



**Holyhead Harbour, Anglesey**

**Proposed marina development**

**Technical report:  
Breeding bird survey**

**Version 2.0**

**Prepared for Axis PED Ltd.**

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## **1 Introduction**

This document sets out the results of a breeding bird survey undertaken at the site of the proposed development of Holyhead marina, Holy Island, Anglesey. The survey area extends from Salt Island Bridge (the eastern border of the site) to the bay immediately west of the breakwater, adjacent to Soldier's Point (the western edge of the site).

## **2 Aim**

The purpose of the survey is to identify areas of the site that have important breeding bird populations. Many bird species are specified as 'Birds of Conservation Concern' (Eaton *et al.*, 2009; Marchant *et al.*, 1990) i.e. they are included in UK and European legislation and on British Trust for Ornithology (BTO)/RSPB conservation lists. An assessment of the data is then made, plus a coded survey plan showing the spatial distribution of individual species is also included.

## **3 Methodology**

### **3.1 Bird census technique**

The Common Bird Census (CBC) methodology was employed to monitor the populations of common breeding birds on site (Bibby *et al.*, 2000; Gilbert *et al.*, 1998; Marchant, 1983). This involves the production of bird species maps that can be used to indicate the density and distribution of territorial breeding birds.

It is based on a British Trust for Ornithology (BTO) survey method known as 'territory mapping', which identifies the number and distribution of breeding territories (for individual bird species) in a specified census area. That is, adult males singing (proclaiming a territory), adult males fighting (defending a territory), adult birds carrying food or nesting material, juveniles calling for food or being fed, or adult birds displaying alarm calls. Additional activities of territorial significance, such as displaying and mating were noted, when appropriate.

This survey method has proved highly valuable in revealing population fluctuations and trends amongst British birds and in helping to understand their causes. Consequently, CBC data has played a key role in collating listings for 'Birds of Conservation Concern' (Baillie *et al.*, 2007; Gregory *et al.*, 2002; Marchant *et al.*, 1990).

### **3.2 Time and route of visits**

Visits were made in the early- to mid-morning, as birds are generally most active at this time of day and most inactive in the early afternoon. The survey area was walked at a slow walking pace with frequent pauses, so that all birds detected could be identified. Days of inclement weather (persistent rain, high winds, poor visibility) were avoided, if possible. Survey routes were varied between visits so that there was no tendency for any part of the survey area to be visited later or

earlier in the survey period. The route was organised such that any point within 50m of the survey route was visited.

The site was surveyed on three separate occasions: 31/03/09, 08/05/09 & 12/06/09.

### 3.3 Bird recording

Observations of bird species (by sight or sound) were noted on the survey (field) map using BTO standard species and activity recording codes. This information was then transferred to a summary map to highlight the breeding bird species that are of conservation significance (see Figure 1). The minimum requirements for a cluster (i.e. breeding territory) are at least two registrations if there were fewer than eight effective visits. The number of effective visits is the number from, and including the visit on which the species was first detected (Bibby *et al.*, 2000).

Records were also made of any bird species observed on land adjacent to the survey area or over flying the site. However, they were not included in the assessment of survey area importance unless it was obvious that they were moving between different parts of the survey area.

### 3.4 Assessment of conservation status

An assessment of bird species conservation status can then be made in relation to its inclusion in UK and European legislation and on RSPB/BTO conservation lists.

Specifically:

#### EC 'Birds Directive' (79/409/EEC)

Special Protection Areas (SPAs) are strictly protected sites classified in accordance with Article 4 of the [EC Directive on the conservation of wild birds \(79/409/EEC\)](#), also known as the 'Birds Directive', which came into force in April 1979. A major provision of the Directive includes the identification and classification of SPAs for rare or vulnerable species listed in Annex I of the Directive, as well as for all regularly occurring migratory species, paying particular attention to the protection of wetlands of international importance.

Also, to regulate the hunting of certain species of birds listed in Annex II, while Annex III regulates the sale, transport, keeping and offering for sale of certain live or dead game birds. In the UK, the provisions of the 'Birds Directive' are implemented through the Wildlife & Countryside Act (1981) (as amended).

#### Wildlife and Countryside Act (1981)

Section 1: makes it an offence to intentionally kill, injure or take any wild bird, nest or egg. The possession of any of these is an offence of strict liability. It covers special protection and increased fines of Schedule 1 species. Schedule 1, Part I - lists 79 rare, endangered, declining or vulnerable bird species which are protected by special penalties at all times, while Part II lists 3 birds that are protected by special penalties during the close season (February - August).

#### Natural Environment and Rural Communities (NERC) Act (2006)

Section 40(1) of the Natural Environment and Rural Communities Act 2006 ("the NERC Act") places a new duty on every public authority, in exercising its functions, to "have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity". Following detailed consultation, the Section 42 list of habitats and species of principal importance in Wales has been signed off by the Welsh Assembly Government and is now available. The list contains all UK Biodiversity Action Plan habitats and species known to occur in Wales in addition to species of particular conservation significance in Wales and is required by legislation under the NERC Act (2006) Biodiversity Duty.

BTO/RSPB 'Red List': birds of **high** conservation concern

'Red List' species are those that are globally threatened according to the IUCN (World Conservation Union) criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery, i.e.:

- Globally threatened according to the IUCN;
- Historical population decline in UK during 1800-1995;
- Rapid ( $\geq 50\%$ ) decline in UK breeding population over last 25 years; and
- Rapid ( $\geq 50\%$ ) contraction of UK breeding range over last 25 years.

N.B. Certain 'Red list' species also qualify for 'Amber List' criteria.

BTO/RSPB 'Amber List': birds of **medium** conservation concern

'Amber List' species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations, i.e.:

- Historical population decline during 1800-1995, but recovering: population size has more than doubled over last 25 years;
- Moderate (25-49%) decline in UK breeding population over last 25 years;
- Moderate (25-49%) contraction of UK breeding range over last 25 years;
- $\geq 50\%$  of UK breeding population in 10 or fewer sites;
- $\geq 20\%$  of European breeding population in UK; and
- Species with unfavourable conservation status in Europe.

An updated list of 'Red' and 'Amber List' species was published in May 2009 (Eaton *et al.*, 2009).

UK Biodiversity Action Plan (UK BAP)

The UK BAP, which was published in 1994, sets priorities for nationally and locally important species and habitats. Each plan has costed actions and targets and reporting on the targets occurs on a 3-5 year cycle. An updated list of UK priority species and habitats was published in June 2007.

## Anglesey Biodiversity Action Plan (Anglesey BAP)

This contains action plans for species and habitats that are agreed to be of conservation importance in the Anglesey Biodiversity Action Plan area.

## 4 Results

**Forty-one** species of bird were observed in and around the proposed development site, of which **thirty-seven** species were noted within the boundary of the site (see Appendices 1 & 2). For specific locations of bird species, see Figures 1-4.

### 4.1 Salt Island Bridge to Lifeboat Station/Trinity Marine Boat Yard

Bird species exhibiting breeding behaviour include:

Blackbird (*Turdus merula*) - a single bird issuing an alarm call from an area of bramble scrub adjacent to rocky coastline, west of Mackenzie Lock.

Other bird species recorded in this area include:

Oystercatcher (*Haematopus ostralegus*) - 1-3 birds foraging on rocky coastline.

Cormorant (*Phalacrocorax carbo*) - one bird roosting on a rock adjacent to Graig Ddu, close to the eastern edge of the site. Also, a single bird, feeding in New Harbour, adjacent to the Maritime Museum.

Dunnock (*Prunella modularis*) - a single bird foraging, adjacent to the Coast Guard Lookout Station.

Starling (*Sturnus vulgaris*) - small numbers of birds (including juveniles) foraging at several locations adjacent to the rocky coastline

House sparrow (*Passer domesticus*) - small numbers of birds foraging at several locations adjacent to the rocky coastline.

Herring gull (*Larus argentatus*) - several birds scavenging beside refuse bins and on amenity grassland, Beach Road.

Jackdaw (*Corvus monedula*) - several birds scavenging beside refuse bins and on amenity grassland, Beach Road.

Carrion crow (*Corvus corone*) - a single bird scavenging beside refuse bins and on amenity grassland, Beach Road.

Rook (*Corvus frugilegus*) - one bird scavenging on amenity grassland, Beach Road.

Magpie (*Pica pica*) - one bird roosting on rooftop of the Coast Guard Lookout Station.

Collared dove (*Streptopelia decaocto*) - a single bird foraging on shingle coastline, west of Mackenzie Lock.

House martin (*Delichon urbicum*) - three birds feeding above amenity grassland, adjacent to Allotment Gardens.

Swallow (*Hirundo rustica*) - four birds feeding adjacent to rocky coastline, close to the eastern edge of the site.

#### 4.2 Boathouse Hotel and Porth-y-Felin House to Soldiers Point

Bird species exhibiting breeding behaviour include:

Wren (*Troglodytes troglodytes*) - a minimum of five pairs of birds singing from areas of scrub.

Whitethroat (*Sylvia communis*) - at least three pairs of birds singing from areas of scrub.

Oystercatcher - two birds issuing alarm calls from rocky coastline, 100m north east of Porth-y-felin House.

Chaffinch (*Fringilla coelebs*) - up to two pairs of birds singing from areas of scrub.

Chiffchaff (*Phylloscopus collybita*) - a minimum of one pair of birds singing from an area of scrub.

Blackcap (*Sylvia atricapilla*) - at least one pair of birds singing from an area of scrub.

Willow warbler (*Phylloscopus trochilus*) - a minimum of one pair of birds singing from an area of scrub.

Great tit (*Parus major*) - up to one pair of birds singing from an area of scrub.

Blackbird - at least one pair of birds singing from an area of scrub.

Feral pigeon (*Columba livia*) - 10+ birds roosting at Porth-y-felin House, and 25+ birds roosting at Soldiers Point.

House sparrow - several birds calling from the depot roof, west of Soldiers Point.

Other bird species recorded in this area include:

Red-breasted merganser (*Mergus serrator*) - a pair of birds noted adjacent to rocky coastline, 100m north east of Porth-y-felin House.

Song thrush (*Turdus philomelos*) - a single bird, foraging in pasture, 100m north west of Porth-y-felin House.

Goldfinch (*Carduelis carduelis*) - 5 birds foraging in pasture, 100m north west of Porth-y-felin House.

Greenfinch (*Carduelis chloris*) - 1 male bird on a telegraph wire, south of Soldiers Point.

Woodpigeon (*Columba palumbus*) - two birds foraging in scrub, adjacent to Porth-y-felin House.

Robin (*Erithacus rubecula*) - a single bird in scrub, adjacent to Porth-y-felin House.

Herring gull - several birds loafing on rocks, north east of Porth-y-Felin House.

Magpie - several birds foraging in pasture, north west of Porth-y-felin House.

Swallow - 1 foraging in pasture, 100m north west of Porth-y-felin House.

Swift (*Apus apus*) - a single bird feeding over the Pumping Station.

Carrion crow - 1 bird calling in pasture, adjacent to the Pumping Station.

Collared dove - a single bird foraging in pasture, 100m north west of Porth-y-felin House.

Breakwater (north east of Soldiers Point) and adjacent bay/gorse scrub (south west of Breakwater)

Bird species exhibiting breeding behaviour include:

Rock pipit (*Anthus petrosus*) - 2 birds issuing alarm calls from a concrete outbuilding, adjacent to the south western end of the Breakwater.

Wren - 2 birds singing in scrub, 50m north west of Soldiers Point, plus 2 birds singing in scrub, adjacent to the north eastern edge of Trefenfan Farm.

Whitethroat - a single bird singing in scrub, adjacent to Trefenfan Farm, plus 1 bird singing in scrub, north of the depot adjacent to Soldiers Point.

Blackbird - 1 bird singing in scrub, north of depot, adjacent to Soldiers Point.

Other of bird species recorded in this area include:

Chough (*Pyrrhocorax pyrrhocorax*) - a single bird foraging on a grassy hummock, adjacent to the south western end of the Breakwater.

Ringed plover (*Charadrius hiaticula*) - 2 birds foraging on waste ground, adjacent to the south western end of the Breakwater.

Linnet (*Carduelis cannabina*) - 2 birds foraging in gorse scrub, south west of the Breakwater.

Grey heron (*Ardea cinerea*) - 1 bird foraging adjacent to the western edge of the Breakwater.

Great black-backed gull (*Larus marinus*) - 1 bird loafing on the south western end of the Breakwater.

Meadow pipit (*Anthus pratensis*) - a single bird foraging on waste ground, adjacent to the south western end of the Breakwater.

Carrion crow - 1 bird foraging, adjacent to the south western end of the Breakwater.

Herring gull - 2 birds loafing on waste ground, adjacent to Soldiers Point.

Magpie - a single bird foraging on the roadside adjacent to Trefenfan Farm.

Great tit - several juvenile birds in gorse scrub, south west of the Breakwater.

Dunnock - a single bird in gorse scrub, south west of the Breakwater.

Woodpigeon - 1 bird foraging in pasture, 200m west of Soldiers Point.

Swallow - several birds feeding at the western edge of Breakwater.

#### 4.4 Bird species observed outside the survey area

Gannet (*Morus bassanus*) - a single bird flying, east-west, 250m north of the Breakwater.

Greylag goose (*Anser anser*) - 1 bird, loafing after high winds the night before, on coastal heath, west of the Breakwater.

Mallard (*Anas platyrhynchos*) - a pair of birds, loafing on coastal heath, west of the Breakwater.

Meadow pipit - a single bird issuing an alarm call on coastal heath, west of the Breakwater.

Wheatear (*Oenanthe oenanthe*) - one bird on coastal heath, west of the Breakwater.

Song thrush - one bird in pasture, west of the Breakwater.

Wren - a single bird singing in gorse scrub, west of the Breakwater.

Chaffinch - one bird calling from gorse scrub, west of the Breakwater.

## 5 **Conservation assessment of bird species**

Appendix 2 summarises the conservation status of bird species recorded within the boundary of proposed development site.

In order of relative importance, this includes:

1 species with special legal protection under or Annex I of the EU Birds Directive:

- Chough.

1 species with special legal protection under Schedule 1 of the Wildlife & Countryside Act (1981):

- Chough.

7 species listed under Section 42 of the Natural Environment and Rural Communities Act 2006:

- Herring gull, dunnoek, song thrush, chough, starling, house sparrow and linnet.

6 UK BAP priority species:

- Herring gull, dunnoek, song thrush, starling, house sparrow and linnet.

5 species on the RSPB/BTO 'Red List' of birds of **high** conservation concern:

- Herring gull, song thrush, starling, house sparrow and linnet.

10 species on the RSPB/BTO 'Amber List' of birds of **medium** conservation concern:

- Oystercatcher, ringed plover, great black-backed gull, swallow, house martin, meadow pipit, dunnoek, whitethroat, willow warbler and chough.

1 Anglesey BAP 'priority' species:

- Chough. Note that there is some overlap between categories.

## **6 Impacts and mitigation**

### **6.1 Impacts on breeding birds**

The proposed development of the site may impact on several habitats of particular value to breeding bird species, namely:

#### The rocky coastline between Salt Island Bridge and the Lifeboat Station/Trinity Marine Boat Yard

This area is principally used for foraging and is considered to be of limited value to breeding bird species; with the only bird species showing breeding behaviour was that of a blackbird issuing an alarm call from an area of bramble scrub adjoining the rocky coastline, west of Mackenzie Lock. Alternative areas of scrub habitat are available in gardens immediately south of this area.

#### The area of scrub and pasture between the Boathouse Hotel and Soldiers Point

The majority of breeding bird species records was noted in this area of scrub and pasture. However, the disturbance of such bird habitat caused by construction work may be offset by comparable areas of habitat that are available, close by, on the perimeter of the site.

Two oystercatchers was seen issuing alarm calls from rocky coastline north east of Porth-y-felin House, though this habitat is likely to remained undisturbed by the development.

#### The waste ground and Breakwater north east of Soldiers Point

A pair of rock pipit was noted issuing alarm calls from a concrete outbuilding, adjacent to the south western end of the Breakwater, which is a probable nest site. However, similar, more natural rock pipit habitat is on hand nearby by, in recesses of the adjoining rocky coastline.

A single chough was observed foraging on a grassy hummock, adjacent to the south western end of the Breakwater. This bird is listed under Schedule 1, Part I of the Wildlife and Countryside Act (1981) and is protected by special penalties at all times. However, it is not breeding on site, and there is therefore no risk of legislative contravention under provisions to prevent disturbance of nests of species with special protection.

#### The area of gorse scrub adjacent to the south western end of the Breakwater

Development work will have a limited effect on breeding species such as whitethroat as comparable habitat is available immediately adjacent to this area of scrub.

As the proposed development will impact on habitats used by breeding birds on site, it is suggested that any site clearance/development work should take place outside of the breeding season (i.e. between September - February). As such, this will prevent disturbance to birds utilising the site during the breeding season. Under Section 1 of the Wildlife and Countryside Act (1981), which relates to the protection of birds, it is illegal to damage or destroy a nest (whilst being built or in use).

## 6.2 Impacts on chough

The loss of grassland at the south end of the breakwater to car parking will result in the loss of one area of grassland where a single chough was observed foraging. Chough are also likely to avoid buildings and human disturbance, although individuals appear (from personal observation) to be relatively habituated to human activity on coastal heath near South Stack.

There will therefore be a small reduction in available foraging habitat for chough through development of the grassland at the south end of the breakwater. This is sub-optimal habitat, chough preferring to forage in fields which are cattle-grazed, especially where a short sward is maintained through winter grazing (Ausden & Bateson, 2005). Much more suitable habitat exists to the west of the site, in the vicinity of the Breakwater Country Park, where choughs were observed foraging on another bird survey occasion. None of the other habitats within the development area, including lawns, and small ungrazed fields, are of value for foraging choughs.

The significance of this impact on chough foraging habitat is therefore negligible, due to the small area of poor-quality habitat affected.

## 7 **Conclusion**

Although a number of breeding birds may be displaced by the proposed development, the numbers and species concerned are not significant in nature conservation terms.

The proposed development may potentially impact on three bird species of high conservation concern (i.e. 'Red List' species) - song thrush, house sparrow and linnet, plus five birds species of medium conservation concern (i.e. 'Amber List' species) - oystercatcher, ringed plover, dunnoek, whitethroat and willow warbler. These all remain common and widespread, and the numbers of individuals affected by the development is not significant at the population level.

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## Appendix 1: Bird species lists

Visit 'A'

Survey date: 31/03/09

Times: 0630 - **0930**

Weather: Overcast, becoming

brighter (W 2-3)

<b><i>Common name</i></b>	<b><i>Number recorded and other information</i></b>
Red-breasted merganser	Pair (eastern part of harbour)
Oystercatcher	5 (on rocks, east shore of harbour) 1 (west of breakwater)
Redshank	2 (on rocks, east shore of harbour)
Herring gull	Numerous individuals and small groups in harbour
Feral pigeon	15+ around Porth-y-Felin House & Soldier's Point
Woodpigeon	Several foraging over pasture west of Porth-y-Felin
Rock pipit	Single on breakwater; pair at S end of breakwater
Wren	At least 3 holding territory in western part of site
Dunnock	1 singing in grounds of Porth-y-Felin
Blackbird	1 foraging near allotment site
Willow warbler	1 early arrival singing, just north of Porth-y-Felin
Great tit	1 calling from scrub, Boathouse Hotel
Blue tit	1 on old rail line west of Soldier's Point
Magpie	Several near old rail line west of Soldier's Point
Jackdaw	3 foraging on amenity grassland to east of marina
Carrion crow	Several foraging over amenity grassland and adjacent housing
Raven	1 overflying south end of breakwater in a NW direction towards coastal heath
Starling	2 near Boathouse Hotel; 5 foraging on amenity grassland
House sparrow	South of Porth-y-Felin; near Boathouse Hotel
Chaffinch	1 singing in scrub, old rail line
Linnet	5 foraging on waste ground, industrial building W of Soldier's Point
Goldfinch	2 foraging at S end of breakwater

Visit 'B'

Survey date: 08/05/09

Times: 0606 - 0921

Weather: Dry and bright

(W: 4-5)

<b><i>Common name</i></b>	<b><i>Number recorded and other information</i></b>
Gannet	1 (flying, east-west, 250m north of breakwater).
Cormorant	1 (roosting on rock, New Harbour), 1 (fishing, coastline adjacent to Coast Guard Lookout station).
Greylag goose	1 (loafing after high winds night before, heather, west of breakwater).
Red-breasted merganser	Pair (adjacent rocky coastline, 100m north east of Porth-y-Felin House).
Oystercatcher	2 (loafing, rocky coastline, New Harbour), 2 (loafing, rocky coastline, western edge of Mackenzie Lock), 2 (loafing on rocks, 100m east of Porth-y-felin House).
Herring gull	1 (scavenging around refuse bin adjacent to Maritime Museum, northern edge of Beach Road), 3 (foraging, amenity grassland, northern edge of Beach Road), 6 (loafing on rocks, 100m east of Porth-y-Felin House), 2 (loafing, waste ground, Soldiers Point).
Feral pigeon	10+ (roosting, Porth-y-felin House), 10+ (roosting, Soldiers Point – 1 carrying nesting material).
Woodpigeon	1 (foraging, amenity grassland, southern edge of boat yard), 2 (foraging, pasture, 100m north west of Porth-y-Felin House), 1 (foraging, pasture, 200m west of Soldiers Point).
Collared dove	1 (foraging, pasture, 100m north west of Porth-y-Felin House).
Swallow	4 (feeding over New Harbour), 1 (foraging, pasture, 100m north west of Porth-y-Felin House).
House martin	1 (over flying, east-west, Lifeboat Station).
Rock pipit	1 (foraging, south western end of breakwater).
Wren	1 (singing, scrub, adjacent Boathouse Hotel), 1 (singing, scrub, immediately north of Pumping station), 1 (singing, pasture, 100m north west of Porth-y-Felin House), 2 (singing, scrub, 50m north west of Soldier's Point).
Robin	1 (scrub, west of Porth-y-Felin House).
Song thrush	1 (foraging, pasture, 100m north west of Porth-y-Felin House).
Blackbird	1 (singing, scrub, west of pond adjacent to Pumping Station), 2 (foraging, pasture, 100m north west of Porth-y-Felin House), 2 (foraging, pasture, 200m west of Soldiers Point), 1 (singing,

	scrub, 50m north west of Soldiers Point).
Whitethroat	2 (singing, scrub, between Porth-y-Felin House & Soldier's Point), 1 (singing, scrub, 100m north west of Porth-y-Felin House), 1 (singing, scrub, adjacent to Trefenfan Farm).
Chiffchaff	1 (singing, scrub, 100m north west of Porth-y-Felin House).
Great tit	1 (singing, garden, south of Prince of Wales Road), 1 (singing, scrub, 100m north west of Porth-y-Felin House).
Magpie	1 (foraging, pasture, 100m north west of Porth-y-Felin House).
Jackdaw	3 (scavenging around refuse bin adjacent to Maritime Museum, northern edge of Beach Road).
Chough	1 (foraging, pasture south of Breakwater Country Park).
Carrion crow	1 (perched on house roof, south of Prince of Wales Road), 1 (scavenging around refuse bin adjacent to Maritime Museum, northern edge of Beach Road), 1 (foraging, amenity grassland, northern edge of Beach Road), 1 (foraging, pasture, between Boathouse Hotel and Pumping Station), 1 (foraging, breakwater).
Starling	2 (foraging, MHW, New Harbour), several birds (foraging, beach, adjacent western edge of Mackenzie Lock), 2 (perched on roof of Maritime Museum, northern edge of Beach Road), 2 (foraging, amenity grassland, east of Lifeguard Station).
House sparrow	3 (foraging, MHW, New Harbour), 2 (foraging, adjacent to Coast Guard Lookout station), several birds (calling, bramble scrub, adjacent western edge of Mackenzie Lock), 1 (calling, garden, south of Prince of Wales Road), several (calling, Soldiers Point).
Chaffinch	1 (singing, scrub, 100m north west of Porth-y-Felin House).
Linnet	2 (foraging, waste ground, Soldiers Point), 2 (foraging, gorse scrub, west of breakwater).
Goldfinch	5 (foraging, pasture, 100m north west of Porth-y-Felin House).

Visit 'C'

Survey date: 12/06/09

Times: 0534 - 0835

Weather: Dry and sunny, later

overcast

<b><i>Common name</i></b>	<b><i>Number recorded and other information</i></b>
Cormorant	1 (fishing, rocky coastline, adjacent to Beach Road).
Grey heron	1 (western edge of breakwater).
Mallard	Pair (loafing, heather, west of breakwater).
Oystercatcher	1 (loafing, rocky coastline, Coastguard Slipway), 3 (loafing, rocky coastline, western edge of Mackenzie Lock), 1 (rocky coastline, adjacent to Beach Road), 2 (issuing alarm call, rocky coastline, 100m north east of Porth-y-Felin House).
Ringed plover	2 (foraging, waste ground, breakwater).
Herring gull	3 (loafing, rocky coastline, New Harbour), 7 (scavenging around refuse bins, northern edge of Beach Road), 7 (loafing on rocks, 100m east of Porth-y-Felin House),
Great black-backed gull	1 (loafing, breakwater, New Harbour).
Feral pigeon	10+ (roosting, Porth-y-Felin House), 25+ (roosting, Soldiers Point).
Woodpigeon	2 (foraging, scrub, north of Porth-y-felin House).
Collared dove	1 (foraging, rocky coastline, western edge of Mackenzie Lock), 1 (scrub, southern edge of pond adjacent to Pumping Station).
Swallow	1 (feeding, rocky coastline, adjacent to Beach Road), 1 (telegraph wire, pasture, west of Porth-y-Felin House), several (western edge of breakwater).
House martin	3 (over flying, east-west, grassland, west of Allotment Gardens).
Rock pipit	2 (issuing alarm call, concrete outbuilding, south western end of breakwater- possible nest site).
Meadow pipit	1 (foraging, waste ground, breakwater), 1 (issuing alarm call, heather, west of breakwater).
Wren	1 (singing, Boat Yard, west of Trinity Marine), 1 (singing, scrub, adjacent Boathouse Hotel), 1 (singing, scrub, east of Porth-y-Felin House), 2 (singing, scrub, west of Porth-y-Felin House), 2 (singing, scrub, south of Soldiers Point), 1 (singing, scrub, north of depot, Soldiers Point), 2 (singing, scrub, north eastern edge of Trefenfan Farm).
Dunnock	1 (foraging, adjacent Coast Guard Lookout Station), 1 (foraging, pasture, 100m north east of Porth-y-Felin House), 1 (scrub,

	north of depot, Soldiers Point).
Robin	1 (scrub, south west of Porth-y-Felin House).
Song thrush	1 (foraging, pasture, north of depot, Soldiers Point).
Blackbird	1 (issuing alarm call, rocky coastline, western edge of Mackenzie Lock - possible nest in brambles), 1 (foraging, amenity grassland, adjacent Lifeboat Station), 1 (foraging, pasture, 100m north west of Porth-y-Felin House), 1 (foraging, pasture, 100m north east of Porth-y-Felin House), 1 (singing, scrub, north of Soldiers Point), 1 (singing, scrub, north of depot, Soldiers Point).
Blackcap	1 (singing, scrub, north of Porth-y-Felin House), 1 (singing, scrub, south of Soldiers Point).
Whitethroat	1 (singing, scrub, west of Porth-y-Felin House), 1 (singing, scrub, north of Porth-y-Felin House), 1 (singing, scrub, south east of Soldiers Point), 1 (singing, scrub, north of depot, Soldiers Point).
Willow warbler	1 (singing, scrub, southern edge of pond adjacent to Pumping Station), 1 (singing, scrub, north of Soldiers Point).
Chiffchaff	1 (singing, scrub, west of Porth-y-Felin House), 1 (singing, scrub, north of Porth-y-Felin House).
Great tit	1 adult & 1 juvenile (foraging, scrub, north of Soldiers Point).
Blue tit	1 (scrub, adjacent Pumping Station), 2 (foraging, scrub, north of Soldiers Point).
Magpie	1 (rooftop, southern edge of Prince of Wales Road), 4 (foraging, pasture, north west of Porth-y-Felin House), 1 (foraging, adjacent to Trefenfan Farm).
Jackdaw	4 (foraging, amenity grassland, Beach Road).
Chough	1 (foraging on grassy hummock, breakwater, New Harbour).
Rook	2 (foraging, amenity grassland, Beach Road).
Carrion crow	1 (rooftop, Coastguard Station), 1 (calling, pasture, Pumping Station).
Starling	1 (calling, Allotment Gardens), 1 (rooftop, Coast Guard Lookout Station), 1 (foraging, rocky coastline, western edge of Mackenzie Lock), 3 (scavenging around refuse bin adjacent to Maritime Museum, northern edge of Beach Road), 2 & 1 juvenile (foraging, amenity grassland, adjacent Lifeboat Station).
House sparrow	2 (foraging, MHW, New Harbour), 1 (foraging rocky coastline, Coastguard Slipway), 3 (rooftop, Coast Guard Lookout Station), 1 (foraging, rocky coastline, western edge of Mackenzie Lock), 5 (foraging, amenity grassland, adjacent Lifeboat Station),

	several (calling, depot roof, west of Soldiers Point).
Chaffinch	1 (singing, scrub, 100m north west of Porth-y-Felin House), 1 (singing, scrub, south of Soldiers Point).
Linnet	2 (foraging, rocky coastline, adjacent to Beach Road), 2, scrub, west of Soldier's Point), 1 (male, foraging, scrub, north of depot, Soldiers Point).
Goldfinch	2 (calling, Porth-y-Felin House), 1 (singing, telegraph post, south of Soldiers Point).
Greenfinch	1 (male, telegraph wire, south of Soldiers Point), 1 (female, foraging, scrub, north of depot, Soldiers Point).

## Appendix 2: Bird species and their conservation status

Scientific Name	Common Name	BTO Code**	NERC - Sect. 42	WCA (1981)	EC 'Birds Directive' (79/409/EEC)	BTO/RSPB 'Red List'	BTO/RSPB 'Amber List'	UK BAP	Anglesey BAP
<i>Morus bassanus</i>	Gannet	GX					√		
<i>Phalacrocorax carbo</i>	Cormorant*	CA							
<i>Ardea cinerea</i>	Grey heron*	H.							
<i>Anser anser</i>	Greylag goose	GJ			Annex II/1 & III/2		√		
<i>Anas platyrhynchos</i>	Mallard	MA			Annex II/1 & III/1		√		
<i>Mergus serrator</i>	Red-breasted merganser*	RM			Annex II/2				
<i>Haematopus ostralegus</i>	Oystercatcher*	OC			Annex II/2		√		
<i>Charadrius hiaticula</i>	Ringed plover*	RP					√		
<i>Tringa totanus</i>	Redshank						√		
<i>Larus argentatus</i>	Herring gull*	HG	√		Annex II/2	√		√	
<i>Larus marinus</i>	Great black-backed gull*	GB			Annex II/2		√		
<i>Columba livia</i>	Feral pigeon*	FP			Annex II/1				
<i>Columba palumbus</i>	Woodpigeon*	WP			Annex II/1 & III/1				
<i>Streptopelia decaocto</i>	Collared dove*	CD			Annex II/2				
<i>Apus apus</i>	Swift	SI							

Scientific Name	Common Name	BTO Code**	NERC - Sect. 42	WCA (1981)	EC 'Birds Directive' (79/409/EEC)	BTO/RSPB 'Red List'	BTO/RSPB 'Amber List'	UK BAP	Anglesey BAP
<i>Hirundo rustica</i>	Swallow*	SL					√		
<i>Delichon urbicum</i>	House martin*	HM					√		
<i>Anthus petrosus</i>	Rock pipit*	RC							
<i>Anthus pratensis</i>	Meadow pipit*	MP					√		
<i>Troglodytes troglodytes</i>	Wren*	WR							
<i>Prunella modularis</i>	Dunnock*	D.	√				√	√	
<i>Erithacus rubecula</i>	Robin*	R.							
<i>Oenanthe oenanthe</i>	Wheatear	W.					√		
<i>Turdus philomelos</i>	Song thrush*	ST	√		Annex II/2	√		√	
<i>Turdus merula</i>	Blackbird*	B.			Annex II/2				
<i>Sylvia atricapilla</i>	Blackcap*	BC							
<i>Sylvia communis</i>	Whitethroat*	WH					√		
<i>Phylloscopus trochilus</i>	Willow warbler*	WW					√		
<i>Phylloscopus collybita</i>	Chiffchaff*	CC							
<i>Parus major</i>	Great tit*	GT							
<i>Cyanistes caeruleus</i>	Blue tit*	BT							

Scientific Name	Common Name	BTO Code**	NERC - Sect. 42	WCA (1981)	EC 'Birds Directive' (79/409/EEC)	BTO/RSPB 'Red List'	BTO/RSPB 'Amber List'	UK BAP	Anglesey BAP
<i>Pica pica</i>	Magpie*	MG			Annex II/2				
<i>Corvus monedula</i>	Jackdaw*	JD			Annex II/2				
<i>Pyrrhocorax pyrrhocorax</i>	Chough*	CF	√	√	Annex I		√		√
<i>Corvus frugilegus</i>	Rook*	RO			Annex II/2				
<i>Corvus corone</i>	Carrion crow*	C.			Annex II/2				
<i>Corvus corax</i>	Raven								
<i>Sturnus vulgaris</i>	Starling*	SG	√		Annex II/2	√		√	
<i>Passer domesticus</i>	House sparrow*	HS	√			√		√	
<i>Fringilla coelebs</i>	Chaffinch*	CH							
<i>Carduelis cannabina</i>	Linnet*	LI	√			√		√	
<i>Carduelis carduelis</i>	Goldfinch*	GO							
<i>Carduelis chloris</i>	Greenfinch*	GR							

\* Bird species' recorded in survey area

\*\* BTO standard species recording codes

Footnote:

NERC - Sect. 42

WCA (1981)

EC 'Birds Directive'

BTO/RSPB 'Red List'

BTO/RSPB 'Amber List'

UK BAP

Natural Environment and Rural Communities Act 2006 - Section 42 species.

Schedule 1 species - Wildlife and Countryside Act (1981).

EC Directive (79/409/EEC) on The Conservation Of Wild Birds (the 'Birds Directive')

Royal Society for the Protection of Birds - 'Red List' of Bird Species of High Conservation Concern

Royal Society for the Protection of Birds - 'Amber List' of Bird Species of Medium Conservation Concern

UK Biodiversity Action Plan - List of Priority Species for which a Costed Action Plan has been written.