not covered by seawater at low tide. Limited value as only refers to point locations along coastal zone. Two points adjacent to study area are shown for the presence of annex habitats. Both points within SACs.	No	NA	No	Deemed to be of limited value in this project as only shows point location of habitats that occur along coastal zone.	NA	DA - habitat information is from reliable desktop sources.
2	1210 1220 Moore and Wilson 1999 Bleasdale et al. 1995_clip	Point	Distribution of upland and lowland oligotrophic lakes based on analysis of various GIS datasets. This shapefile has been used for the production of the habitat's distribution and range maps for the 2007 Conservation Assessments (according to the EU Habitats directive).	No	NA	No	Deemed to be of limited value in this project as only shows point location of habitats that occur along coastal zone.	NA	DA - habitat information is from reliable desktop sources.
3	3110 3130 lwsqg_0207_clip	Polygon	Distribution of hard water lakes based on analysis of various GIS datasets. This shapefile has been used for the production of the habitat's distribution and range maps for the 2007 Conservation Assessments (according to the EU Habitats directive).	No	NA	No	Waterbodies are considered as a hydrological constraint.	National. Likely presence of Annex 1 habitat (3110 / 3130) (oligotrophic lakes).	DC - habitat information is derived from desktop interpretation of GIS datasets.
4	3140 lwsqg_0207_clip	Polygon	Distribution of dystrophic lakes based on analysis of various GIS datasets. This shapefile has been used for the production of the habitat's distribution and range maps for the 2007 Conservation Assessments (according to the EU Habitats directive).	No	NA	No	Waterbodies are considered as a hydrological constraint.	National. Likely presence of Annex 1 habitat (3140) (hard water lakes).	DC - habitat information is derived from desktop interpretation of GIS datasets.
5	3160 lwsqg_0207_clip	Polygon	Potential distribution of dry calcareous grassland based on intersection of dry unimproved pasture from the Corine Land Cover Map (EPA 2000) and soil types 12, 22 and 46 from the National Soil and Parent Material Map (Teagasc 2006).	No	NA	No	No records within study area.	NA	DC - habitat information is derived from desktop interpretation of GIS datasets.
6	4010_CFP_commonage/land_2006_clip	Polygon	CEPs (Commonage Framework Plans) describe the habitats, condition of the land (i.e. level of damage), land use and plant species found in each sub-unit of each agricultural unit for commonage areas. Each sub-unit was digitised and the habitat or habitats within the sub-unit were listed. This shapefile contains all the sub-units containing Wet Heath (habitat type II), however generally as a mosaic with other habitats, only corresponding with commonage land. In several occasions areas mapped as Wet Heath did not correspond with this habitat type. This is reported in the validation field (Val) within the file Attribute Table. The validation was mainly focused on areas where none other sources indicated the occurrence of habitat 4010.	No	NA	No	No records within study area.	National. Likely presence of Annex 1 habitat (wet heath 4010)	DC - habitat information is derived from desktop interpretation of GIS datasets.
7	6210 Area_clip	Polygon	Potential distribution of dry calcareous grassland based on intersection of dry unimproved pasture from the Corine Land Cover Map (EPA 2000) and soil types 12, 22 and 46 from the National Soil and Parent Material Map (Teagasc 2006).	No	NA	No	From interpretation of aerial imagery the data appears to be of limited value as originated from high level GIS interpretation.	Possible occurrence of Annex 1 habitat (6210 calcareous grassland).	DC - habitat information is derived from desktop interpretation of GIS datasets.
8	7110 7120 2.dary_degraded_unsurv_othersources_clip	Polygon	This dataset includes secondary degraded raised bog. These areas correspond with highly drained high bog devoid of vegetation (including the majority of Bord na Mona sites), cutaway bog, cutover and occasionally reclaimed agricultural land with peaty soils. Corine 2000 exploited raised bog areas (level 5) were selected for this category. However visual validation was carried out as it was noted that Corine 2000 classified certain areas as intact when they are exploited and vice versa. Some areas reported by Corine as exploited areas were eliminated from this dataset as they no longer correspond to raised bog. Those areas reported by Conaghan (2000) were digitised using the 2000 ortho-images. Hammond (1979) highlighted certain areas within the MA modified category that were also included in this dataset. The location of these areas reported by Hammond (2000) may have been slightly off the actual location. In this particular case the raised bog boundary was re-digitised using 2000 ortho-images.	No	NA	No	Habitat considered to be of low ecological interest.		DC - habitat information is derived from desktop interpretation of GIS datasets.
9	7110 7120 intctrb_surv_indesignp_othersurv_clip	Polygon	Maps from surveys involving vegetation mapping at the ecotope level, as described by Kelly et al. (1995). Active Raised Bog habitat consists of two ecotopes (central and sub-central) and active peat forming flushes. Bog Woodland habitat (91D0), on raised bog, is also deemed part of Active Raised Bog habitat as it also actively forms peat. Degraded Raised bog habitat consists of marginal, sub-marginal and facebank ecotopes. All the records provided by these surveys are limited to designated sites (i.e. NHAs or SACs). A very small amount of Active Raised Bog habitat is considered to be outside designated sites.	No	NA	No	Located within designated site	International. Priority Annex I habitat.	DA - habitat information is from reliable desktop sources.

10	7110_7120_intactrb_surv_indesign_bmp2005_clip	Polygon	Dataset shows distribution of habitats within those designated sites re-surveyed in 2005. This project aimed to monitor the conservation status of raised bog habitats included in the Annex I of the Council Directive 92/43/EEC. Habitats were mapped at ecotope level according to Kelly et al. (1995) description. Active Raised Bog habitat (7110) includes sub-central and central ecotopes; Degraded Raised Bog habitat (7120) includes marginal, sub-marginal and facebank ecotopes. Flushes were mapped independently as active forming (habitat 7110) or inactive peat forming (habitat 7120). Bog Woodland habitat was also mapped independently (habitat 91D0).	No	NA	No records within study area.	NA	DA - habitat information is from reliable desktop source.
11	7110_7120_rb_unsurv_indesign_othersources_clip	Polygon	This dataset includes raised bog areas within designated sites (i.e. SACs or NHAs) for which comprehensive botanical surveys were not carried out, that have been reported or identified by the sources mentioned above. The occurrence of Active Raised bog habitat within these sites is unknown but is likely to be extremely limited. This dataset specifies within the Attribute table ("Comment" field), whether the digitised areas is Degraded Raised bog / Secondary degraded raised bog and Active Raised bog is a subset or the presence of Active Raised bog is Unknown (i.e. ARB unknown).	No	NA	Located within designated site.	National, Likely occurrence of Annex I habitat 7110 active raised bog or 7120 degraded raised bog within designated site.	DC - habitat information is derived from desktop interpretation of GIS and desktop datasets.
12	7110_7120_rb_unsurv_outdesign_othersources_clip	Polygon	To summarise this can be taken as an approximate estimation of the distribution and extent of the high bog resource outside designated sites. This dataset includes raised bog areas outside designated sites for which comprehensive botanical surveys were not carried out that have been reported or identified by desktop sources. The occurrence of Active Raised bog habitat within these sites is unknown but is likely to be extremely limited. The majority of the raised bog areas illustrated in this dataset were mapped by Corinne 2000 (level 4). The remaining raised bog, which corresponds to secondary degraded raised bog, is included in the Secondary degraded dataset. The origin of each raised bog record is reported in the Attribute table, under "Source" field.	Yes	Raised Bog, North-South		National, Likely occurrence of Annex I habitat 7110 active raised bog or 7120 degraded raised bog outside designated site.	DC - habitat information is derived from desktop interpretation of GIS and desktop datasets.
13	7130_CFP_commonageand_2006_clip	Polygon	CFPs (Commonage Framework Plans) describe the habitats, condition of the land (i.e. level of damage), land use and plant species found in each sub-unit of each agricultural unit for commonage areas. Each sub-unit was digitised and the habitat or habitats within the sub-unit were listed. This stagetitle contains all the sub-units containing Blanket Bog (habitat type I), however generally as a mosaic with other habitats, only corresponding with commonage land. In several occasions areas mapped as Blanket Bog did not correspond with this habitat type. This is reported in the Validation field (Val) within the file Attribute Table. The validation was mainly focused on areas where none other sources indicated the occurrence of habitat 7130.	No	NA	Not located within study area.	National, Annex I habitat (blanket bog 7130)	DA - habitat information is from reliable desktop source. Misclassified areas (non-validated) were removed from dataset. In some instances higher quality data available for these areas was used in preference.
14	ALEM09_Woodland_Inventory_clip	Polygon	Inventory of ancient and long-established woodland in Ireland by BEC Consultants. Dataset shows extent of possible ancient woodlands and ancient woodlands based on a range of desktop sources including historical maps, forest inventory maps, and more recent ecological surveys. A final list of 123 sites at which PAM/AM stands occur was thus compiled through the combination of historical national maps and previous Irish ancient woodland research. A further list of 359 LEV (I) stands presented by the research represents a resource from which future ancient woodlands could be identified. A total of 81 LEV (II) stands were identified.	No	NA	Sites of importance correspond with NSNW sites which are included in the woodland dataset	National, Likely occurrence of Annex I habitat.	DA - habitat information is from reliable desktop source.
15	Blanket_Bog_NHA_SurveyData_2011_clip	Polygon	Blanket Bog NHA Survey Data. Detailed habitat data on 79 sites was gathered during a survey of Blanket Bog NHAs undertaken during 2004. The GIS data was reviewed by BEC in 2011.	No	NA	Not located within study area.	NA	DA - habitat information is from reliable desktop source.
16	Blanket_Bog_NHA_Polygons_Edited_2011_clip	Line	Blanket Bog NHA Survey Data. Detailed habitat data on 79 sites was gathered during a survey of Blanket Bog NHAs undertaken during 2004. The GIS data was reviewed by BEC in 2011.	No	NA	Not located within study area.	NA	DA - habitat information is from reliable desktop source.
17	Coastal_Monitoring_Project_2004_2006_clip	Polygon	Coastal Monitoring Project 2004-2006. Habitat information from coastal sites. Includes Site Code, CMP Site, County, NPSWS ID, Name, CMP Habitat, Survey Name/ Date, Survey Method, CMP Name, Annex I, Saltmarsh (Yes/No), EU Code	No	NA	Relates to habitat data from a few coastal locations on the fringe of study area. Unlikely to be a constraint on North-South project.	None. Could be interpreted. Annex codes are presented.	DA - habitat information is from reliable desktop source.
18	Commonage_Base_Plan_2011_National_v04_clip	Polygon		No	NA	Not relevant to constraint identification	DA - habitat information is from reliable desktop source.	DA - habitat information is from reliable desktop source.
19	Commonage_Base_Station_2011_National_v01_clip	Point		No	NA	Not relevant to constraint identification	DA - habitat information is from reliable desktop source.	DA - habitat information is from reliable desktop source.

20	Commonage_Base_SU_2011_National_v03_clip	Polygon	No	NA	No	Not relevant to constraint identification	DA - habitat information is from reliable desktop source.
21	CPJ_Habitats_March_2012_clip	Polygon	No	NA	No	Not located within study area.	DA - habitat information is from reliable desktop source.
22	FEN_complete_clip	Point	No	NA	No	Subset of Wetland Map of Ireland dataset.	DA - habitat information is from recent reliable desktop source.
23	ISGS_2009_clip	Polygon	Yes	Grasslands North/South	Yes	Distribution of habitats surveyed as part of ISGS 2009. The survey aimed to identify many areas of semi-natural grassland to map these using GIS.	DA - habitat information is from reliable desktop source.
24	ISGS_2009_releves_clip	Point	No	NA	No	Irish Semi-natural grassland survey 2009 releves	DA - habitat information is from reliable desktop source.
25	map_distribution_1130_poly_clip	Polygon	No	NA	No	Map showing distribution for Estuaries, Natura code 1130. The 10km grid estuary distribution map was based on squares occupied by an extent map of estuaries also created in-house by Aqua-Fact.	DC - habitat information is derived from desktop interpretation of GIS datasets.
26	native_woodland_clip	Polygon	No	NA	No	NSNW file. The primary data source for this file was the Forest Inventory Planning System 1998 (FIPS). FIPS is a GIS database running in ArcView that has digitally mapped all forested areas (parcels) > 0.2 ha in Ireland (Gallagher et al. 2001). Attributes include site code referring to NSNW sites. See NSNW database for details on individual sites.	DA - habitat information is from reliable desktop source.
27	npws_7140_records_2006_clip	Point	No	NA	No	Subset of Fens dataset (Dataset # 21) showing point distribution of Transition mires and floating bogs (7240)	DA - habitat information is from reliable desktop source.
28	npws_7210_records_2006_clip	Point	No	NA	No	Subset of Fens dataset (Dataset # 21) showing point distribution of Cladium Fen (7210)	DA - habitat information is from reliable desktop source.
29	npws_7220_records_2006_clip	Point	No	NA	No	Subset of Fens dataset (Dataset # 21) showing point distribution of Peatflying Springs (7220)	DA - habitat information is from reliable desktop source.
30	npws_7230_records_2006_clip	Point	No	NA	No	Subset of Fens dataset (Dataset # 21) showing point distribution of Alkaline Fen (7230)	DA - habitat information is from reliable desktop source.
31	NSIP_8240_distribution_map_clip	Polygon	No	NA	No	Wilson & Fernandez (2013) completed a detailed field survey of 216 limestone pavement and associated habitat monitoring sites, and 17 pH4 sites (this includes sites surveyed during the pilot survey (PSIP) by Murphy & Fernandez 2009). The main objective of the current study (NSIP) was to undertake a national survey and monitoring programme to assess the conservation status of limestone pavement and associated habitats in Ireland. The identification of areas that may possibly be suitable for NHA designation and the rationalisation of SAC boundaries, where required, was also undertaken.	DA - habitat information is from reliable desktop source.
32	NSNW_Woodland_Habitats_2010_clip	Polygon	Yes	Woodlands North/South	Yes	BEC Consultants - F.H. O'Neill, J.R. Martin & K.E. McHutt (2010): The digitisation of woodland habitats surveyed as part of the National Survey of Native Woodlands. Report Submitted to the National Parks & Wildlife Services. Includes Group, Veg. Type, Annex, Fossil	DA - habitat information is from reliable desktop source.
33	Saltmarsh_Curtis_Sheeney_Skerfingon_1998_clip	Point	No	NA	No	Point location of salt marsh habitat. This project provided a list of 238 salt marshes including the largest sites in the country. The location of the salt marsh was given by three digit values for easting and northing. This data set, which includes point location records, includes the following additional data: site name, location of the sites in relation to a designated site, substrate and associated habitats.	DB - habitat information is from older (>10 - 15 years) reliable desktop source.
34	Saltmarsh_quad_Wymer_1984_clip	Point	No	NA	No	Wymer (1984) mapped the distribution of different saltmarsh communities around the Irish coast and these data were used to identify additional saltmarsh sites with Spargina awards.	DB - habitat information is from older (>10 - 15 years) reliable desktop source.
35	smr_national_sm_resource_revised_GIS_2011_clip	Polygon	No	NA	No	Saltmarsh Monitoring Project 2006 - 2008. Annex I Saltmarsh habitats according to the EU Habitats Directive were mapped around the coast of the Republic of Ireland, and their conservation status was assessed.	DA - habitat information is from reliable desktop source.

36	Solution_and_Tectonic_Caves_D_Drew_clip	Polygon	The distribution of the habitat is illustrated on a 10km Irish National Grid. The map has been produced by intersecting 10-km grid squares containing known Lesser-horseshoe bat ( <i>Rhinolophus hipposideros</i> ) roosts in Ireland with the National Solution and Tectonic Caves distribution database.	No	NA	No	Considered as a hydro-geological constraint.	NA	DC - habitat information is derived from desktop interpretation of GIS datasets.
37	Turloughlistmap09_clip	Point	Dataset showing point distribution of turloughs in Ireland. Data was gathered through a review of existing datasets and with reference to aerial photography and other GIS data sources.	No	NA	No	Subset of Wetland Map of Ireland dataset	National, Likely presence of priority Annex I habitat (31.80 Turlough).	DA - habitat information is from reliable desktop sources.
38	Woodland_relevés_2010	Point	Point dataset showing location of vegetation sampling (relevés) recorded during the National Survey of Native Woodland (Berrin et al. 2008).	No	NA	No	This dataset is not relevant to constraint identification.	None. Could be interpreted. Annex codes are presented.	DA - habitat information is from reliable desktop sources. Misclassified areas (non-validated) were removed from dataset. In some instances higher quality data available for these areas was used in preference.
39	LWS 2012 Polygon Habitats	Polygon	Polygon dataset showing location of polygon habitats recorded during the Louth Wetland Survey (Crushell et al. 2012).	No	NA	No	This dataset is not relevant to constraint identification.	National Occurrence of Annex I Habitats.	DA - habitat information is from reliable desktop source.
40	LWS 2012 Site Boundaries	Polygon	Polygon dataset showing location of site boundaries recorded during the Louth Wetland Survey (Crushell et al. 2012).	Yes	Wetlands (Louth-Monaghan) North/South	Yes		National Occurrence of Annex I Habitats.	DA - habitat information is from reliable desktop source.
41	MWM Polygon Habitats 2012	Polygon	Polygon dataset showing location of polygon habitats recorded during the Monaghan Wetland Survey (Foss et al. 2012).	No	NA	No	This dataset is not relevant to constraint identification.	National Occurrence of Annex I Habitats.	DA - habitat information is from reliable desktop source.
42	MWM Site Boundaries 2012	Polygon	Polygon dataset showing location of site boundaries recorded during the Monaghan Wetland Survey (Foss et al. 2012).	Yes	Wetlands (Louth-Monaghan) North/South	Yes		National Occurrence of Annex I Habitats.	DA - habitat information is from reliable desktop source.
43	6424 IWeBS Sites_310112	Point	Point location of sites monitored during IWeBS.	Yes	IWeBS_North/South	Yes		None. May be determined with reference to published IWeBS reports (Crowe et al. 2005).	DA - habitat information is from reliable desktop source.
44	NGO Shadowlist	Point	Shapfiles showing point locations of proposed Natura 2000 sites. Sites that have been formally designated are included within the dataset.	No	NA	No	Requires review of data to determine sites that remain undesignated. On preliminary inspection original grid coordinates may need to be sufficient accuracy. Dataset will be reviewed when analysing designated sites in the surroundings.	Yes. Likely international importance.	DC - habitat information is derived from desktop interpretation of GIS and desktop datasets.
45	pNHAs	Polygon		No	NA	No	Dataset will be reviewed when analysing designated sites in the surroundings.	Yes	Formally designated areas
46	NHAs	Polygon		No	NA	No	Dataset will be reviewed when analysing designated sites in the surroundings.	Yes	Formally designated areas
47	SAC	Polygon		No	NA	No	Dataset will be reviewed when analysing designated sites in the surroundings.	Yes	Formally designated areas
48	SPA	Polygon		No	NA	No	Dataset will be reviewed when analysing designated sites in the surroundings.	Yes	Formally designated areas
49	WMI Sites_170413	Point	Dataset showing the distribution of wetland sites within the study area as displayed on the Wetland Map of Ireland (Wetland Survey, Ireland 2013).	Yes	Wetlands_North/South	Yes		National Occurrence of Annex I Habitats.	DA - habitat information is from reliable desktop source.
50	OSI 1:2500 & 1:5000 Vector Mapping								
51	OSI 6 Historic Inch Mapping								
52	Teagasc Subsoil dataset (Meehan 2004)								
53	OSI Rivers dataset								
54	OSI Lakes dataset								
55	OSI River Chatchments								
56	National Biodiversity Data Centre On-line Mapping Resource								
57	BSFI atlas of British and Irish Flora (Preston et al. 2002)								
58	Department of Agriculture, Food and Marine. Badger limited access to dataset.								