



# WILD BIRD & BIODIVERSITY SURVEY

No.1 of 3—BALLAST PIT

SKERRIES, CO. DUBLIN

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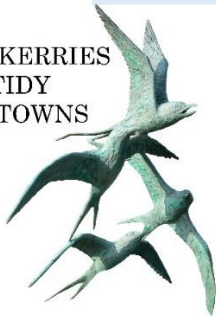
BirdWatch Ireland (Fingal Branch)

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*Edited by Frank Prendergast*

Presented to

SKERRIES  
TIDY  
TOWNS



**Comhairle Contae  
Fhine Gall**  
Fingal County  
Council

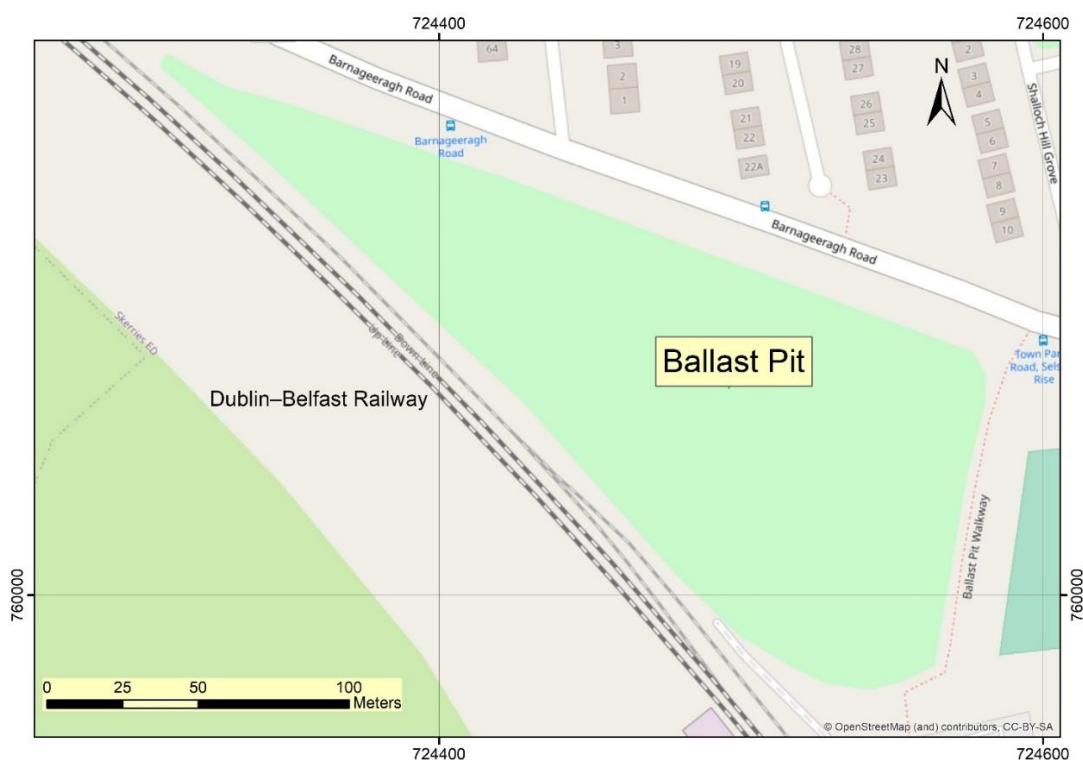


## INTRODUCTION

The Ballast Pit, Skerries, lies between the northern side of the Dublin–Belfast Railway and Barnageeragh Road (**Fig. 1**). The ground is owned by Fingal County Council and divided into two sections by the Ballast Pit Walkway. The ground east of the walkway is leased to the GAA and used as playing pitches. The ground west of the walkway provides the area of interest for this study in terms of its wild birds, habitats and biodiversity.

The first Ordnance Survey 6 inch scale map (1830s) shows the ground, now a deep pit, is undisturbed and in use for agricultural purposes. The later 25 inch scale map of the area (c. 1890) shows it was quarried for gravel between those dates to depths up to 10 m associated with the construction of the then named ‘Dublin and Drogheda Railway’. Works on the railway commenced in 1837 and the line opened to public traffic on 25 May 1844.<sup>1</sup> Local records show that in more recent times, the Ballast Pit was occasionally used for shooting practice and grenade throwing and in the 1950s it functioned as a refuse pit for the town of Skerries.<sup>2</sup> This could partially explain the significant difference between floor levels of the disused pit and GAA pitches as shown in Figure 2.

The purpose of this study and report is to list the variety, number and conservation status of the wild bird species which inhabit the Ballast Pit on an annual or seasonal basis and make recommendations in the broader context of biodiversity and national monitoring of bird species.<sup>3</sup> A species can be resident, a winter or summer migrant, or on passage to another destination. Summer visitors arrive from March onwards and depart in September/October. Resident birds and summer migrants breed in the Ballast Pit. Their number and variety are partly dependent on the diversity of plant and animal life in the Ballast Pit as represented by the number of extant species (**biodiversity**).



**Figure 1.** Ballast Pit, Skerries, Co. Dublin

<sup>1</sup> (Geraghty 2013)

<sup>2</sup> The authors kindly acknowledge Maree Baker, Skerries Historical Society, for information on local usage the Ballast Pit.

<sup>3</sup> (Fingal County Council 2022, BirdWatch Ireland 2022a)

## TOPOGRAPHY & HABITAT DESCRIPTION

The Ballast Pit is 2.3 hectares/5.8 acres in extent and currently disused. It is 260 m in length, slopes west–east to a maximum depth of 5 m and varies in width from 33 m–145 m. Being a gravel quarry (disused), it is free draining and not liable to flooding. The sidewalls have a mostly steep gradient. Numerous rough tracks transect the pit floor and there is limited access from the Barnageeragh Road (**Fig. 2**).



**Figure 2.** Aerial view of the Ballast Pit (above); longitudinal section/profile looking north (below).

We use two literary sources for categorising natural habitats and to classify the ground and vegetation types found in the Ballast Pit.<sup>4</sup> The disturbed ground has exposed sand and gravel (Category ED1), and spoil/bare ground (Category ED2) which has been recolonised/invaded by herbaceous and weed plants (Category ED3). The vegetation is scrub/transitional woodland (Category WS) bounded by linear hedgerows and treelines (Categories WL1 and WL2). A cursory survey by us of the vegetation in the Ballast Pit has identified alder, bramble, elder, gorse, hawthorn and sycamore. These provide dense and varied cover for nesting birds and are a food resource in terms of the biodiversity of insect life and berries.

<sup>4</sup> (Fossitt 2000, Smith et al. 2011)



## SURVEY METHOD

Volunteers from the Fingal Branch of BirdWatch Ireland field-walked the Ballast Pit on two dates in May timed to coincide with maximum bird activity. The volunteers are expert in visual identification and bird call/song recognition. The latter is especially evident during the breeding season in the months of April, May and June. The survey was conducted during this period for that reason. Dates were also chosen so as to record summer migrant species. The Branch has continuously monitored bird populations here over decades.

## SURVEY RESULTS

Twenty-six species were recorded and these are alphabetically listed in **Table 1**. The columns give the common names in English and Irish<sup>5</sup>, the highest total recorded, and whether species are resident all-year or are a summer visitor (no winter visitors were recorded). Where a colony was observed, these are also noted. The last column in Table 1 indicates the conservation status of each species.

**TABLE 1.** Species recorded in Ballast Pit (ordered alphabetically).

Species	<i>Saghas</i>	Count	Resident	Summer	Comments	Conservation status
Blackbird	<i>Lon dubh</i>	7	✓			Green
Blackcap	<i>Caipín dubh</i>	2		✓		Green
Blue Tit	<i>Meantán gorm</i>	1	✓			Green
Bullfinch	<i>Corcrán coille</i>	2	✓			Green
Buzzard	<i>Clamhán</i>	1	✓			Green
Chaffinch	<i>Rí Rua</i>	1	✓			Green
Collared Dove	<i>Fearán baicdhubh</i>	2	✓			Green
Dunnoek	<i>Donnóg</i>	3	✓			Green
Goldfinch	<i>Lasair choille</i>	2	✓			Green
Great Black-backed Gull	<i>Droimneach mór</i>	2	✓			Amber
Herring Gull	<i>Faoileán scadán</i>	2	✓			Amber
Hooded Crow	<i>Caróg liath</i>	2	✓			Green
House Sparrow	<i>Gealbhan binne</i>	45	✓		3 colonies	Amber
Kestrel	<i>Pocaire gaoithe</i>	1	✓			Red
Jackdaw	<i>Cág</i>	4	✓			Green
Linnet	<i>Gleoiseach</i>	12	✓			Amber
Magpie	<i>Snag breac</i>	1	✓			Green
Mistle Thrush	<i>Smólach mór</i>	2	✓			Green
Rook	<i>Rúcach</i>	4	✓			Green
Song Thrush	<i>Smólach ceoil</i>	2	✓			Green
Starling	<i>Druid</i>	6	✓			Amber
Swallow	<i>Fáinleog</i>	1		✓		Amber
Whitethroat	<i>Gilphíb</i>	2		✓		Green
Woodpigeon	<i>Colm coille</i>	4	✓			Green
Wren	<i>Dreolín</i>	8	✓			Green
Yellowhammer	<i>Buíóg</i>	2	✓			Red
<b>Species recorded</b>		<b>26</b>				

<sup>5</sup> (BirdWatch Ireland 2022b)

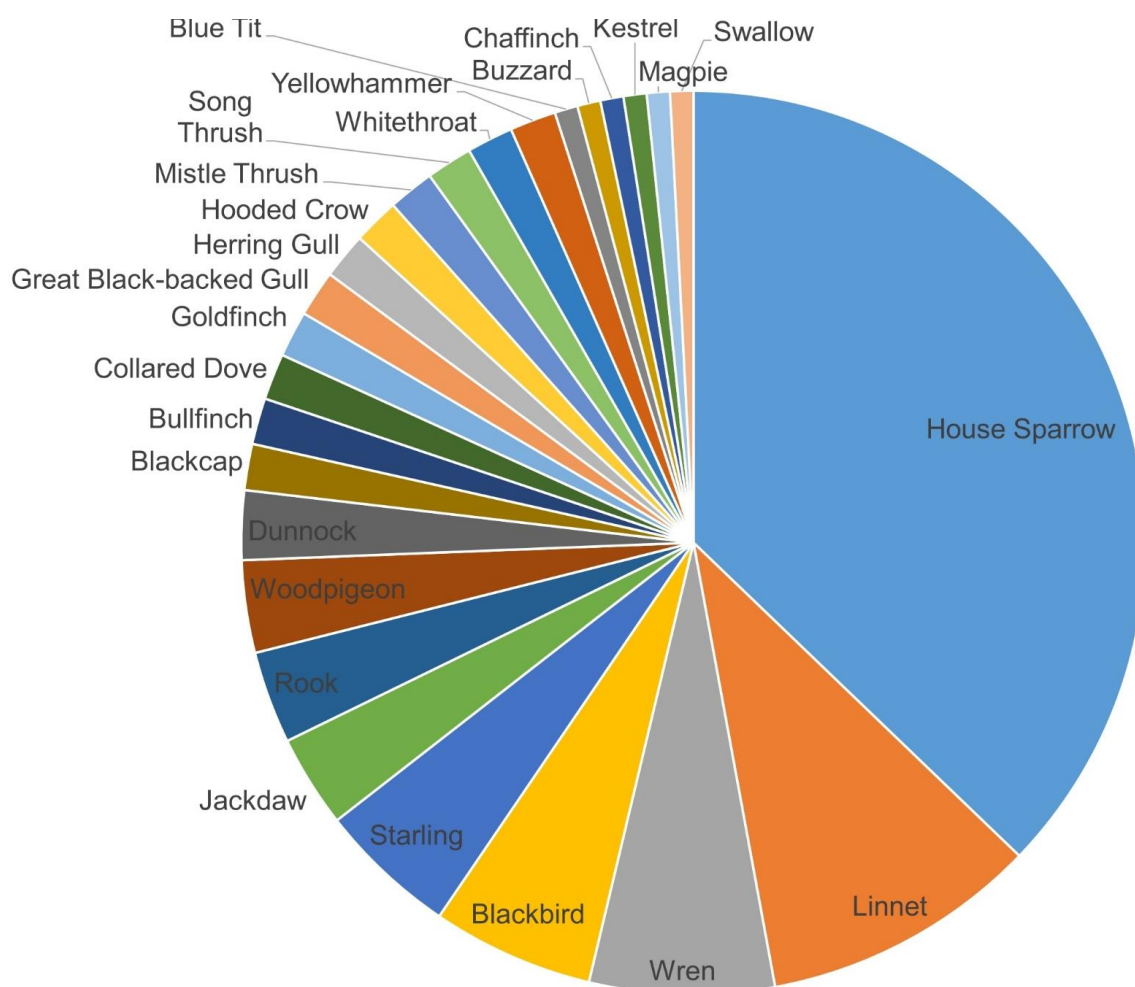
The conservation status of each species in **Table 1** is described using three colour codes based on an internationally recognised Green-Amber-Red system of the IUCN.<sup>6</sup> This provides the list of **Birds of Conservation Concern** in Ireland.<sup>7</sup>

**Green list** — these are species which are **not** showing moderate or severe declines and do **not** fit into the Amber or Red categories.

**Amber list** — these are species with an **unfavourable conservation status** in Europe and whose population or range has declined moderately in recent years.

**Red list** — these are species that are **globally threatened** according to the IUCN criteria and whose population or range has **declined rapidly** in recent years.

The species and their number in Table 1 are further illustrated using a pie-chart (**Fig. 3**). Counts are ordered clockwise from high to low.



**Figure 3.** Species recorded (26) in the Ballast Pit ordered by their frequency.

<sup>6</sup> IUCN, International Union for Conservation of Nature <https://www.iucn.org/>

<sup>7</sup> (BirdWatch Ireland 2021)

## DISCUSSION & RECOMMENDATIONS

The Ballast Pit was excavated in the early nineteenth-century for its gravel deposits used in the construction of the nearby railway. The pit to the west of the Walkway was partially infilled with refuse from the town of Skerries in the 1950s. Since that time it has become naturalised and overgrown with brambles and other vegetation. Now the site is characterised by different natural habits enclosed within the pit's crest-line and these merge to form a mosaic of vegetation types (**Fig. 4**). Biodiversity within the pit and minimal disturbance by humans and dogs have allowed a good population of wild bird life and other flora/fauna to become established there over time. Surveys in the mid-1990s by Betty Balcombe made an important contribution to bringing the pit and its biodiversity, especially the vegetation and butterfly population, to public attention.<sup>8</sup> The rare large **carder bee** is found in the Ballast Pit with the **kidney vetch** being an important food source. This plant is also important for the **small blue butterfly**. The rare **pyramid orchid** is also found in Ballast Pit.



**Figure 4.** Ballast Pit, Skerries, looking west from the Ballast Pit Walkway.

**Table 1** and **Figure 3** show two red-listed species are present in the Ballast Pit. The **kestrel**, a type of falcon, hunts for ground prey – small mammals, invertebrates, insects and small birds which are found in the pit. The red-listed **yellowhammer** is also in decline nationally but has a stronghold in Fingal with numbers strongly tied to cereal growing. The **whitethroat** is one of two warblers also found the Ballast Pit. It feeds on insects and other invertebrates and breeds in various habitats, especially gorse. The **blackcap** is a summer visitor from Iberia and North Africa although some overwinter here. The remaining species listed in Table 1 have green or amber conservation status.

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<sup>8</sup> (Balcombe c. 1995)

Few if any towns in Ireland are likely to have a disused quarry within their precincts, making Skerries unique in this regard. The Ballast Pit also sits within a significant biodiversity corridor delineated by the railway and Barnageeragh Road. Conversion of the Ballast Pit into a nature reserve would enhance and secure its flora, fauna and biodiversity, showcase the site's geological heritage and provide the community with a new amenity space having educational value. A case study on the rehabilitation of a disused quarry in New Zealand provides the ideal model for ecological restoration of the pit backed by community engagement.<sup>9</sup> This is used here as a framework for action and a new biodiversity action plan for the Ballast Pit, described in the comments and recommendations section.

### COMMENTS AND RECOMMENDATIONS

- Wild bird populations are a critical indicator of biodiversity richness.
- Twenty-six species of wild bird inhabit the pit zone making it a locally important wildlife resource.
- Skerries Open Orchards are to be commended for recent fruit tree-planting between the pit's crest and Barnageeragh Road.
- The roadside wild margin which extends along the southern side of Barnageeragh Road as far as Skerries Point positively affects the biodiversity of the Ballast Pit.
- The presence of the red-listed kestrel is considered significant.
- The presence of the red-listed yellowhammer is considered significant.
- The range of amber and green-listed species of bird is diverse.
- There is a strong case to protect this unique site and maintain it as a litter-free zone for nature.
- Appropriately manage the site to enhance its wildness for use as a place for nature with amenity and education value for the local community.
- Consider the action plan by Frey & Spellerberg (2011) which proposes specific steps as follows:
  - review current arrangements
  - develop a vision;
  - engage the local community;
  - engage the local authority in discussions about options for the Ballast Pit;
  - prepare a concept development plan;
  - design an amenity and nature conservation area;
  - implement the plan.
- Erect an information panel/sign overlooking the pit – key to establishing a biodiversity mind-set for the Ballast Pit and communicating important/interesting information on the site.
- The content and findings of this report, along with **No.2/3** (Mill Stream green zone and **No.3/3** (Red Island/South Strand coastal zone) suggest all three zones (**nominated by Skerries Tidy Towns**) are a corridor linking places for nature within urban spaces that will improve biodiversity locally.
- The objectives of the three reports are consistent with the aims of the **International Union for Conservation of Nature**, especially data gathering and analysis, advocacy and education.
- Disseminate these reports *via* **Skerries Tidy Towns**, **Fingal County Council** and **BirdWatch Ireland** (Fingal Branch) – a triangle of common interests, to maximise impact and create **greater public awareness and engagement** with the biodiversity and conservation of the **Ballast Pit**.

Selected species of birds observed in the Ballast pit are shown in the **APPENDIX**. To discover more about Ireland's birds visit BirdWatch Ireland at <https://birdwatchireland.ie/irelands-birds-birdwatch-ireland/>. For information on the local birdlife of Fingal visit <https://bwifingal.ie/>.

<sup>9</sup> (Frey and Spellerberg 2011)



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## APPENDIX—Selected species of the Ballast Pit

### Blackcap

The blackcap is green-listed and a summer visitor from Iberia and North Africa although some overwinter here. The distinctive black cap of the male gives it its name. They feed mainly on insects and other invertebrates during the summer and on berries (ivy, rowan) in winter.

### Kestrel

The kestrel is red-listed and numbers are in decline nationally. It is usually seen hovering with fanned tail and rapid wing beats hunting for ground prey – small mammals, invertebrates, insects and small birds. They nest in trees, buildings or cracks in cliffs.

### Whitethroat

The whitethroat is green-listed and one of two warbler species found the Ballast Pit. This summer visitor is larger than a robin and, as the name suggests, has a distinctive white throat. It feeds on insects and other invertebrates and breeds in various habitats, especially gorse. It winters in central and southern Africa.

### Yellowhammer

The yellowhammer is red-listed and numbers are in decline nationally. Adult males in summer are a stunning yellow colour with a distinctive call. Yellowhammers feed on the grains of grasses and cereals but feed their young with insects.

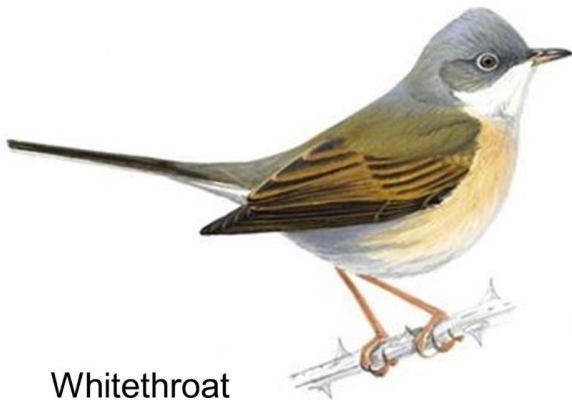




Blackcap



Kestrel



Whitethroat



Yellowhammer

Source of images: <https://www.rspb.org.uk/birds-and-wildlife/wildlife-guides/bird-a-z/>