

## Appendix 1: Desk Study – Records of Rare, Protected and Notable Flora and Fauna

<b>Table 3 Records of Protected, Rare and other Notable Flora and Fauna Species<sup>1</sup></b>				
<b>Common Name</b>	<b>Scientific Name</b>	<b>Protection<sup>2</sup></b>	<b>Red-Listing Status<sup>3</sup></b>	<b>Nearest Location and Date (if known)</b>
<b>Flora</b>				
American Skunk-cabbage	<i>Lysichiton americanus</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (2005)
Basil Thyme	<i>Clinopodium acinos (Acinos arvensis)</i>	FPO	Vulnerable	Carrickmines (unknown)
Blunt-leaved Ear-wort	<i>Diplophyllum obtusifolium</i>	None	Near threatened	Ballycorus (2008)
Borrer's Saltmarsh-grass	<i>Puccinellia fasciculata</i>	FPO	Rare	Boosterstown (2007)
Brazilian Giant-rhubarb	<i>Gunnera manicata</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O23 (2014)
Canadian Waterweed	<i>Elodea canadensis</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (2009)
Cherry Laurel	<i>Prunus laurocerasus</i>	Invasive species	N/A	Irish Grid Reference O22 (2005)
Cornflower	<i>Centaurea cyanus</i>	None	Regionally Extinct	Irish Grid Reference O22 (2010)
Giant Hogweed	<i>Heracleum mantegazzianum</i>	Invasive – Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (2012)
Hair-pointed Grimmia	<i>Grimmia trichophylla</i>	None	Data Deficient	Irish Grid Reference O22 (2008)
Himalayan Balsam	<i>Impatiens glandulifera</i>	Invasive – Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (2009)
Hottentot-fig	<i>Carpobrotus edulis</i>	Invasive – Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O23 1986)
Japanese Knotweed	<i>Fallopia japonica</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (2012)
Lead moss	<i>Ditrichum plumbicola</i>	None	Endangered	Ballycorus (2008)
Lesser Centaury	<i>Centaureum pulchellum</i>	FPO	Endangered	Irish Grid Reference O23 (1997)
Lesser Copperwort	<i>Cephaloziella massalongi</i>	None	Vulnerable	Ballycorus (2008)
Moschatel	<i>Adoxa moschatellina</i>	None	Vulnerable	Leopardstown Park Hospital (2010)
Musk Thistle	<i>Carduus nutans</i>	None	Data deficient	Dún Laoghaire (1977)
Nuttall's Waterweed	<i>Elodea nuttallii</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (2007)
Potato Bryum	<i>Bryum bornholmense</i>	None	Near threatened	Ballycorus (2008)
Reindeer Moss	<i>Cladonia portentosa</i>	HD V	Not assessed	Ballycorus (1985)
Rhododendron	<i>Rhododendron ponticum</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O23 (2014)
Salmonberry	<i>Rubus spectabilis</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O23 (2014)
Sea-buckthorn	<i>Hippophae rhamnoides</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (1994)
Sharp-leaved Fluellen	<i>Kickxia elatine</i>	None	Vulnerable	Shanganagh (1991)

<sup>1</sup> Data from a combination of the following sources; NPWS Research Branch Records, [www.npws.ie](http://www.npws.ie), Bat Conservation Ireland (BCI), NBDC online maps <http://maps.biodiversityireland.ie> accessed 6<sup>th</sup> March 2014 and 13<sup>th</sup> May 2015 and Scott Cawley (2009). Data is quoted as obtained from these sources; nomenclature is as supplied and not necessarily in accordance with that outlined in Section 5.2.2.4.2

<sup>2</sup> HDII/IV/V = Habitats Directive Annexes II/IV/V; FPO = Flora Protection Order; WA = Wildlife Acts; BD I = Birds Directive Annex I.

<sup>3</sup> Mammal Red-list from Marnell *et al.*, 2009. Birds from *Birds of Conservation Concern in Ireland 2014–2019* (Colhoun & Cummins, 2014); Vascular Flora from the Irish Red Data Book 1 Vascular Plants (Curtis & McGough 2005); Fish, Amphibians and Reptiles from (King *et al.*, 2011); Bryophytes Red List from Lockhart *et. al.* 2012; Cetaceans conservation status from NPWS (2013b).

<sup>4</sup> Schedule 3 to the Birds and Habitat Regulations 2011

Three-cornered Garlic	<i>Allium triquetrum</i>	Invasive - Offence to spread <sup>4</sup>	N/A	Irish Grid Reference O23 (2014)
Wireweed	<i>Sargassum muticum</i>	Invasive – Offence to spread <sup>4</sup>	N/A	Bullock Harbour (2008)
<b>Fauna</b>				
Arctic Tern	<i>Sterna paradisaea</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2012)
Atlantic Cod	<i>Gadus morhua</i>	OSPAR	N/A	Irish Grid Reference O22 (2013)
Badger	<i>Meles meles</i>	WA	Least Concern	Killiney (2007)
Bar-tailed Godwit	<i>Limosa lapponica</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2010)
Barn Owl	<i>Tyto alba</i>	WA	Red	Irish Grid Reference O22 (1991)
Balearic Shearwater	<i>Puffinus mauretanicus</i>	WA	Red	Irish Grid Reference O22 (2010)
Bee <i>sp.</i>	<i>Colletes similis</i>	None	Near Threatened	Irish Grid Reference O22 (2008)
Black-headed Gull	<i>Larus ridibundus</i>	WA	Red	Irish Grid Reference O22 (2013)
Black-necked Grebe	<i>Podiceps nigricollis</i>	WA	Red	Irish Grid Reference O22 (2012)
Black Guillemot	<i>Cepphus grylle</i>	WA	Amber	Carlisle Pier (2009)
Black-throated Diver	<i>Gavia arctica</i>	WA, Annex I	Amber	Irish Grid Reference O22 (1984)
Black-tailed Godwit	<i>Limosa limosa</i>	WA	Amber	Irish Grid Reference O22 (2010)
Bee <i>sp.</i>	<i>Bombus (Thoracombus) muscorum</i>	None	Near Threatened	Irish Grid Reference O22 (2010)
Brandts Bat	<i>Myotis brandtii</i>	WA, HD IV	Data deficient	Irish Grid Reference O22 (2005)
Brent Goose	<i>Branta bernicla hrota</i>	WA, BD Annex II	Amber	Irish Grid Reference O22 (2013)
Brown Long-eared Bat	<i>Plecotus auritus</i>	WA, HD IV,	Least Concern	Within 10km of the proposed development
Common Coot	<i>Fulica atra</i>	WA, BD Annex II & III	Amber	Irish Grid Reference O22 (2011)
Common Dolphin	<i>Delphinus delphis</i>	WA, HD IV	Favourable	Killiney (2011)
Common Frog	<i>Rana temporaria</i>	WA, HD V	Not Threatened	Dún Laoghaire (2006)
Common Kingfisher	<i>Alcedo atthis</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2011)
Common Lizard	<i>Zootoca vivipara</i>	WA	Least Concern	Irish Grid Reference O22 (1972)
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	WA, HD IV	Least Concern	Carlisle Pier (2009)
Common Pochard	<i>Aythya ferina</i>	WA, BD Annex II & III	Red	Irish Grid Reference O22 (1984)
Common Sandpiper	<i>Actitis hypoleucos</i>	WA	Amber	Irish Grid Reference O22 (2012)
Common Scoter	<i>Melanitta nigra</i>	WA, BD Annex II & III	Red	Irish Grid Reference O22 (2010)
Common Tern	<i>Sterna hirundo</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2012)
Common Woodpigeon	<i>Columba palumbus</i>	WA, BD Annex II & III	Green	Irish Grid Reference O22 (2014)
Cormorant	<i>Phalacrocorax carbo</i>	WA	Amber	Irish Grid Reference O22 (2013)
Corncrake	<i>Crex crex</i>	WA, BD Annex I	Red	Irish Grid Reference O22 (1972)
Curlew	<i>Numenius arquata</i>	WA, BD Annex II	Red	Irish Grid Reference O22 (2012)
Dark Green Frillary	<i>Argynnis aglaja</i>	None	Vulnerable	Irish Grid Reference O22 (1984)
Daubenton's Bat	<i>Myotis daubentonii</i>	WA, HD IV	Least Concern	Within 10km of the proposed development
Dingy Skipper	<i>Erynnis tages</i>	None	Near Threatened	Irish Grid Reference O22 (2010)
Dogwhelk	<i>Nucella lapillus</i>	OSPAR	N/A	Irish Grid Reference O22 (1996)
Dunlin	<i>Calidris alpina</i>	WA, BD Annex I	Red	Irish Grid Reference O22 (2012)
European hedgehog	<i>Erinaceus europaeus</i>	WA	Least Concern	Irish Grid Reference O22 (2013)
Gadwall	<i>Anas strepera</i>	WA, BD Annex II	Amber	Irish Grid Reference O23 (2009)
Gatekeeper	<i>Pyronia tithonus</i>	None	Near Threatened	Irish Grid Reference O22 (2012)

Gannet	<i>Morus bassanus</i>	WA	Amber	Irish Grid Reference O22 (2012)
Goldeneye	<i>Bucephala clangula</i>	WA, BD Annex II	Red	Irish Grid Reference O22 (1984)
Goldcrest	<i>Regulus regulus</i>	WA	Amber	Irish Grid Reference O22 (2012)
Golden Plover	<i>Pluvialis apricaria</i>	WA, BD Annex I, II & III	Red	Irish Grid Reference O22 (2010)
Grayling	<i>Hipparchia semele</i>	None	Near Threatened	Irish Grid Reference O22 (2010)
Grasshopper Warbler	<i>Locustella naevia</i>	WA	Green	Irish Grid Reference O22 (1991)
Great Black-backed Gull	<i>Larus marinus</i>	WA	Amber	Irish Grid Reference O22 (2014)
Great Crested Grebe	<i>Podiceps cristatus</i>	WA	Amber	Irish Grid Reference O22 (2013)
Great Northern Diver	<i>Gavia immer</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2012)
Great Spotted Woodpecker	<i>Dendrocopos major</i>	WA	Amber	Irish Grid Reference O22 (2010)
Greenshank	<i>Tringa nebularia</i>	WA	Green	Irish Grid Reference O23 (2012)
Grey Heron	<i>Ardea cinerea</i>	WA	Green	Irish Grid Reference O23 (2014)
Grey Plover	<i>Pluvialis squatarola</i>	WA	Amber	Irish Grid Reference O22 (1984)
Grey Wagtail	<i>Motacilla cinerea</i>	WA	Red	Irish Grid Reference O22 (2012)
Grey Seal	<i>Halichoerus grypus</i>	WA, HD II & V	N/A	Irish Grid Reference O22 (2013)
Guillemot	<i>Uria aalge</i>	WA	Amber	Irish Grid Reference O22 (2013)
Harbour Porpoise	<i>Phocoena phocoena</i>	WA, HD II & IV, OSPAR	N/A	Irish Grid Reference O22 (1999)
Harbour Seal	<i>Phoca vitulina</i>	WA, HD II & V	N/A	Irish Grid Reference O22 (2014)
Herring Gull	<i>Larus argentatus</i>	WA	Red	Irish Grid Reference O22 (2012)
House Martin	<i>Delichon urbicum</i>	WA	Amber	Irish Grid Reference O22 (2012)
House Sparrow	<i>Passer domesticus</i>	WA	Amber	Irish Grid Reference O22 (2013)
Irish Hare	<i>Lepus timidus subsp. Hibernicus</i>	WA, HD V	Least Concern	Ballybetagh (1993)
Kestrel	<i>Falco tinnunculus</i>	WA	Amber	Irish Grid Reference O22 (2010)
Kemp's Ridley Turtle	<i>Lepidochelys kempii</i>	WA, HD IV	NA	Irish Grid Reference O23 (1968)
Kittiwake	<i>Rissa tridactyla</i>	WA	Amber	Irish Grid Reference O22 (2012)
Knot	<i>Calidris canutus</i>	WA	Amber	Irish Grid Reference O22 (1984)
Lapwing	<i>Vanellus vanellus</i>	WA, BD Annex II	Red	Irish Grid Reference O22 (2011)
Leatherback Turtle	<i>Dermodochelys coriacea</i>	WA, HD IV, OSPAR	Least Concern	Irish Grid Reference O32 (1985)
Leathery Sea Squirt	<i>Styela clava</i>	Invasive – offence to spread <sup>4</sup>	N/A	Irish Grid Reference O22 (2004)
Leisler's bat	<i>Nyctalus leisleri</i>	WA, HD IV	Vulnerable	Carlisle Pier (2009)
Lesser Black-backed Gull	<i>Larus fuscus</i>	WA	Amber	Irish Grid Reference O22 (2012)
Linnet	<i>Carduelis cannabina</i>	WA	Amber	Irish Grid Reference O22 (2013)
Little Egret	<i>Egretta garzetta</i>	WA, BD Annex I	Green	Irish Grid Reference O22 (2013)
Little Grebe	<i>Tachybaptus ruficollis</i>	WA	Amber	Irish Grid Reference O22 (2012)
Little Gull	<i>Larus minutus</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2002)
Little Tern	<i>Sternula albifrons</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (1972)
Loggerhead Turtle	<i>Caretta caretta</i>	WA, HD II/IV	Not assessed	Kilbarrick Strand (2004)
Long-tailed Duck	<i>Clangula hyemalis</i>	WA, BD Annex II	Red	Irish Grid Reference O22 (2002)
Long-eared Owl	<i>Asio otus</i>	WA	Green	Irish Grid Reference O23 (1991)
Mallard	<i>Anas platyrhynchos</i>	WA, BD Annex II & III	Green	Irish Grid Reference O22 (2011)
Manx Shearwater	<i>Puffinus puffinus</i>	WA	Amber	Irish Grid Reference O22 (2012)

Marsh Fritillary	<i>Euphydryas aurinia</i>	HD II	Vulnerable	Irish Grid Reference O23 (2014)
Mediterranean Gull	<i>Larus melanocephalus</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2014)
Merlin	<i>Falco columbarius</i>	WA, BD Annex I	Amber	Irish Grid Reference O23 (2011)
Moss Carder-Bee	<i>Bombus (Thoracombus) muscorum</i>	None	Near Threatened	Irish Grid Reference O32 (2004)
Mute Swan	<i>Cygnus olor</i>	WA	Amber	Irish Grid Reference O22 (2012)
Nathusius Pipistrelle	<i>Pipistrellus nathusii</i>	WA, HD IV	Least Concern	Within 10km of the proposed development
Natterer's Bat	<i>Myotis nattereri</i>	WA, HD IV	Least Concern	Within 10km of the proposed development
New Zealand Flatworm	<i>Arthurdendyus triangulatus</i>	Invasive species	N/A	Irish Grid Reference O22 (2012)
Nightjar	<i>Caprimulgus europaeus</i>	WA, BD Annex I	Red	Irish Grid Reference O22 (1972)
Northern Colletes	<i>Colletes (Colletes) floralis</i>	None	Vulnerable	Irish Grid Reference O22 (2008)
Northern Pintail	<i>Anas acuta</i>	WA, BD Annex II & III	Red	Irish Grid Reference O23 (2011)
Otter	<i>Lutra lutra</i>	WA, HD II/IV	Near Threatened	Irish Grid Reference O22 (2012)
Oystercatcher	<i>Haematopus ostralegus</i>	WA	Amber	Irish Grid Reference O22 (2014)
Peregrine Falcon	<i>Falco peregrinus</i>	WA, BD Annex I	Green	Irish Grid Reference O22 (2012)
Pheasant	<i>Phasianus colchicus</i>	WA, BD Annex II & III	Green	Irish Grid Reference O22 (2010)
Pine Marten	<i>Martes martes</i>	WA, HD Annex V	Least Concern	Irish Grid Reference O23 (2013)
Pygmy Shrew	<i>Sorex minutus</i>	WA	Least Concern	Irish Grid Reference O22 (2013)
Razorbill	<i>Alca torda</i>	WA	Amber	Irish Grid Reference O22 (2012)
Red-breasted Merganser	<i>Mergus serrator</i>	WA, BD Annex II	Green	Irish Grid Reference O22 (2012)
Redshank	<i>Tringa totanus</i>	WA	Red	Irish Grid Reference O22 (2014)
Red Squirrel	<i>Sciurus vulgaris</i>	WA	Near Threatened	Irish Grid Reference O22 (2013)
Red Deer	<i>Cervus elaphus</i>	WA	Least Concern	Irish Grid Reference O22 (2008)
Red-throated Diver	<i>Gavia stellata</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2012)
Red Grouse	<i>Lagopus lagopus</i>	WA BD Annex II & III	Red	Irish Grid Reference O22 (1972)
Reed Warbler	<i>Acrocephalus scirpaceus</i>	WA	Amber	Irish Grid Reference O22 (2012)
Robin	<i>Erithacus rubecula</i>	WA	Amber	Irish Grid Reference O22 (2014)
Rock Pigeon	<i>Columba livia</i>	WA BD Annex II	Green	Irish Grid Reference O22 (2012)
Roseate Tern	<i>Sterna dougallii</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2012)
Sand Martin	<i>Riparia riparia</i>	WA	Amber	Irish Grid Reference O22 (2012)
Sanderling	<i>Calidris alba</i>	WA	Green	Irish Grid Reference O23 (2012)
Sandwich Tern	<i>Sterna sandvicensis</i>	WA, Annex I	Amber	Irish Grid Reference O22 (2012)
Scaup	<i>Aythya marila</i>	WA, BD Annex II & III	Amber	Irish Grid Reference O22 (2010)
Shag	<i>Phalacrocorax aristotelis</i>	WA	Amber	Irish Grid Reference O22 (2014)
Shelduck	<i>Tadorna tadorna</i>	WA	Amber	Irish Grid Reference O22 (2012)
Short-eared Owl	<i>Asio flammeus</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (1984)
Shoveler	<i>Anas clypeatea</i>	WA, BD Annex II & III	Red	Irish Grid Reference O22 (1984)
Sika Deer	<i>Cervus nippon</i>	WA	Not Assessed	Irish Grid Reference O22 (2008)
Skylark	<i>Alauda arvensis</i>	WA BD Annex II	Amber	Irish Grid Reference O22 (2011)
Small Blue	<i>Cupido minimus</i>	None	Endangered	Irish Grid Reference O22 (2010)
Small Heath	<i>Coenonympha pamphilus</i>	None	Near Threatened	Irish Grid Reference O22 (2010)
Smooth Newt	<i>Lissotriton vulgaris</i>	WA	Least Concern	Sallynoggin (2011)

Snipe	<i>Gallinago gallinago</i>	WA, BD Annex II & III	Amber	Irish Grid Reference O22 (2011)
Soprano Pipistrelle	<i>Pipistrellus pygmaeus</i>	WA, HD IV	Least Concern	Within 10km of the proposed development
Spotted Flycatcher	<i>Muscicapa striata</i>	WA	Amber	Irish Grid Reference O22 (1991)
Starling	<i>Sturnus vulgaris</i>	WA	Amber	Irish Grid Reference O22 (2013)
Stock Dove	<i>Columba oenas</i>	WA	Amber	Irish Grid Reference O22 (1991)
Stonechat	<i>Saxicola torquata</i>	WA	Amber	Irish Grid Reference O22 (2011)
Storm Petrel	<i>Hydrobates pelagicus</i>	WA, BD Annex I	Amber	Irish Grid Reference O22 (2010)
Swallow	<i>Hirundo rustica</i>	WA	Amber	Irish Grid Reference O22 (2012)
Swift	<i>Apus apus</i>	WA	Amber	Irish Grid Reference O22 (2013)
Teal	<i>Anas crecca</i>	WA, BD Annex II & III	Amber	Irish Grid Reference O22 (2013)
Thornback Ray	<i>Raja clavata</i>	OSPAR	Threatened	Irish Grid Reference O23 (2014)
Tree Sparrow	<i>Passer montanus</i>	WA	Amber	Irish Grid Reference O22 (1999)
Tufted Duck	<i>Aythya fuligula</i>	WA, BD Annex II & III	Red	Irish Grid Reference O22 (2010)
Turtle Dove	<i>Streptopelia turtur</i>	WA	Amber	Irish Grid Reference O22 (1972)
Viviparous Lizard	<i>Lacerta vivipara</i>	WA	Least Concern	Killiney (1970)
Wall	<i>Lasiommata megera</i>	None	Endangered	Irish Grid Reference O22 (2010)
Water Rail	<i>Rallus aquaticus</i>	WA	Amber	Irish Grid Reference O22 (2009)
Wheatear	<i>Oenanthe oenanthe</i>	WA	Amber	Irish Grid Reference O22 (2012)
Whiskered Bat	<i>Myotis mystinaceus</i>	WA, HD IV	Least Concern	Within 10km of the proposed development
Wigeon	<i>Anas penelope</i>	WA, BD II & III	Red	Irish Grid Reference O22 (2010)
Woodcock	<i>Scolopax rusticola</i>	WA, BD Annex II & III	Red	Irish Grid Reference O22 (2010)
Wood White	<i>Leptidea sinapis</i>	None	Near Threatened	Irish Grid Reference O22 (2010)
Yellowhammer	<i>Emberiza citrinella</i>	WA	Red	Irish Grid Reference O22 (2010)