# GLOUNTHAUNE COMMUNITY
# BIODIVERSITY ACTION PLAN

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# 1. INTRODUCTION

## 1.1. GLOUNTHAUNE TIDY TOWNS AND THE GLOUNTHAUNE COMMUNITY BIODIVERSITY ACTION PLAN

### 1.1.1. Glounthaune Tidy Towns

Glounthaune Tidy Towns has been in existence for the past 20 years. They are part of the Glounthaune Community Association otherwise known as GCA Limited. They have an executive committee of six members and an auxiliary network of 20 volunteers.

The objectives of Glounthaune Tidy Towns are the enhancement and maintenance of the physical and natural environment of Glounthaune, in particular:

- The general improvement and upgrading of the environment.
- The development of community pride and the encouragement of a spirit of neighbourliness contributing to the positive image of Glounthaune.
- Endeavouring to make Glounthaune a better place to live in, work and visit.
- Being instrumental in the development of community facilities and projects catering for both young and old residents of our area.
- Participation in the National Tidy Towns Competition each year.

Glounthaune Tidy Towns has been a recent winner of the best village in County Cork (2018). They were awarded a significant grant from the Cork County Council to carry out enhancement projects, which were all completed successfully in 2019. They otherwise derive their finances from local authorities, government agencies, and locally through book sales, coffee mornings and church gate collections. Glounthaune Tidy Towns annual participation in the Tidy Towns completion demands a lot of co-ordinated hard work and effort to both maintain and improve on the existing standards that are demanded. They have achieved an incremental improved score rating year on year.

### 1.1.2. Biodiversity actions carried out by Glounthaune Tidy Towns

Glounthaune Tidy Towns has been heavily involved with the development and management of Harper's Island Wetlands, through their collaboration with the local Men's Shed, BirdWatch Ireland and Cork County Council. This has included development of nature trail, birdwatching hides and other visitor amenities, as well as habitat management. Harper's Island Wetlands is an asset of huge natural significance and the number of visitors to see this site has risen in this current pandemic providing a valuable respite for people to exercise and come closer to nature. Other biodiversity work carried out by Glounthaune Tidy Towns has included planting trees, pollinator-friendly grassland management, and an extensive Japanese Knotweed eradication programme.

### 1.1.3. Aim of the Community Biodiversity Action Plan

The aim of the Glounthaune Community Biodiversity Action Plan is to enhance the biodiversity of Glounthaune by combining the expertise of a qualified ecologist with the skills, experience and enthusiasm of the Glounthaune Tidy Towns.

## 1.2. THE STUDY AREA

The study area is shown in Map 1.

## 1.3. STRUCTURE OF THIS REPORT

This report follows the Community Biodiversity Action Plan structure outlined in the Resource Pack. The main section of the report is dived into two parts: a descriptive section which provides details about the important habitats and species that occur in the study area, and a proscriptive section, includes a SWOT analysis and action plans. Detailed habitat species inventory data are included in appendices. The full habitat survey results are provided via an interactive online map at https://arcg.is/0KDyvO.

Species names used in the main section of the report are English names, with the full scientific names included in the appendices.

# 2. PART 1: DESCRIPTIVE

## 2.1. MAPS

A series of maps are included at the end of Part 1. Map 1 shows the overall extent of the study area. Map 2 shows the distribution of designated sites in the vicinity of the study area. Map 3 provides an overview of the distribution of habitats across the study area. This map uses the Fossitt level 2 classification to avoid unnecessary detail at this scale. Map 5-Map 11provide detailed habitat mapping, using the Fossitt level 3 classification, for the Areas of Ecological Potential (AOEPs) that were identified from the results of the habitat survey. Map 13 shows the distribution of invasive plant species records across the study area. Map 14 shows the distribution of records of notable species across the study area.

## 2.2. PHOTOS

A series of photographs are included at the end of Part 1 to illustrate some of the key habitats within the study area.

## 2.3. DESKTOP RESEARCH

### 2.3.1. Designations

The Glounthaune Community Biodiversity Action Plan area is adjacent to the Cork Harbour Special Protection Area (SPA), the Great Island Channel Special Area of Conservation (SAC) and the Great Island Channel proposed Natural Heritage Area (pNHA) (Map 2).

The Cork Harbour SPA is designated for 23 migratory waterbird species. These are mainly non-breeding/winter visitors to Cork Harbour, but one species (Common Tern) is a summer visitor, which is designated for its breeding population. The boundary of the Cork Harbour SPA runs along the edge of the Glounthaune Estuary, immediately adjacent to the study area.

The Great Island Channel SAC is designated for its mudflat and saltmarsh habitats. The boundary of the Great Island Channel SAC runs along the edge of the Glounthaune Estuary, immediately adjacent to the study area.

The Great Island Channel pNHA overlaps with both the Cork Harbour SPA and the Great Island Channel SAC. The site synopsis for the pNHA refers to the mudflat and saltmarsh habitats for which the SAC has been designated and the waterbird populations for which the SPA has been designated. It also refers to the rich invertebrate fauna supported by the mudflat, saltmarsh and brackish water habitats.

### 2.3.2. National Biodiversity Data Centre records

Records of notable and invasive species for the study area held by the National Biodiversity Data Centre are listed in Table 2.1 and are shown on Map 13 and Map 14. Note that there has been a major Japanese Knotweed treatment programme carried out in Glounthaune in recent years, so some of the records mapped by the National Biodiversity Data Centre may refer to stands that are no longer extant.

Table 2.1. Records of invasive and notable species held by the National Biodiversity Data Centre.

| Group | Species | Location | Date | Status |
|---|---|---|---|---|
| Vascular plants | Bee Orchid | Garden, Johnstown Park | 2019 | Scarce species |
| | Bhutan Cypress | Ashbourne House | 2009 | Heritage Tree |
| | Japanese Knotweed | Various (see Map 13) | 2009-2015 | Invasive species |
| Invertebrates | Lily Beetle | Glouthaune | 2016 | Invasive species |
| Amphibians | Common Frog | Glencorrig | 2002-2003 | Protected species |
| Mammals | Red Squirrel | Various (see Map 14) | 2007-2018 | Protected species |
| | Irish Hare | Rougrane | 2017 | Protected species |
| | Rabbit | Various (not mapped) | 2010-2015 | Invasive species |

Rabbit records not mapped, because they are widespread throughout the study area. Sources: = Atlas of Mammals in Ireland 2010-2015, Heritage Trees of Ireland, Irish National Frog Database, Mammals of Ireland 2016-2025, National Invasive Species Database, Online Atlas of Vascular Plants 2012-2020, The Irish Squirrel Survey 2007 and The Irish Squirrel Survey 2012 datasets held by the National Biodiversity Data Centre.

### 2.3.3. Other information

Records of rare and protected species were received from the National Parks and Wildlife Service for the 10 km square W77, which contains the Glounthaune Community Biodiversity Action Plan study area. These did not include any additional records for the study area over those reviewed from National Biodiversity Data Centre datasets.

Two ecological assessment reports for recent development applications in the study area were reviewed (BSM, 2018a, b). Neither report contained any records of notable species, or records of species not already included in the species inventories from other sources).

## 2.4. LAND HISTORY

The 1st edition Ordnance Survey map (1837-1842) shows that most of the southern section of the study area was occupied by large areas of parkland associated with various properties including Anne Mount, Combermere Cottage, Toureen Lodge and the Rockgrove Demesne. Woodland areas in the Rockgrove Demsene, and at Ballynaroon and Ballycurreen that are shown on this map are still present today, showing that these areas qualify as Long-established Woodland (see Perrin and Daly, 2010).

By the time of the 25" Ordnance Survey map (1888-1913), the railway line had been constructed and there had been some loss of parkland in the western section of the Toureen Lodge property and the eastern section of the Anne Mount property, and in the Rockgrove Demesne.

## 2.5. SURVEYS AND INVENTORY

### 2.5.1. Surveys carried out

A habitat and vegetation survey was carried out between July and September 2020. The habitat survey covered all the farmland within the study area, as well as areas of accessible land within the developed area of the survey area. All the habitats were classified and mapped to level 3 of the Fossitt classification (Fossitt, 2007). Vascular plant species lists were compiled for individual habitat parcels of semi-natural habitat or other habitats of potential ecological value. In addition, composite vascular plant species lists were compiled for field boundary habitats (hedgerows, treelines, stone walls and earth banks). Species lists were also compiled from incidental observations of birds, invertebrates and other fauna made during the surveys.

### 2.5.2. Habitats

#### *Overview*

The overall distribution of habitats within the study area is shown in Map 3, while plant species lists for semi-natural habitats and other habitats of potential biodiversity value are provided in Table A3.2 in Appendix 3. The full results of the habitat survey, including notes and species lists for individual habitat parcels are provided via an interactive online map at https://arcg.is/0KDyvO.

The farmland within the study area was dominated by improved agricultural grassland (GA1) and arable crops (BC1). There was a diversity of field boundary habitats including well-developed hedgerows (WL1) and treelines (WL1), and low hedgerows and earth banks (BL2). There were only a few pockets of semi-natural grassland (GS), but there are was also a large block of abandoned fields which are developing into semi-natural grassland. Small patches of woodland occurred at various locations and included semi-natural oak-ash-hazel (WN2) and wet willow-alder-ash (WN6) woodland. However, no well-developed semi-natural woodland habitat was found in the study area.

The better-developed examples of wet willow-alder-ash (WN6) woodland habitat in the study area probably correspond to the Habitats Directive Annex I habitat type: *Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) (91E0)*. However, this Annex I habitat is widespread in Ireland. The potential examples in the study area are small and fragmented and are not of major importance. No other Annex I habitats occur within the study area.

***Areas of Ecological Potential***

Eight Areas of Ecological Potential (AOEPs) were identified in the study area. These were areas with important or significant habitats / habitat complexes. These were habitats of high biodiversity value in the context of the study area, and/or habitats with potential for significant biodiversity benefits from management action.

The following sections provide summary descriptions of each AOEP. Detailed notes, and species lists, for individual habitat parcels are included in the GIS database that accompanies this report.

*AOEP 1*

This AOEP comprises a strip of woodland habitats along a small stream valley in the northern corner of the study area (Map 5).

The stream rises in an area of species-poor wet grassland (GS4) dominated by Soft-rush. It then flows north along a field boundary. There is an area of mixed woodland in the corner of the field to the west, with a canopy of mature Alder and European Larch and a grassy ground layer lacking a woodland ground flora.

The stream then runs through a block of woodland next to a farmyard. On the higher ground to the west, this includes modified broad-leaved woodland (WD1) with a canopy of large mature Beech trees and a well-developed ground flora including a good representation of species typical of woodlands on base-rich soils (Plate 1). Along the stream itself, the habitat is wet willow-alder-ash woodland (WN6), which continues as a narrow strip along the stream to the north. This woodland has a canopy of multi-stemmed Alder and Sycamore with frequent Ash. Parts of the woodland have been heavily degraded by livestock access with the ground flora largely eradicated, but elsewhere the woodland has a moderately developed ground flora with wetland elements along seepages.

The stream itself is a narrow channel that has been straightened and deepened along most of its length. It is largely shaded by the woodland habitats, but the open sections contain some aquatic flora.

*AOEP2*

This AOEP comprises a narrow strip of habitats along a small stream which rises near the north-western boundary of the study area (Map 6).

There is a linear strip of degraded semi-natural wet willow-alder-ash woodland (WN6) at the southern end of the AOEP. This has a canopy dominated by multi-stemmed Alder with some Grey Willow and a poorly developed ground flora dominated by Blackberry (Plate 2). The woodland grades into mixed scrub (WS1) at its southern end, while a small patch of species-poor grassy verge (GS2) habitat occurs at its northern end (Plate 2).

A narrow, seasonal drainage ditch (FW4) runs along the western side of the woodland. This continues inside the roadside hedgerow (WL1) to the north, where it deepens and includes some wetland vegetation. Just before the northern end of the study area, this drainage ditch cuts across the corner of the field. This section of the drainage ditch is several metres wide and contains well-developed wetland vegetation. It encloses a small triangle of species-poor dry meadow (GS2) habitat with some wetland elements.

*AOEP3*

This AOEP comprises a mixture of habitats along a small stream valley in the south-eastern part of the study area (Map 7).

The stream appears to rise in a small patch of degraded marsh habitat (GM1) and then flows through some dense mixed scrub (WS1) on the western side of Priest's Hill. It then crosses the road and flows through a narrow valley which appears to have been unmanaged for some years. This valley is mainly occupied by recolonising bare ground (ED3) vegetation, which is now developing into Blackberry scrub, but which also includes some more recently disturbed ground with more diverse vegetation. A small patch of wet willow alder-ash woodland (WN6).

The eastern slope above the middle section of the stream holds what appears to be an area of long established semi-natural grassland (Plate 3). This has been classified as dry-humid acid grassland (GS3) in the habitat map, although it is probably best regarded as intermediate between this habitat and dry neutral grassland (GS1). The vegetation is moderately diverse and corresponds approximately to the *Common Bent - White Clover grassland (GL4A)* vegetation type in the Irish Vegetation Classification (IVC, 2018).

A small stream valley running south. The stream rises in a small patch of degraded marsh habitat (GM1), and there is a mix of habitats along the stream corridor. The middle of this AEOP includes what appears to be an area of long established semi-natural dry-humid acid grassland (GS3) occurs in the middle of this section.

Two linear strips of oak-ash-hazel woodland (WN2) occur along the eastern side of the stream valley. The northern strip occurs along an old track and has an Ash-dominated canopy will a moderately well-developed ground flora. The southern strip occurs on a steep bank and has a mixed canopy of Ash, Beech and Sycamore with a more disturbed ground layer. Other areas of woodland occur along the northern side of the farmyard adjacent to the middle of this AOEP but these areas of woodland are heavily disturbed.

The stream itself is largely shaded and has been straightened and deepened along its northern section. However, the section flowing through the valley on the eastern side of Priest's Hill retains a more natural geomorphology. This stream ultimately flows out into the Glounthaune Estuary next to Glounthaune Station.

*AOEP4*

This AOEP comprises an area of semi-natural grassland on a south-facing bank above The Woods housing estate (Map 7). The eastern two-thirds holds semi-natural dry neutral grassland on steeply sloping ground (GS1) (Plate 4). While this grassland has only developed since 2017, the vegetation is quite diverse and has high potential for management to improve its biodiversity value (particularly for pollinators). The western section is more gently sloping. The grassland here is longer-established (over ten years old) and is now dry meadow (GS2) habitat, which is the successional community that unmanaged dry neutral grassland will develop. An Elm treeline (WL2), and a Hawthorn hedgerow (WL1), respectively, occur along the southern and northern edges of this section.

*AOEP5*

This AOEP holds an of modified broad-leaved woodland (WD1) and comprises one of the largest areas of woodland in the study area (Map 8). This woodland is shown on the 1st edition Ordnance Survey map, and appears to have been continuously wooded since then, so this woodland

qualifies as Long-established Woodland (see Perrin and Daly, 2010). It has a canopy dominated by Sycamore with some Ash, Beech and Oak, with a well-developed dead wood resource (Plate 5). While the ground flora is poorly-developed, it has elements of a semi-natural woodland ground flora.

Overall, while the current condition of the woodland is somewhat degraded, it is of value due to its age and it has potential for management to improve its biodiversity value. The potential value of its dead wood resource is enhanced by its proximity to the veteran trees in AOEP6.

*AOEP6*

This AOEP comprises an open space within the Chos Chuain housing estate (Map 8). While the ground layer comprises amenity grassland that is closely mown and is of negligible value, the scattered trees (WD5) includes several veteran / near-veteran Oak trees (Plate 6). These trees are remnants of the boundary of a woodland area shown on the first edition Ordnance Survey map, which was contiguous with the woodland remaining in AOEP5. The dead / decaying wood features that would be expected in trees of their age / condition appear to have largely been removed by tree surgery. More sympathetic future management of these trees would have significant biodiversity benefits.

*AOEP7*

This AOEP comprises a belt of woodland and scrub along the south-western edge of the study area (Map 9).

The woodland includes mixed canopy modified broad-leaved woodland (WD1) above the Rockgrove Industrial Estate. While this woodland has a lot of Cherry Laurel in the understorey, it has elements of semi-natural woodland ground flora and has a well-developed dead wood resource. A shelterbelt extends to the north along a field boundary, holding some large veteran / near-veteran Oak and Sweet Chestnut trees. Larger veteran trees occur to the south (in an area where there was no access for this survey). All this woodland is shown on the first edition Ordnance Survey map and qualifies as Long-established Woodland (see Perrin and Daly, 2010).

A belt of mixed scrub continues to the east, with woodland to the south (outside the study area). A small stream runs through the eastern end of this scrub belt. The scrub connects to a conifer plantation (WD4). Scots Pine is prominent in the canopy of this plantation. This tree is favoured by Red Squirrels and squirrel feeding signs were found in the plantation during this survey.

*AOEP8*

This AOEP comprises a mixture of road verges, railway embankments and amenity areas, which extend along the southern boundary of the study area (Map 10 and Map 11).

Several of these areas are managed by Glounthaune Community Association / Glounthaune Tidy Towns and include areas that are managed for biodiversity. The linear amenity area along the southern side of the Old Youghal Road, west of Glounthaune Village holds a diverse area of semi-natural dry grassland habitat (which may be of planted origin), although significant parts of this area are affected by Winter Heliotrope invasion. The Ashbourne Walkway encloses a remnant wetland area that was formed by the impoundment of part of the estuary when the Old Youghal Road was constructed. This now holds a linear pond (FL8), which has developed into tall herb swamp (FS2) at its western end. The large greens enclosed between Johnstown Park and the Old Youghal Road include areas where a low intensity mowing regime has recently been introduced.

In addition to the managed areas, the railway embankments along the entire length of this AOEP, and the steep road verge along the northern side of the Old Youghal Road in the western section of the AOEP hold linear strips of grassy verge (GS2) and scrub (WS1) habitat. Japanese Knotweed was formerly extensively distributed along the railway embankments, but has been subject to an extensive treatment programme by the Glounthaune Community Association /

Glounthaune Tidy Towns in recent years. The remnant stands recorded during this survey (Map 13) were mainly treated stands with partial regeneration.

A large area of mixed woodland (WD2) occurs on the steep slopes between the Ashbourne Walkway and The Terrace. This woodland was not surveyed as no access permission was obtained for this project.

### *Field boundary habitats*

The field boundary habitats collectively comprise an important ecological resource across the study area. The total lengths of mapped field boundary habitats within the study area are shown in Table 2.2. This shows that the field boundaries were more or less equally divided between poorly-developed hedgerows, well-developed hedgerows, treelines and earth banks, while stone walls were rare.

The earth bank field boundaries were typically formed by a stone wall which had been covered, or partially covered by earth. The vegetation included a mixture of grassy and bracken-dominated areas (Plate 9), with Blackberry often frequent (and some banks grading into Blackberry-dominated hedgerows). In some cases, a stone wall was still visible on one side of the bank and held elements of a stone wall flora. Only a few field boundaries were mapped as stone walls: these were boundaries with free-standing stone walls lacking significant cover of earth.

The dominant hedge forming shrubs in the study area are Blackberry, Gorse and Hawthorn. The poorly-developed hedgerows were defined as hedges where Blackberry was the main hedge-forming shrub, other hedges which had been heavily cut into box shapes, or gappy hedges lacking a well-developed ground layer. The well-developed hedgerows included bushy Gorse hedges (Plate 10), tall Hawthorn hedges with well-developed ground layers, and some diverse mixed-species hedges. Hedgerow trees were frequent with Ash the commonest species. The hedgerow ground flora was generally rather species-poor reflecting the lack of field margin habitat in the intensive pastures that comprise most of the agricultural land in the study area. Old hedges are often associated with townland boundaries. However, none of the edges along townland boundaries in the study area appeared notably diverse.

The treelines in the study area were dominated by Ash with Beech and Sycamore also frequent (Plate 11). Many of the treelines had well-developed understoreys and/or woodland ground flora.

Table 2.2. Lengths of mapped field boundary habitats within the study area.

| Type | Fossitt code | Length |
|---|---|---|
| Hedgerow (well-developed) | WL1 | 6,600 |
| Hedgerow (poorly-developed) | WL1 | 6,100 |
| Hedgerow (not classified) | WL1 | 870 |
| Treeline | WL2 | 6,850 |
| Stone wall | BL1 | 400 |
| Earth banks | BL2 | 7,270 |

See text for distinction between well-developed and poorly-developed hedgerows.

### *Watercourses*

No watercourses are identified by the EPA as occurring in the study area, and the surveys carried out for the Glounthaune Community Biodiversity Action Plan identified very limited watercourse habitat in the study area (Map 12).

The main watercourses occur in AOEPs 1, 2 and 3, while short sections of watercourse also occur along the south-western edge of the study area. There is also a watercourse runs through the valley between Annmount and Cois Chuain, but this watercourse is mainly underground and is not shown in Map 12.

All the watercourse in the study area very narrow streams, and have been modified by straightening and deepening over much of their length. The less modified sections probably

correspond to eroding / upland river (FW1) habitat (Plate 12), while some of the heavily modified sections were classified as drainage ditches (FW4). The watercourses are mainly heavily shaded with limited development of aquatic vegetation in some of the more open areas.

### 2.5.3. Species inventory

#### *Overview*

Species inventories for the study area are included in Appendix 3. A total of 172 plant taxa, 21 invertebrate species, 37 bird species, 1 amphibian species and five mammal species are included in the inventories. All these inventories are incomplete. However, the plant and bird species inventories provide a good representation of the typical species in these groups that occur in the study area (excluding lower plants such as mosses, liverworts and lichens).

#### *Important or significant species*

No important of significant plant species were recorded during the habitat and vegetation surveys. However, there is a record of Bee Orchids from a garden in Johnstown Park that was reported to the National Biodiversity Data Centre. This is a scarce plant species, although it can be locally quite frequent in parts of east Cork and a small population occurs in Harper's Island Wetlands just outside the study area.

A single Comma butterfly as recorded during the habitat and vegetation surveys in AOEP 3 (Plate 13). This is a species that has been colonising Ireland over the past 20 years and has recently reached Cork. While it is a rare species at present in Cork it is likely to become widespread and common as the population develops over the next decade or so.

The improved grassland habitats in the study area provide foraging habitat for waterbird populations associated with the Glounthaune Estuary / Slatty Water. The main species involved are Curlew and Black-tailed Godwit. Small flocks of these waders can be regularly seen commuting from the estuary to feed in fields in the hinterland around the estuary. The surveys carried out for this project were outside the main period when these species use grassland habitats in the Cork Harbour area (November-February). However, in winter both species have been recorded using fields within the survey area.

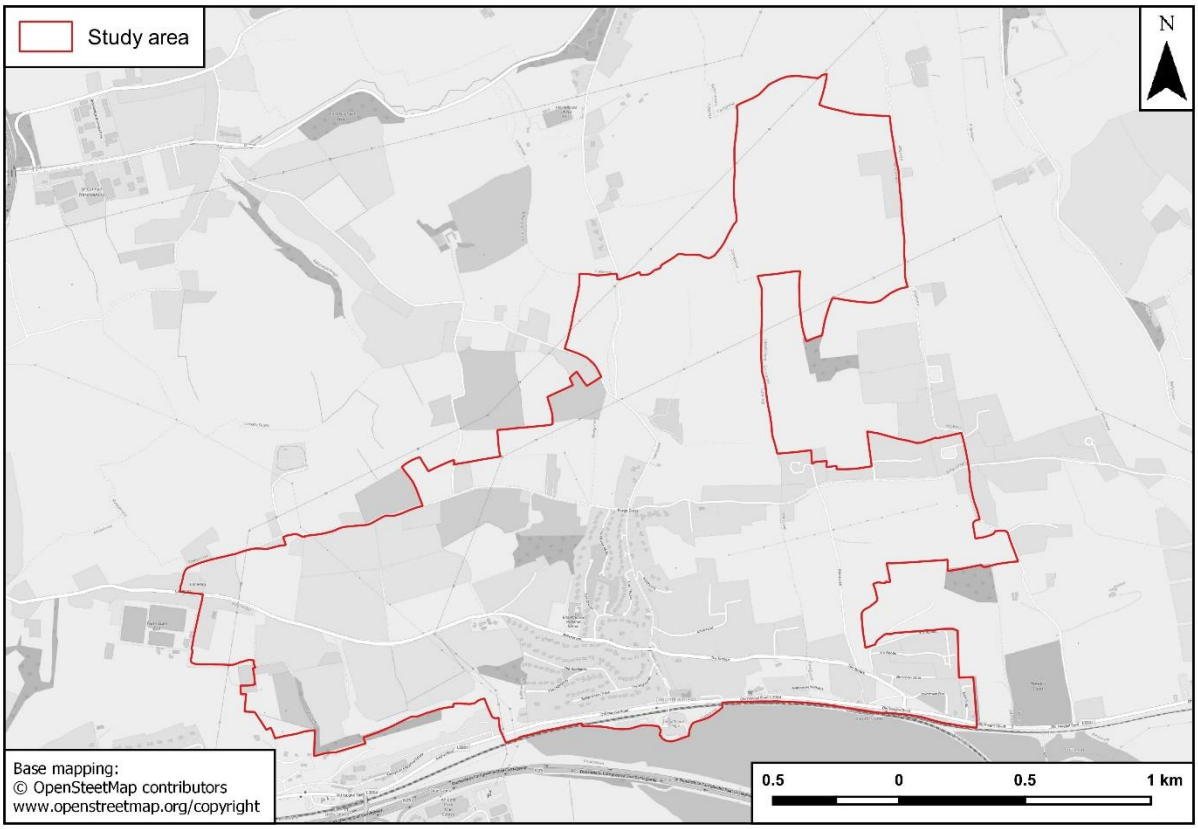
The arable habitat in the study area supports Yellowhammer. This is a red-listed bird species in Ireland (Cummins and Colhoun, 2013), although it is still widespread in parts of east Cork.

The NBDC database has several records of Red Squirrel from the study area, while squirrel feeding signs were recorded in the conifer plantation habitat in AOEP 7 during the surveys carried out for this project. There is a likely to be a good population of Red Squirrels associated with the woodland habitats and large gardens in the southern third of the study area.

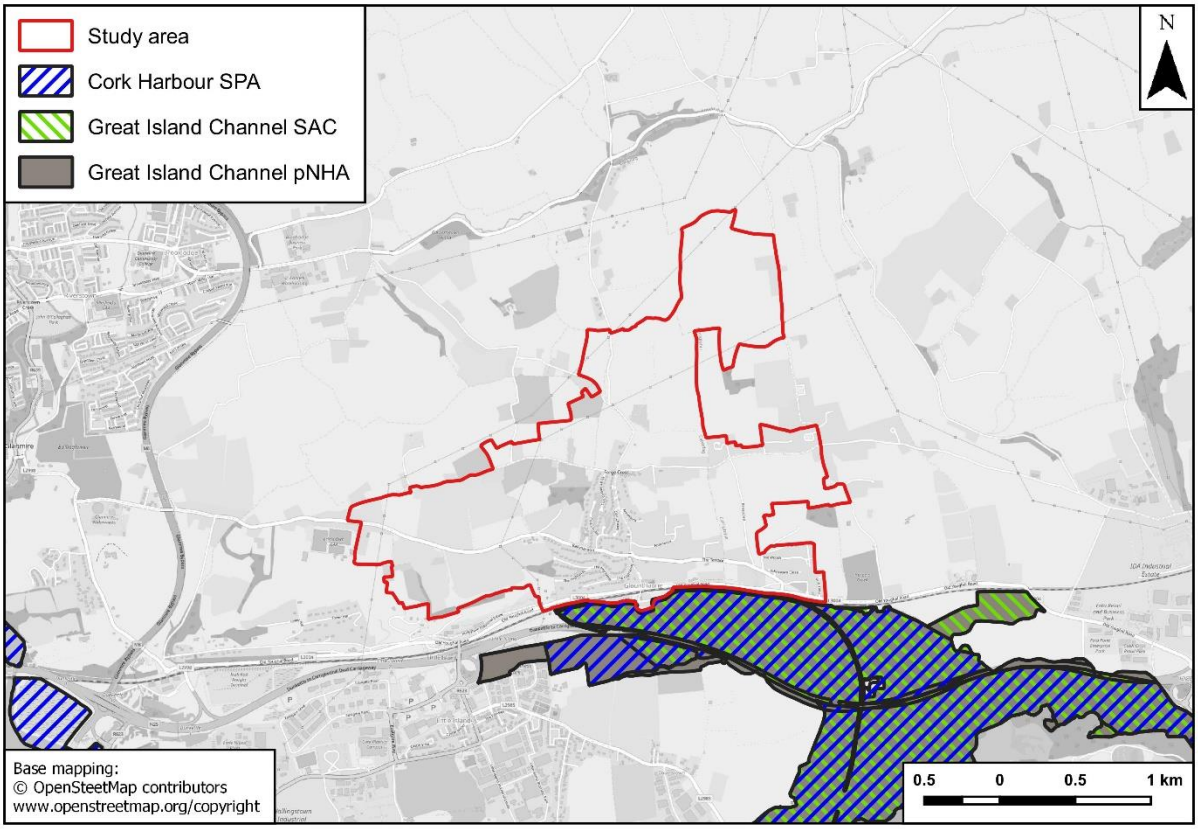
A Badger sett was recorded in AOEP 7, and Badger signs were recorded in other locations, during the surveys carried out for this project. Badgers are widespread and common in lowland agricultural habitats in Ireland.

#### *Invasive species*

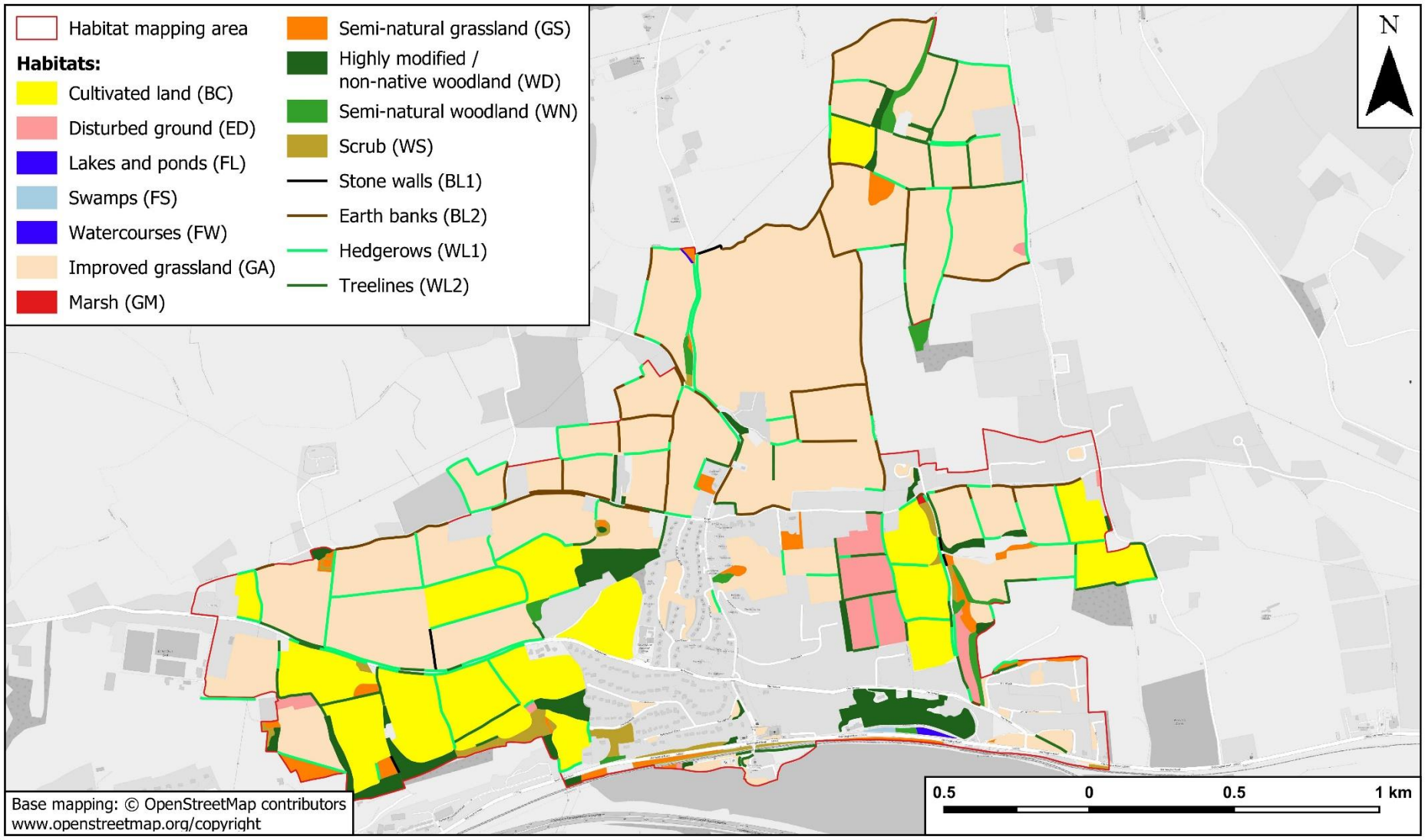
The invasive species records from the study area are mapped in Map 13. This mapping is incomplete as not all roadsides / field boundaries were walked. Also, as discussed above the NBDC Japanese Knotweed records may include stands that are no longer extant due to the extensive treatment programme by the Glounthaune Community Association / Glounthaune Tidy Towns in recent years.



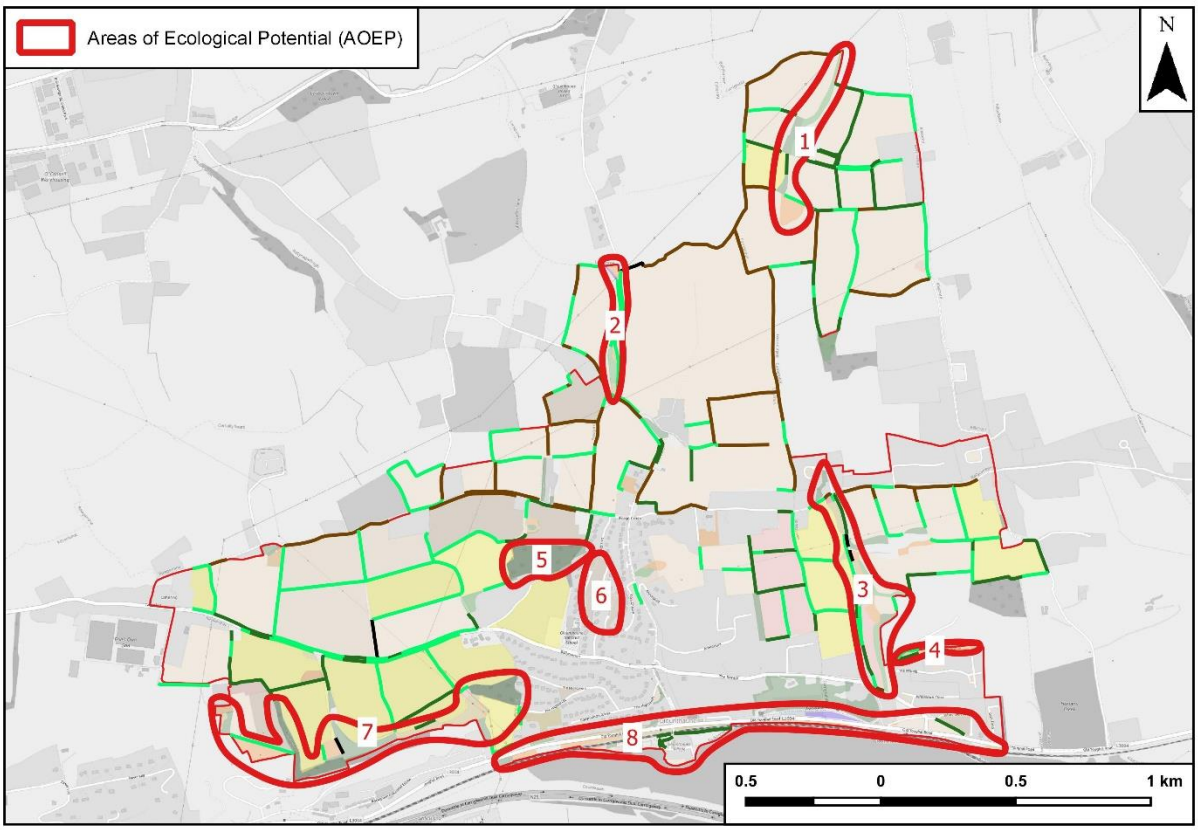

Map 1. The Glounthaune Community Biodiversity Action Plan study area.



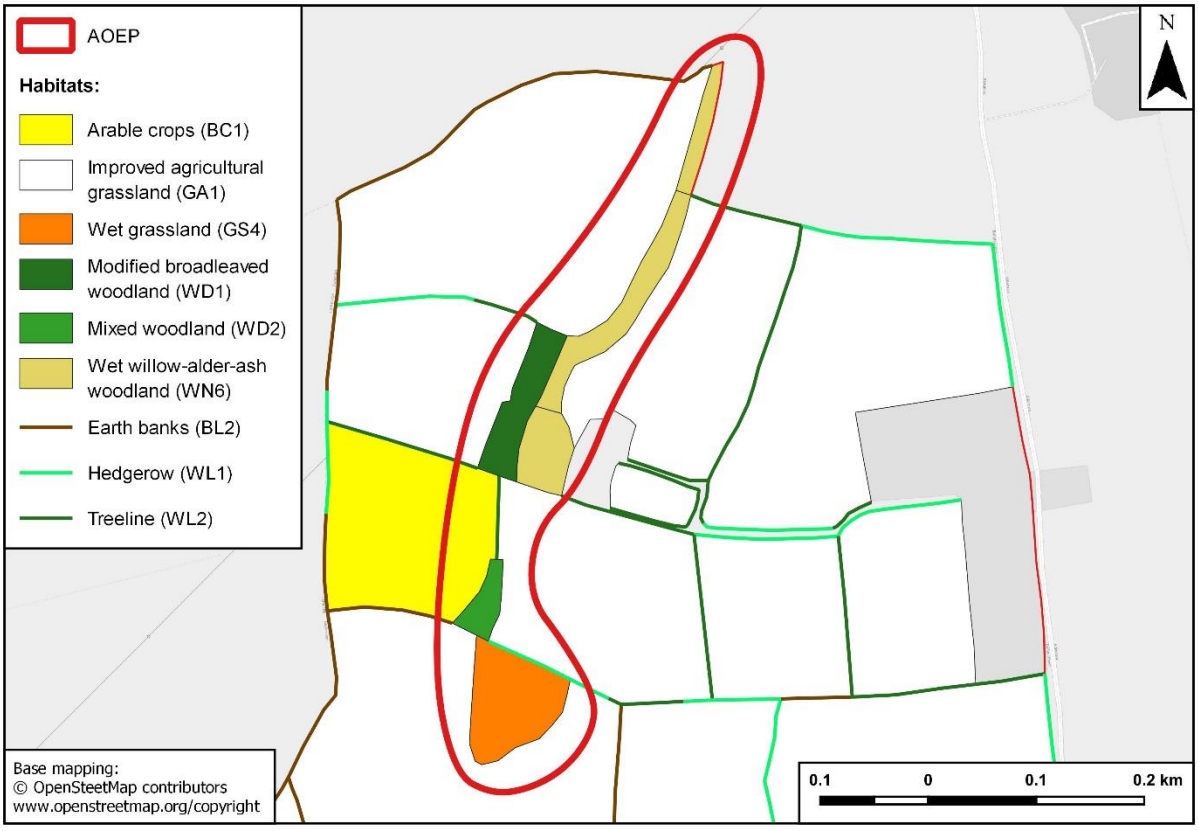

Map 2. Designated sites in the vicinity of the study area.



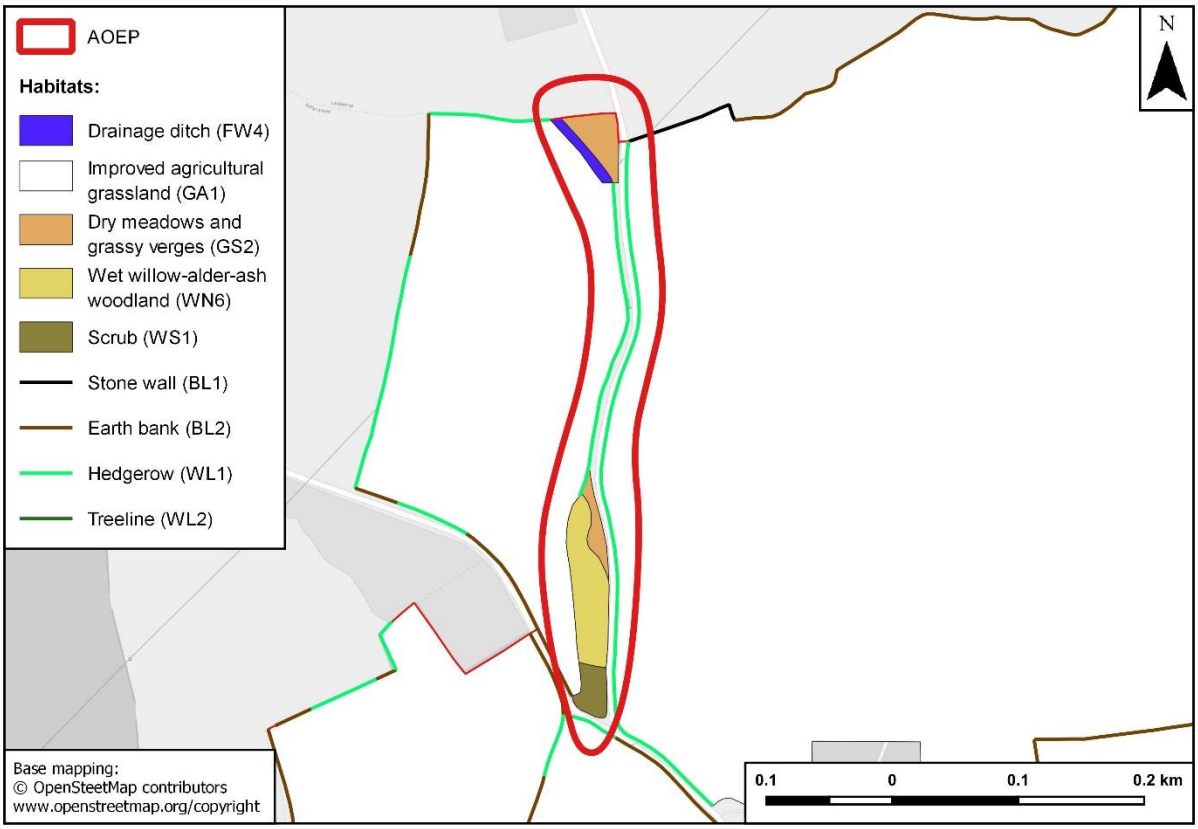

Map 3. Overall habitat map of the study area.



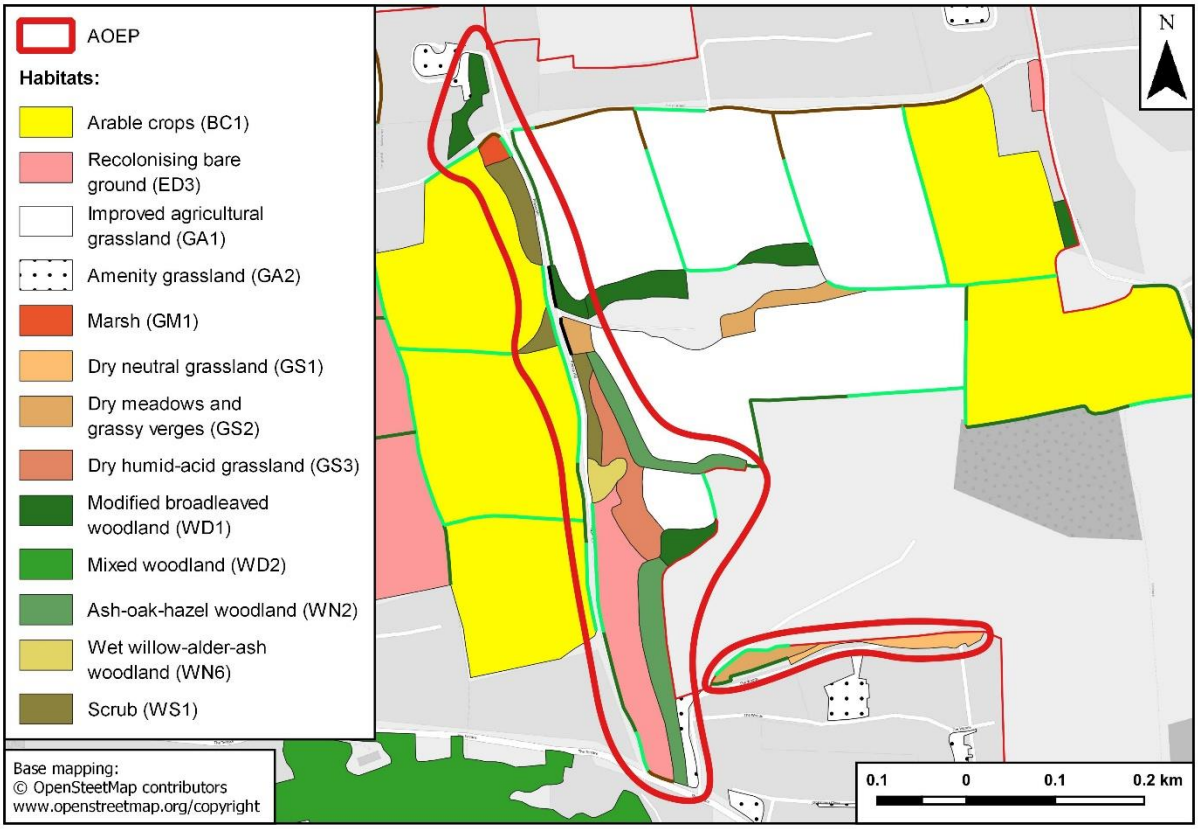

Map 4. Areas of Ecological Potentials (AOEPs).



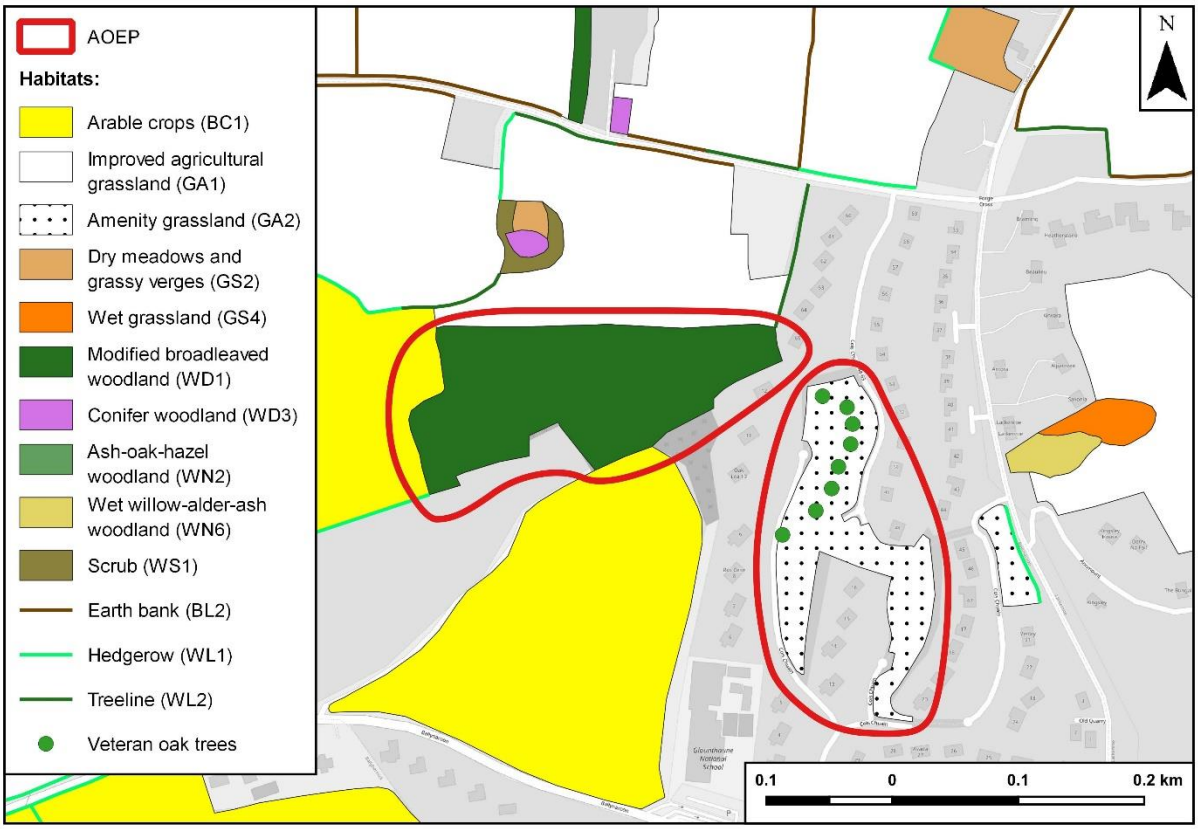

Map 5. Detailed habitat map of AOEP1.



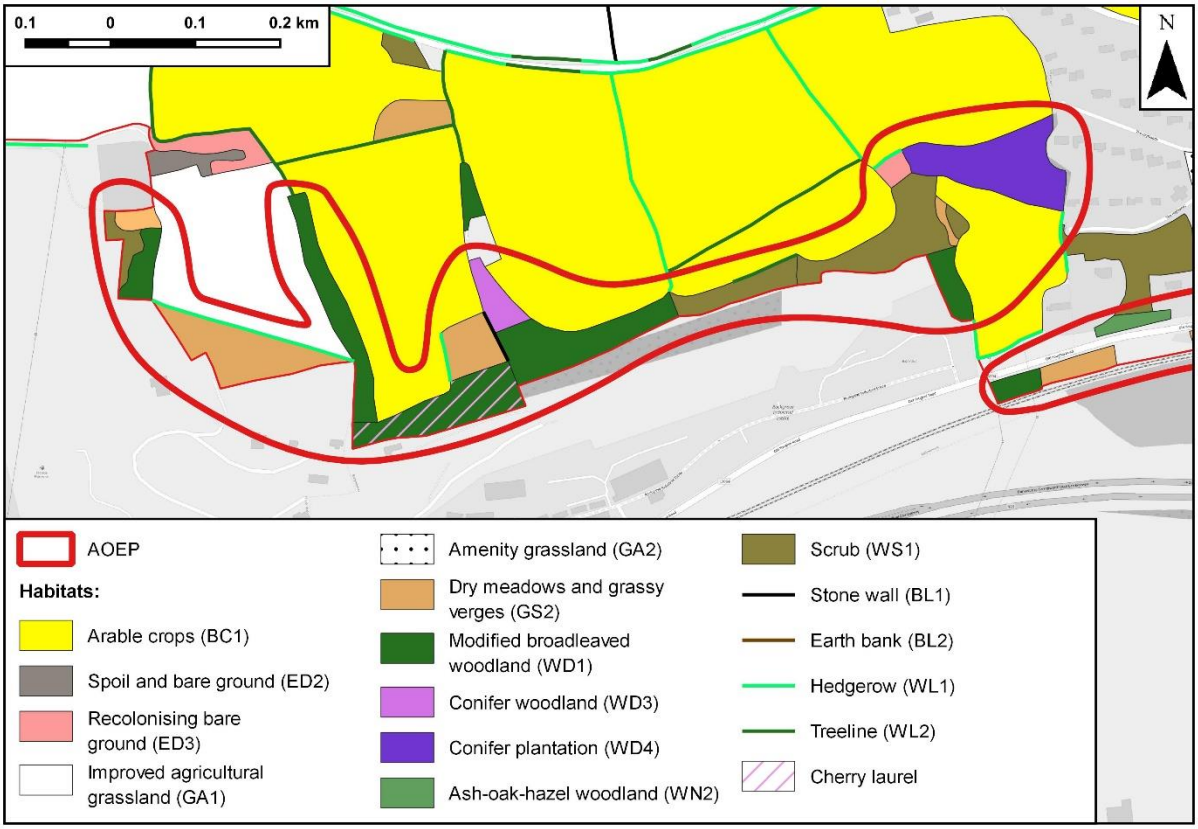

Map 6. Detailed habitat map of AOEP2.



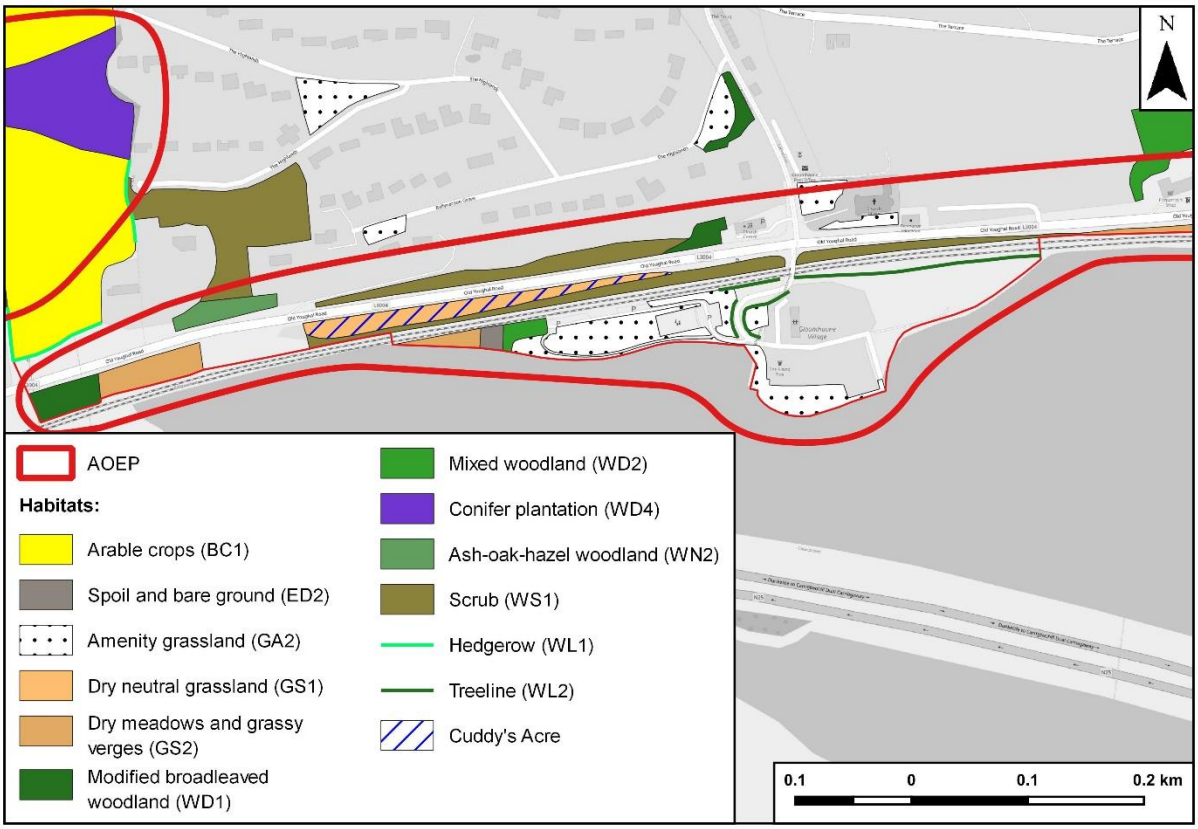

Map 7. Detailed habitat map of AOEP3 and AOEP4.



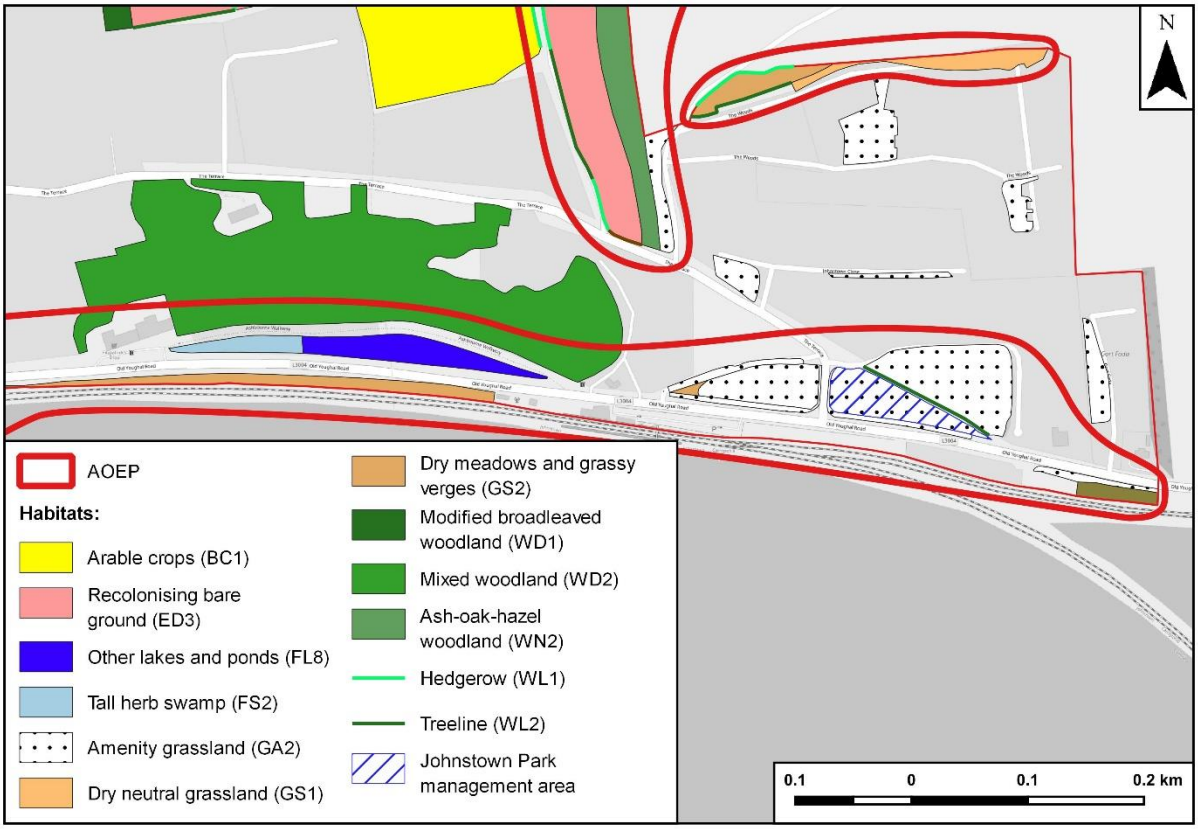

Map 8. Detailed habitat map of AOEP5 and AOEP6.



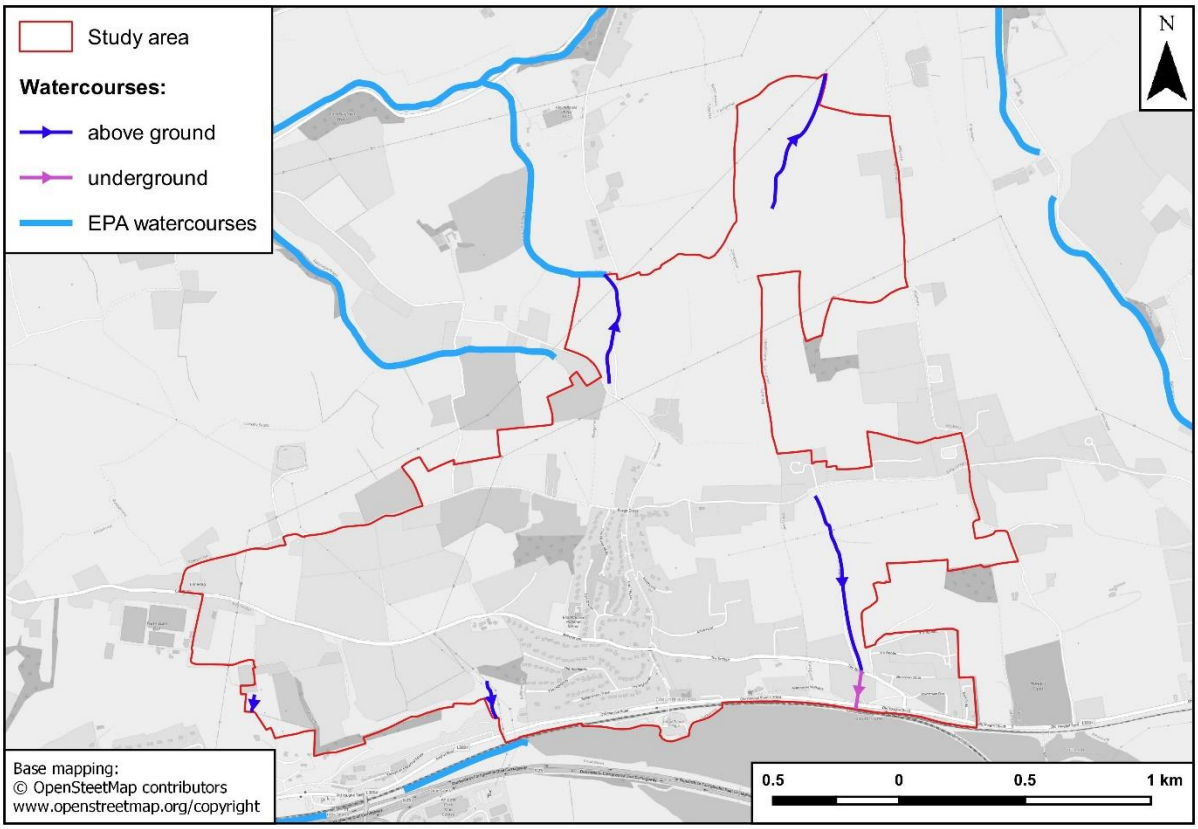

Map 9. Detailed habitat map of AOEP7.



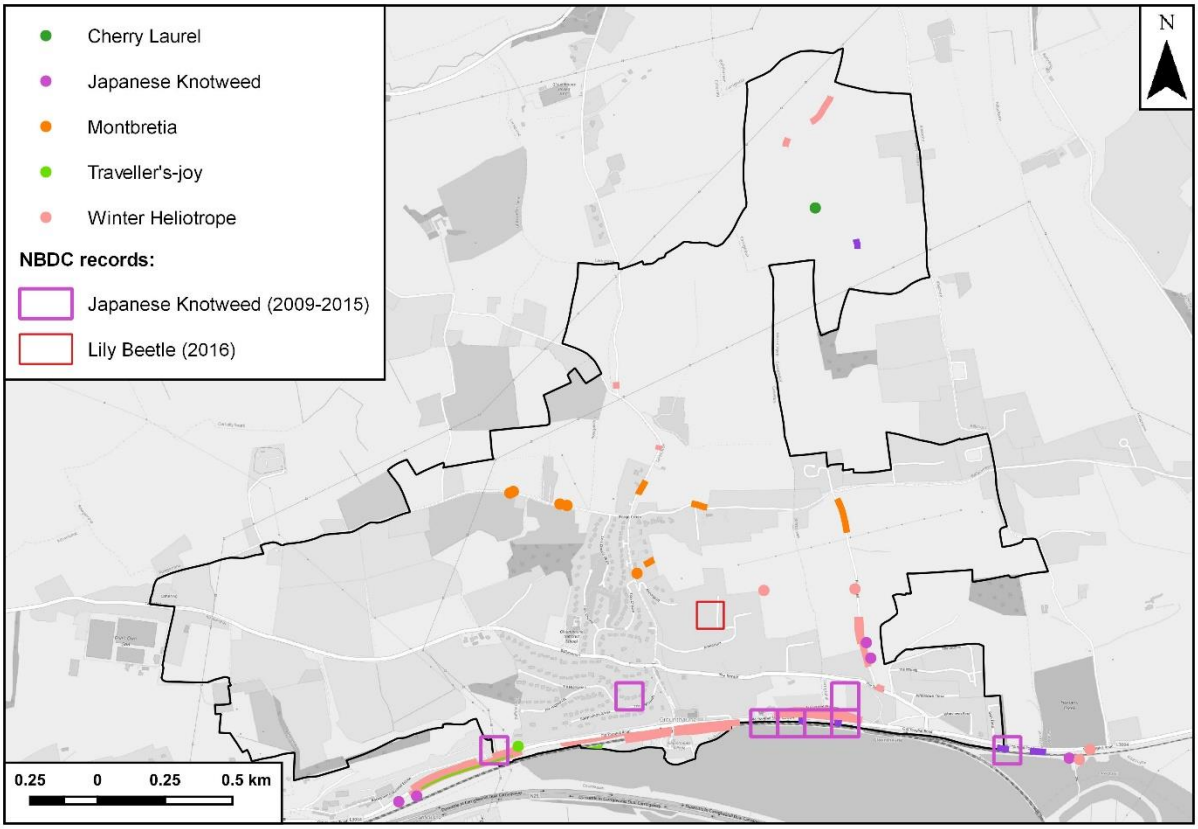

Map 10. Detailed habitat map of AOEP8 west.



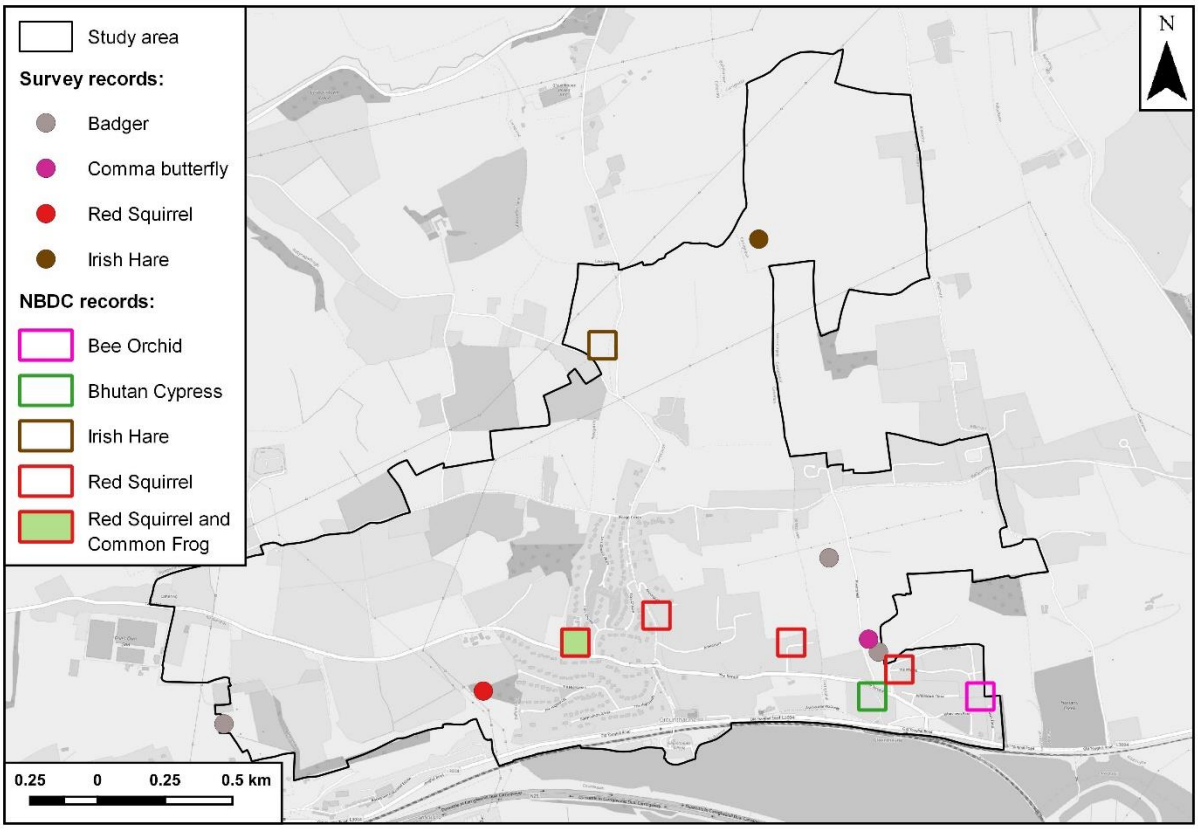

Map 11. Detailed habitat map of AOEP8 east.




Map 12. Watercourses in the study area.




Map 13. Invasive species records in the study area.




Map 14. Notable species records in the study area.

Plate 1. Modified broad-leaved woodland (WD1) habitat in AOEP1.

Plate 2. Wet willow-alder-ash woodland (WN6) and grassy verges (GS2) habitat in AOEP2.

Plate 3. Dry-humid acid grassland (GS3) habitat in AOEP3.

Plate 4. Dry neutral grassland (GS1) habitat in AOEP4.

Plate 5. Modified broad-leaved woodland (WD1) habitat in AOEP5.

Plate 6. Veteran / near-veteran Oak trees in AOEP6.

Plate 7. Veteran / near-veteran Sweet Chestnut tree in AOEP7.

Plate 8. Tall herb swamp (FS2) habitat in AOEP8.

Plate 9. An example of earth bank (BL2) field boundary habitat.

Plate 10. An example of well-developed Gorse hedgerow (WL1) field boundary habitat.

Plate 11. An example of Ash treeline (WL2) field boundary habitat.

Plate 12. Small stream in AOEP1.

Plate 13. Comma butterfly.

# 3. PART 2: PROSCRIPTIVE

## 3.1. SWOT ANALYSIS

A SWOT analysis was carried out by Tom Gittings and members of Glounthaune Tidy Towns. The results of this SWOT analysis are presented in Table 3.1.

Table 3.1. SWOT analysis.

| Category | Items |
|---|---|
| Strengths | Active group<br>Strong track record of securing funding<br>Strong experience of biodiversity projects through involvement with Harper's Island Wetlands<br>Linkages with some local farmers |
| Weaknesses | Reliance on a small group of ageing volunteers<br>No farmers are actively involved in Glounthaune Tidy Towns<br>No involvement from local schools |
| Opportunities | Good financial resources<br>Many potential funding opportunities<br>Good support from Cork County Council<br>Already actively involved in managing land within the study area for biodiversity |
| Threats | High development pressure as Glounthaune is a highly sought after area<br>Potential development of Priest's Hill stream valley (AOEP3) |

## 3.2. TABLE OF ACTIONS

An online meeting between Tom Gittings and members of the Glounthaune Tidy Towns was held in December 2020 to review the results of the biodiversity surveys and inventories. This meeting identified potential for implementing biodiversity actions in AOEP4-AOEP8. Based on the discussions during this meeting, action plans for each of these AOEPs are presented in Table 3.2.

Based on the guidance in Section 3 of the Resource Pack, the number of actions has been kept limited (2-3 per AOEP), and the actions are generally simple to implement, without any requirement for professional technical expertise (apart from action 6.1).

The structure of Table 3.2 is also based on the guidance in Section 3 of the Resource Pack. For each action, the details presented include a description of the action, a rationale for the action, a specific location for the action, the timing of the action and methods/techniques for implementing the action. A high-level ranking scale is also presented for each action. This ranking scale assumes that all work will be carried out by volunteers, except when specific technical expertise is required.

Table 3.2 does not include detailed schedules for the implementation of the actions. These will need to be decided by Glounthaune Tidy Towns, based on their resources and work programmes.

Table 3.2. Table of actions.

| AOEP | Action | Item | Details |
|---|---|---|---|
| AOEP4 | 4.1 | What? | Pollinator-friendly grassland management regime. |
| | | Why? | To maintain/enhance the diversity of the grassland habitat. |
| | | Where? | The dry neutral grassland (GS1) and dry meadow grassland (GS2) in AOEP4, as mapped in Map 7. |
| | | When? | Annually in September / October. |
| | | How? | Mow the grassland and remove the cut material. |
| | | Ranking | Effort: moderate<br>Expense: low<br>Complexity: low<br>Timeframe: long-term |

| AOEP | Action | Item | Details |
|---|---|---|---|
| AOEP4 | 4.2 | What? | Excavate bee scrapes. |
| | | Why? | To provide nesting habitat for mining bees. |
| | | Where? | The dry neutral grassland (GS1) and dry meadow grassland (GS2) in AOEP4, as mapped in Map 7. |
| | | When? | Winter. |
| | | How? | Excavate three scrapes in the steeply sloping sections. Each scrape should be around 2.5 m x 2.5 m and should be excavated to a depth of around 0.2 m, except where deeper excavation is required to remove plant roots. Maintain the scrapes by annual clearance of recolonising vegetation. |
| | | Ranking | Effort: moderate<br>Expense: low<br>Complexity: low<br>Timeframe: long-term |
| AOEP4 | 4.3 | What? | Hedge planting. |
| | | Why? | To provide shelter and early season floral resources for pollinators and to diversify the habitat structure. |
| | | Where? | Along the fence line behind (to the north) of the grassland, extending east from the existing hedgerow mapped in Map 7. Note no planting should be carried out in the grassland, or to the south of the grassland, to avoid shading the grassland habitat. |
| | | When? | Winter. |
| | | How? | Plant a hedgerow of Blackthorn, Crab Apple, Goat Willow, Hawthorn and Hazel. |
| | | Ranking | Effort: moderate<br>Expense: moderate<br>Complexity: moderate<br>Timeframe: short-term |
| AOEP5 | 5.1 | What? | Planting / natural regeneration of native trees and shrubs. |
| | | Why? | To gradually convert the woodland to native woodland. |
| | | Where? | The modified broad-leaved woodland habitat in AOEP5, as mapped in Map 8. |
| | | When? | This is a long-term measure that should be carried out as required (see below). |
| | | How? | Where canopy gaps develop through tree falls, remove regenerating Beech and Sycamore (and any other non-native species). If sufficient regeneration of native species does not occur, plant native trees and shrubs. Appropriate native trees and shrubs include Ash, Pedunculate Oak, Hawthorn, Hazel and Holly. |
| | | Ranking | Effort: moderate<br>Expense: low<br>Complexity: moderate<br>Timeframe: long-term |
| AOEP5 | 5.2 | What? | Retention of dead wood. |
| | | Why? | To prevent removal of the dead wood resource. |
| | | Where? | The modified broad-leaved woodland habitat in AOEP5, as mapped in Map 8. |
| | | When? | This is a long-term measure that should be carried out as required (see below). |
| | | How? | Encourage the retention of dead wood through liaison with landowners and local residents. If trees need to be felled for safety reasons, a tall stump should be retained and the felled wood left in situ. If landowners and/or local residents remove fallen wood for firewood, encourage them to limit this removal. |
| | | Ranking | Effort: low<br>Expense: low<br>Complexity: low<br>Timeframe: long-term |

| AOEP | Action | Item | Details |
|---|---|---|---|
| AOEP6 | 6.1 | What? | Conservation of veteran oak trees |
| | | Why? | To maintain the dead wood habitat provided by the veteran oak trees. |
| | | Where? | The veteran oak trees in AOEP6, as mapped in Map 8. |
| | | When? | This is a long-term measure that should be carried out as required (see below) |
| | | How? | Engage an appropriately qualified tree surgeon to develop a long-term management plan for the veteran oak trees. This will identify the tree surgery measures that are required for safety reasons and the associated mitigation measures that will be implemented to conserve the dead wood resource. The mitigation measures should include minimising the amount of tree surgery required and retaining any dead wood that is felled *in situ*. |
| | | Ranking | Effort: moderate<br>Expense: high<br>Complexity: moderate<br>Timeframe: long-term |
| AOEP6 | 6.2 | What? | Development of semi-natural grassland. |
| | | Why? | To provide floral resources for the adults of insect species whose larvae develop in the dead wood habitat provided by the veteran oak trees. This measure will also benefit the trees by reducing physical impacts to their roots. |
| | | Where? | Around the veteran oak trees in AOEP6, as mapped in Map 8. |
| | | When? | Annually in September / October. |
| | | How? | Designate a low-mowing zone. This zone will be mown annually in September / October, with the cuttings removed, but otherwise left unmown. |
| | | Ranking | Effort: moderate<br>Expense: low<br>Complexity: low<br>Timeframe: long-term |
| AOEP7 | 7.1 | What? | Planting / natural regeneration of native trees and shrubs. |
| | | Why? | To gradually convert the woodland to native woodland. |
| | | Where? | The modified broad-leaved woodland habitat in AOEP7, as mapped in Map 9. |
| | | When? | This is a long-term measure that should be carried out as required (see below). |
| | | How? | Where canopy gaps develop through tree falls, remove regenerating Beech and Sycamore (and any other non-native species). If sufficient regeneration of native species does not occur, plant native trees and shrubs. Appropriate native trees and shrubs include Ash, Pedunculate Oak, Hawthorn, Hazel and Holly. |
| | | Ranking | Effort: moderate<br>Expense: low<br>Complexity: moderate<br>Timeframe: long-term |

| AOEP | Action | Item | Details |
|---|---|---|---|
| AOEP7 | 7.2 | What? | Cherry Laurel control. |
| | | Why? | To control Cherry Laurel invasion, which has degraded the modified broad-leaved woodland habitat in AOEP7. |
| | | Where? | The modified broad-leaved woodland habitat invaded by Cherry Laurel in AOEP7, as mapped in Map 9. |
| | | When? | Initial treatment in winter, with follow-up measures one-four years after initial treatment (see below). |
| | | How? | Cut and remove individual stems, with the stems cut as close to the ground as possible. The cut material could be used to build a "dead hedge" along the woodland edge. Treat the cut stems by painting or spot spraying with Glyphoshate, Tryclopyr or Ammonium sulphanate, with the stems being marked by a vegetable dye to identify which stumps have been treated. Spray the regrowth and large seedlings one-three years after the initial treatment. Remove seedlings by hand pulling three-four years after the initial treatment. See Barron (2009) for further details; note, control methods for Rhodendron can be applied to Cherry Laurel. |
| | | Ranking | Effort: high<br>Expense: moderate<br>Complexity: moderate<br>Timeframe: medium-term |
| AOEP7 | 7.3 | What? | Retention of dead wood. |
| | | Why? | To prevent removal of the dead wood resource. |
| | | Where? | The modified broad-leaved woodland habitat in AOEP7, as mapped in Map 9. |
| | | When? | This is a long-term measure that should be carried out as required (see below). |
| | | How? | Encourage the retention of dead wood through liaison with landowners and local residents. If trees need to be felled for safety reasons, a tall stump should be retained and the felled wood left in situ. If landowners and/or local residents remove fallen wood for firewood, encourage them to limit this removal. |
| | | Ranking | Effort: low<br>Expense: low<br>Complexity: low<br>Timeframe: long-term |
| AOEP8 | 8.1 | What? | Pollinator-friendly grassland management. |
| | | Why? | To maintain/enhance the diversity of the grassland habitat. |
| | | Where? | Cuddy's Acre (Map 10) and the Johnstown Park management area (Map 11). |
| | | When? | Annually in September / October. |
| | | How? | These areas were planted with Yellow Rattle seed in September 2018 and have been managed by annual mowing, with removal of the cut material. This management will continue. |
| | | Ranking | Effort: moderate<br>Expense: low<br>Complexity: low<br>Timeframe: long-term |

| AOEP | Action | Item | Details |
|---|---|---|---|
| AOEP8 | 8.2 | What? | Coppicing of trees. |
| | | Why? | To maintain open water and swamp habitat. |
| | | Where? | The other lakes and ponds and tall herb swamp habitats along the Ashbourne Walkway in AOEP8, as mapped in Map 11. |
| | | When? | This is a long-term measure that should be carried out as required (see below). |
| | | How? | Carry out selective coppicing of the marginal willows that grow around the banks of the open water and swamp habitat. Select individual trees for coppicing to maintain the existing open areas (particularly around the swamp habitat at the western end of the walkway) and to open up heavily shaded areas. The reason for this management should be communicated to the local community to allay any concerns about feeling of trees; note that the willows will regrow after coppicing. The felled timber should be retained *in situ* to provide dead wood habitat. |
| | | Ranking | Effort: moderate<br>Expense: low<br>Complexity: low<br>Timeframe: long-term |
| AOEP8 | 8.3 | What? | Winter Heliotrope control. |
| | | Why? | To control Winter Heliotrope invasion, which is threatening the dry neutral grassland habitat at Cuddy's Acre. |
| | | Where? | Cuddy's Acre (Map 10). |
| | | When? | Annually in February-March, or in mid to late summer, until eradicated. |
| | | How? | Spray with Glyphoshate after flowering, or in mid to late summer, taking care to avoid spraying uninfested areas (NRA, 2010). |
| | | Ranking | Effort: moderate<br>Expense: moderate<br>Complexity: moderate<br>Timeframe: medium-term |

## 3.3. ACTION FUNDING OPPORTUNITIES

Potential sources of funding for implementation of the action plans are listed in Table 3.3. These include three funding sources, which have previously provided funding to Glounthaune Tidy Towns, and which are potential sources of additional funding (Cork County Council), or for which there are balances of funding remaining (Eirgrid and Foundation Ireland). The Forest Service's Native Woodland Scheme would be a potential funding source for the actions in AOEP5 and AOEP7.

Table 3.3. Action funding opportunities.

| Organisation | Grant scheme | Previous funding secured | Actions |
|---|---|---|---|
| Cork County Council | Community Environmental Award | Yes | all |
| Foundation Ireland | - | Yes | all |
| Eirgrid | - | Yes | all |
| Forest Service | Native Woodland Scheme | No | AOEP5 and AOEP7 |

# Appendix 1 Methodologies for data collection

## INTRODUCTION

This appendix describes the methodologies used to collect data for the Glounthaune Community Biodiversity Action Plan.

## DESK REVIEW

The main data source was the National Biodiversity Data Centre. Species records for the study area held by the National Biodiversity Data Centre were extracted from Biodiversity Maps using the *Report by Polygon (Within)* tool. The *Intersect* feature was not used as this would have produced many records associated with the adjacent designated sites, rather than referring to the study area.

Other data sources reviewed included: habitat mapping carried out for Cork County Council for the Blarney and Midleton Electoral Areas habitat mapping projects; records received from a data request to NPWS; and ecological assessment reports prepared for recent planning applications within the study area (BSM, 2018a, 2018b).

## HABITAT AND VEGETATION SURVEY

A habitat and vegetation walkover survey of the study area was carried out between July and September 2020. This survey covered all the land within the agricultural section of the study area, and public open spaces and other accessible areas within the developed section of the study area. Residential and other private properties were not included in the walkover survey, although some habitats in these properties were mapped from roadside surveys.

The habitat survey methodology was based on Smith et al. (2011), using minimum mappable units of 0.04 ha for polygons and 20 m for polyline. All habitats were classified to level 3 of the Fossitt classification.

Vascular plant species lists were compiled for habitat parcels containing semi-natural habitats, or other habitats of potential biodiversity value. These lists were only compiled for habitat parcels which could be fully surveyed: i.e., excluding parcels with no permission to access the land, or which could not be accessed due to health and safety reasons. For field boundary habitats, composite species lists were compiled for each survey day. The relative cover-abundance of each species recorded in each list was classified using the DAFOR scale following the definitions of the classes in Table A1.1.

Table A1.1. DAFOR scale.

| Category | Definition |
|---|---|
| Dominant (D) | A Dominant species generally covers more than two-thirds of the habitat. Most habitats do not have a dominant species, but exceptions can include dense bracken (HD1) stands or oak-birch-holly woodland (WN1) with a pure canopy of sessile oak (*Quercus petraea*). |
| Abundant (A) | Abundant species typically cover between one-third and two-thirds of the habitat. Usually only a few species in a habitat can be considered Abundant. |
| Frequent (F) | Commonly encountered species seen when walking through a habitat are Frequent. A rule of thumb for evaluating Frequent species is 'everywhere you look, you see some' whereas Abundant species are those where 'everywhere you look, you see lots'. |
| Occasional (O) | Occasional species generally have relatively low frequency and low cover. However, they do not have to be searched for to be found. |
| Rare (R) | Rare species are those that are only found once or a very few times during the survey, depending on the size of the habitat. Species cover is also low where Rare species are found. |

Source: Smith et al. (2011).

Three plant taxa were not recorded to species during the surveys. These were taxa that were widespread in the study area, and for which accurate species identification requires careful study, often involving collecting material that may not always be readily available. Therefore, given the

extent of the survey area, and the limited time available for the survey, it was considered that accurate identification to species was not feasible. Notes about these taxa are provided in Table A1.2.

Table A1.2. Notes about plant taxa not recorded to species.

| Taxa | Notes |
|---|---|
| Elm (*Ulmus* sp.) | The Wych Elm (*Ulmus glabra*) is native to Ireland. However, the elms recorded in study area were mainly/all suckering elms. |
| Oak (*Quercus* sp.) | Most oaks recorded in the survey area were probably Pedunculate Oak (*Quercus robur*) or Hybrid Oak (*Quercus petraea* × *robur* = *Q.* × *rosacea*) |
| Polypody (*Polypody* sp.) | There are three Irish species of Polypody: Common Polypody (*Polypodium vulgare*), Intermediate Polypoday (*Polypodium interjectum*) and Southern Polypody (*Polypodium cambricum*). These species are all widespread and common in Co. Cork. |

All stands found of the following invasive species were mapped: species listed on the third schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011); other species included in the NRA Guidelines (NRA, 2010), but excluding Butterfly-bush; or are otherwise generally considered to be invasive (Cherry Laurel).

On each walkover survey, bird species lists were compiled using the eBird travelling recording protocol[1]. When it was necessary to travel by car during a survey visit, the eBird list was stopped before this happened, and a new list started when the next walkover survey began.

Incidental records were also kept of invertebrate and mammal species recorded during the surveys.

[1] https://ebird.org.

# Appendix 2 References

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Smith, G.F., O'Donoghue, P., O'Hora, K. & Delaney, E. (2011). Best Practice Guidance for Habitat Survey and Mapping. The Heritage Council, Kilkenny.

# Appendix 3 Species list

## INTRODUCTION

This appendix contains lists of all the species recorded in the study area during the surveys carried out for the Glounthaune Community Biodiversity Action Plan, or by other sources.

## PLANTS

Table A3.1 contains a complete species list of plant taxa recorded in the study area during the surveys carried out for the Glounthaune Community Biodiversity Action Plan, or by other sources. This table also classifies the status of the species as native, archaeophyte (a pre-1600 introduction), or neophyte (a post-1600 introduction). It also indicates species that are considered to be invasive species, either because they are listed in the third schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011), included in the NRA Guidelines (NRA, 2010), or are otherwise generally considered to be invasive (other). The taxonomy and nomenclature follows *The Irish Vascular Plant Synonym Workbook* (Jebb, 2019).

Table A3.2 contains composite species lists for the habitats of potential biodiversity value that were recorded during the surveys carried out for the Glounthaune Community Biodiversity Action Plan. The habitat types are indicated by the relevant habitat code from Fossitt (2007). Note that the species list for improved grassland (GA) were compiled from a habitat parcel of abandoned improved agricultural grassland (GA1) and a habitat parcel of amenity grassland (GA2) where a low intensity mowing regime has recently been introduced.

Each species list in Table A3.2 is based on species lists that were compiled for individual habitat parcels, or on separate survey days for the field boundary habitat (see Appendix 1). The table indicates that the overall cover-abundance of each species using the DAFOR scale in the habitat types that they were recorded in during the survey. This is based on the mean cover-abundance of the ranks (1 = rare to 5 = abundance) across all species lists for the relevant habitat type.

Table A3.1. Plant species recorded in the survey area.

| Category | English name | Scientific name | Status | Invasive species | Source |
|---|---|---|---|---|---|
| Ferns and allies | Black Spleenwort | *Asplenium adiantum-nigrum* | native | | this survey |
| | Bracken | *Pteridium aquilinum* | native | | this survey |
| | Broad Buckler-fern | *Dryopteris dilatata* | native | | this survey |
| | Hard-fern | *Blechnum spicant* | native | | this survey |
| | Hart's-tongue Fern | *Asplenium scolopendrium* | native | | this survey |
| | Lady-fern | *Athyrium filix-femina* | native | | this survey |
| | Maidenhair Spleenwort | *Asplenium trichomanes* | native | | this survey |
| | Male-fern | *Dryopteris filix-mas* | native | | this survey |
| | Polypody | *Polypodium sp.* | native | | this survey |
| | Scaly Male-fern | *Dryopteris affinis* | native | | this survey |
| | Soft Shield-fern | *Polystichum setiferum* | native | | this survey |
| Forbs (broad-leaved herbs) | Alexanders | *Smyrnium olusatrum* | archaeophyte | | this survey |
| | American Willowherb | *Epilobium ciliatum* | neophyte | | this survey |
| | Barren Strawberry | *Potentilla sterilis* | native | | this survey |
| | Bee Orchid | *Ophrys apifera* | native | | NBDC |
| | Bilbao's Fleabane | *Conyza floribunda* | neophyte | | this survey |
| | Bittersweet | *Solanum dulcamara* | native | | this survey |

| Category | English name | Scientific name | Status | Invasive species | Source |
|---|---|---|---|---|---|
| Forbs (broad-leaved herbs) | Black Medick | *Medicago lupulina* | native | | this survey |
| | Bluebell | *Hyacinthoides non-scripta* | native | | this survey |
| | Broad-leaved Dock | *Rumex obtusifolius* | native | | this survey |
| | Broad-leaved Willowherb | *Epilobium montanum* | native | | this survey |
| | Brooklime | *Veronica beccabunga* | native | | this survey |
| | Bulrush | *Typha latifolia* | native | | this survey |
| | Bush Vetch | *Vicia sepium* | native | | this survey |
| | Cat's-ear | *Hypochaeris radicata* | native | | this survey |
| | Cleavers | *Galium aparine* | native | | this survey |
| | Clustered Dock | *Rumex conglomeratus* | native | | this survey |
| | Common Bird's-foot-trefoil | *Lotus corniculatus* | native | | this survey |
| | Common Dog-violet | *Viola riviniana* | native | | this survey |
| | Common Duckweed | *Lemna minor* | native | | this survey |
| | Common Figwort | *Scrophularia nodosa* | native | | this survey |
| | Common Knapweed | *Centaurea nigra* | native | | this survey |
| | Common Mouse-ear | *Cerastium fontanum* | native | | this survey |
| | Common Nettle | *Urtica dioica* | native | | this survey |
| | Common Ragwort | *Senecio jacobaea* | native | | this survey |
| | Common Sorrel | *Rumex acetosa* | native | | this survey |
| | Common Vetch | *Vicia sativa* | neophyte | | this survey |
| | Corn Marigold | *Glebionis segetum* | archaeophyte | | this survey |
| | Cow Parsley | *Anthriscus sylvestris* | native | | this survey |
| | Creeping Buttercup | *Ranunculus repens* | native | | this survey |
| | Creeping Cinquefoil | *Potentilla reptans* | native | | this survey |
| | Creeping Thistle | *Cirsium arvense* | native | | this survey |
| | Curled Dock | *Rumex crispus* | native | | this survey |
| | Daisy | *Bellis perennis* | native | | this survey |
| | Dandelion | *Taraxacum agg.* | native | | this survey |
| | Dove's-foot Crane's-bill | *Geranium molle* | native | | this survey |
| | Enchanter's-nightshade | *Circaea lutetiana* | native | | this survey |
| | Field Pansy | *Viola arvensis* | archaeophyte | | this survey |
| | Fool's-water-cress | *Apium nodiflorum* | native | | this survey |
| | Foxglove | *Digitalis purpurea* | native | | this survey |
| | Fumitory / Ramping-fumitory | *Fumaria sp.* | native/alien | | this survey |
| | Germander Speedwell | *Veronica chamaedrys* | native | | this survey |
| | Great Mullein | *Verbascum thapsus* | native | | this survey |
| | Great Willowherb | *Epilobium hirsutum* | native | | this survey |
| | Great Wood-rush | *Luzula sylvatica* | native | | this survey |

| Category | English name | Scientific name | Status | Invasive species | Source |
|---|---|---|---|---|---|
| Forbs (broad-leaved herbs) | Greater Bird's-foot-trefoil | *Lotus pedunculatus* | native | | this survey |
| | Greater Periwinkle | *Vinca major* | neophyte | | this survey |
| | Greater Plantain | *Plantago major* | native | | this survey |
| | Greater Stitchwort | *Stellaria holostea* | native | | this survey |
| | Ground-elder | *Aegopodium podagraria* | archaeophyte | | this survey |
| | Ground-ivy | *Glechoma hederacea* | native | | this survey |
| | Groundsel | *Senecio vulgaris* | native | | this survey |
| | Hedge Mustard | *Sisymbrium officinale* | archaeophyte | | this survey |
| | Hedge Woundwort | *Stachys sylvatica* | native | | this survey |
| | Herb-Robert | *Geranium robertianum* | native | | this survey |
| | Hoary Willowherb | *Epilobium parviflorum* | native | | this survey |
| | Hogweed | *Heracleum sphondylium* | native | | this survey |
| | Knotgrass | *Polygonum aviculare* | native | | this survey |
| | Lesser Stitchwort | *Stellaria graminea* | native | | this survey |
| | Lords-and-Ladies | *Arum maculatum* | native | | this survey |
| | Marsh Thistle | *Cirsium palustre* | native | | this survey |
| | Marsh Woundwort | *Stachys palustris* | native | | this survey |
| | Meadow Buttercup | *Ranunculus acris* | native | | this survey |
| | Meadow Vetchling | *Lathyrus pratensis* | native | | this survey |
| | Meadowsweet | *Filipendula ulmaria* | native | | this survey |
| | Montbretia | *Crocosmia pottsii x aurea = C. x crocosmiiflora* | neophyte | NRA | this survey |
| | Navelwort | *Umbilicus rupestris* | native | | this survey |
| | Nipplewort | *Lapsana communis* | native/alien | | this survey |
| | Opposite-leaved Golden-saxifrage | *Chrysosplenium oppositifolium* | native | | this survey |
| | Oxeye Daisy | *Leucanthemum vulgare* | native | | this survey |
| | Pellitory-of-the-wall | *Parietaria judaica* | native | | this survey |
| | Perforate St John's-wort | *Hypericum perforatum* | native | | this survey |
| | Himalayan Knotweed | *Persicaria wallichii* | neophyte | scheduled | this survey |
| | Prickly Sow-thistle | *Sonchus asper* | native | | this survey |
| | Primrose | *Primula vulgaris* | native | | this survey |
| | Ragged-Robin | *Silene flos-cuculi* | native | | this survey |
| | Red Clover | *Trifolium pratense* | native | | this survey |
| | Redshank | *Persicaria maculosa* | native | | this survey |
| | Ribwort Plantain | *Plantago lanceolata* | native | | this survey |
| | Rosebay Willowherb | *Chamerion angustifolium* | native | | this survey |
| | Scarlet Pimpernel | *Anagallis arvensis* | native | | this survey |
| | Selfheal | *Prunella vulgaris* | native | | this survey |
| | Shining Crane's-bill | *Geranium lucidum* | native | | this survey |
| | Silverweed | *Potentilla anserina* | native | | this survey |
| | Slender St John's-wort | *Hypericum pulchrum* | native | | this survey |

| Category | English name | Scientific name | Status | Invasive species | Source |
|---|---|---|---|---|---|
| Forbs (broad-leaved herbs) | Smooth Hawk's-beard | *Crepis capillaris* | native | | this survey |
| | Smooth Sow-thistle | *Sonchus oleraceus* | native | | this survey |
| | Spear Thistle | *Cirsium vulgare* | native | | this survey |
| | Sun Spurge | *Euphorbia helioscopia* | archaeophyte | | this survey |
| | Tufted Vetch | *Vicia cracca* | native | | this survey |
| | Tutsan | *Hypericum androsaemum* | native | | this survey |
| | Water Figwort | *Scrophularia auriculata* | native | | this survey |
| | Water Mint | *Mentha aquatica* | native | | this survey |
| | Water-cress | *Nasturtium officinale* | native | | this survey |
| | Water-pepper | *Persicaria hydropiper* | native | | this survey |
| | Wavy Bitter-cress | *Cardamine flexuosa* | native | | this survey |
| | White Clover | *Trifolium repens* | native | | this survey |
| | Wild Angelica | *Angelica sylvestris* | native | | this survey |
| | Wild Carrot | *Daucus carota* | native | | this survey |
| | Wild Teasel | *Dipsacus fullonum* | native/alien | | this survey |
| | Winter Heliotrope | *Petasites fragrans* | neophyte | NRA | this survey |
| | Wood Avens | *Geum urbanum* | native | | this survey |
| | Wood Sage | *Teucrium scorodonia* | native | | this survey |
| | Yarrow | *Achillea millefolium* | native | | this survey |
| | Yellow Pimpernel | *Lysimachia nemorum* | native | | this survey |
| | Yellow-rattle | *Rhinanthus minor* | native | | this survey |
| Grasses, sedges and rushes | Cock's-foot | *Dactylis glomerata* | native | | this survey |
| | Common Bent | *Agrostis capillaris* | native | | this survey |
| | Common Couch | *Elytrigia repens* | native | | this survey |
| | Compact Rush | *Juncus conglomeratus* | native | | this survey |
| | Creeping Bent | *Agrostis stolonifera* | native | | this survey |
| | Crested Dog's-tail | *Cynosurus cristatus* | native | | this survey |
| | False Oat-grass | *Arrhenatherum elatius* | native | | this survey |
| | False-brome | *Brachypodium sylvaticum* | native | | this survey |
| | Field Bindweed | *Convolvulus arvensis* | native | | this survey |
| | Floating Sweet-grass | *Glyceria fluitans* | native | | this survey |
| | Grey Sedge | *Carex divulsa* | native | | this survey |
| | Hard Rush | *Juncus inflexus* | native | | this survey |
| | Pendulous Sedge | *Carex pendula* | native | | this survey |
| | Perennial Rye-grass | *Lolium perenne* | native | | this survey |
| | Red Fescue | *Festuca rubra* | native | | this survey |
| | Rough Meadow-grass | *Poa trivialis* | native | | this survey |
| | Sharp-flowered Rush | *Juncus acutiflorus* | native | | this survey |
| | Sheep's-fescue | *Festuca ovina* | native | | this survey |
| | Smooth Meadow-grass | *Poa pratensis* | native | | this survey |

| Category | English name | Scientific name | Status | Invasive species | Source |
|---|---|---|---|---|---|
| Grasses, sedges and rushes | Soft-rush | *Juncus effusus* | native | | this survey |
| | Sweet Vernal-grass | *Anthoxanthum odoratum* | native | | this survey |
| | Yorkshire-fog | *Holcus lanatus* | native | | this survey |
| Trees, shrubs and woody climbers | Alder | *Alnus glutinosa* | native | | this survey |
| | Ash | *Fraxinus excelsior* | native | | this survey |
| | Beech | *Fagus sylvatica* | neophyte | | this survey |
| | Bhutan Cypress | *Cupressus cashmeriana* | neophyte | | NBDC |
| | Blackberry | *Rubus fruticosus agg.* | native | | this survey |
| | Blackthorn | *Prunus spinosa* | native | | this survey |
| | Box | *Buxus sempervirens* | neophyte | | this survey |
| | Butterfly-bush | *Buddleja davidii* | neophyte | NRA | this survey |
| | Cherry Laurel | *Prunus laurocerasus* | neophyte | | this survey |
| | Crab Apple | *Malus sylvestris* | neophyte | | this survey |
| | Dog-rose | *Rosa canina* | native | | this survey |
| | Eared Willow | *Salix aurita* | native | | this survey |
| | Elder | *Sambucus nigra* | native | | this survey |
| | Elm | *Ulmus sp.* | native/alien | | this survey |
| | Gorse | *Ulex europaeus* | native | | this survey |
| | Grey Willow | *Salix cinerea s.lat.* | native | | this survey |
| | Hawthorn | *Crataegus monogyna* | native | | this survey |
| | Hazel | *Corylus avellana* | native | | this survey |
| | Hedge Bindweed | *Calystegia sepium* | native | | this survey |
| | Himalayan Honeysuckle | *Leycesteria formosa* | neophyte | | this survey |
| | Holly | *Ilex aquifolium* | native | | this survey |
| | Honeysuckle | *Lonicera periclymenum* | native | | this survey |
| | Horse Chestnut | *Aesculus hippocastanum* | neophyte | | this survey |
| | Ivy | *Hedera helix* | native | | this survey |
| | Japanese Knotweed | *Fallopia japonica* | neophyte | scheduled | NBDC/this survey |
| | Large Bindweed | *Calystegia silvatica* | neophyte | | this survey |
| | Norway Spruce | *Picea abies* | neophyte | | this survey |
| | Oak | *Quercus* sp. | native | | this survey |
| | Scots Pine | *Pinus sylvestris* | neophyte | | this survey |
| | Spindle | *Euonymus europaeus* | native | | this survey |
| | Sweet Chestnut | *Castanea sativa* | neophyte | | this survey |
| | Sycamore | *Acer pseudoplatanus* | neophyte | other | this survey |
| | Traveller's-joy | *Clematis vitalba* | neophyte | NRA | this survey |
| | Wild Privet | *Ligustrum vulgare* | native/alien | | this survey |

Status, from Jebb (2019): native = ; archaeophyte = alien before 1500; neophyte = alien introduced after 1500. Invasive species: scheduled = listed on the third schedule of the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011); NRA = included in the NRA Guidelines (NRA, 2010); other = otherwise generally considered to be invasive. Source: NBDC = Heritage Trees of Ireland, Online Atlas of Vascular Plants 2012-2020 and National Invasive Species Database datasets held by the National Biodiversity Data Centre; this survey = habitat and vegetation surveys carried out by Tom Gittings for the Glounthaune Community Biodiversity Action Plan, July-September 2020.

Table A3.2. Plant species lists for habitats of biodiversity interest recorded during the surveys carried out for the Glounthaune Community Biodiversity Action Plan, with overall cover-abundance in the habitat parcels surveyed indicated using the DAFOR scale.

| Layer | Category | Scientific name | English name | FW4 | GA | GS1 | GS2 | GS3 | GS4 | GM1 | WN2 | WN6 | WD1 | WS1 | WL1 | WL2 | ED3 | BL1 | BL2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| canopy | trees, shrubs and woody climbers | *Acer pseudoplatanus* | Sycamore | | R | | | R | | | F | R | F | | R | F | R | | R |
| | | *Aesculus hippocastanum* | Horse Chestnut | | | | | | | | | | R | | | | | | |
| | | *Alnus glutinosa* | Alder | | | | | | | | | F | R | | R | R | R | | |
| | | *Castanea sativa* | Sweet Chestnut | | | | | | | | | | R | | | | | | |
| | | *Fagus sylvatica* | Beech | | | | | | | | O | | F | | R | F | | | |
| | | *Fraxinus excelsior* | Ash | | | | | | | | A | R | O | | F | A | R | | R |
| | | *Picea abies* | Norway Spruce | | | | | | | | | | R | | | | | | |
| | | *Pinus sylvestris* | Scots Pine | | | | | | | | | | R | | R | R | | | |
| | | *Quercus robur* | Pedunculate Oak | | R | | | | | | R | | R | | R | R | | | |
| | | *Salix cinerea s.lat.* | Grey Willow | | | | | | | | | | | | | | R | | |
| under-storey | trees, shrubs and woody climbers | *Acer pseudoplatanus* | Sycamore | | | | | | | | R | R | R | | R | O | | | |
| | | *Aesculus hippocastanum* | Horse Chestnut | | | | | | | | | | R | | | | | | |
| | | *Alnus glutinosa* | Alder | | | | | | | | | R | | | R | | | | R |
| | | *Buddleja davidii* | Butterfly-bush | | | | R | | | | | | | R | | | O | | |
| | | *Buxus sempervirens* | Box | | | | | | | | | | | | | R | | | |
| | | *Corylus avellana* | Hazel | | | | | | | | O | | R | | | R | | | |
| | | *Crataegus monogyna* | Hawthorn | | | | | | | | O | R | R | | A | F | | | R |
| | | *Euonymus europaeus* | Spindle | | | | | | | | R | | | | | | | | |
| | | *Fallopia japonica* | Japanese Knotweed | | | | R | | | | | | | | R | | R | | |
| | | *Fraxinus excelsior* | Ash | | | | | | | | | | R | | | F | | | R |
| | | *Ilex aquifolium* | Holly | | | | | | | | O | R | O | | R | O | | | R |
| | | *Leycesteria formosa* | Himalayan Honeysuckle | | | | | | | | | R | | | | | | | |
| | | *Ligustrum vulgare* | Wild Privet | | | | | | | | | | | | R | | | | R |
| | | *Malus sylvestris* | Crab Apple | | | | | | | | | | | | | R | | | |
| | | *Prunus laurocerasus* | Cherry Laurel | | | | | | | | | | R | | R | | | | |
| | | *Prunus spinosa* | Blackthorn | | | | | R | | | R | | R | | F | F | | | R |
| | | *Rosa canina* | Dog-rose | | | | | | | | | | | | | R | | | |

| Layer | Category | Scientific name | English name | FW4 | GA | GS1 | GS2 | GS3 | GS4 | GM1 | WN2 | WN6 | WD1 | WS1 | WL1 | WL2 | ED3 | BL1 | BL2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| under-storey | trees, shrubs and woody climbers | *Rubus fruticosus agg.* | Blackberry | | | | | | | | | R | | O | D | O | | | R |
| | | *Salix aurita* | Eared Willow | | | | | | | | | | | | | | R | | |
| | | *Salix cinerea s.lat.* | Grey Willow | | | | | | | | | F | | | R | | R | | |
| | | *Sambucus nigra* | Elder | | | | | | | | O | R | R | R | R | O | | | |
| | | *Ulex europaeus* | Gorse | | | | R | | | | R | R | | O | F | F | O | | R |
| | | *Ulmus sp.* | Elm | | | | | | | | R | | R | | R | O | | | |
| climbers | trees, shrubs and woody climbers | *Calystegia sepium* | Hedge Bindweed | | | | | | | | | | | | R | | | | |
| | | *Calystegia silvatica* | Large Bindweed | | | | R | | | | | | | | | | | | |
| | | *Hedera helix* | Ivy | | | | | | | | F | O | O | | F | F | | | R |
| | | *Lonicera periclymenum* | Honeysuckle | | | | | | | | | | | | R | | | | |
| | | *Rubus fruticosus agg.* | Blackberry | | | | | | | | | R | | | | | | | |
| ground layer | ferns and allies | *Asplenium adiantum-nigrum* | Black Spleenwort | | | | | | | | | | | | R | | | F | R |
| | | *Asplenium scolopendrium* | Hart's-tongue Fern | | | | | | | | F | R | O | | R | R | | O | R |
| | | *Asplenium trichomanes* | Maidenhair Spleenwort | | | | | | | | | | | | | | | D | |
| | | *Athyrium filix-femina* | Lady-fern | | | | | | | | | R | R | | | | | | |
| | | *Blechnum spicant* | Hard-fern | | | | | | | | | R | | | | R | | | R |
| | | *Dryopteris affinis* | Scaly Male-fern | | | | | | | O | | R | R | | R | R | | | |
| | | *Dryopteris dilatata* | Broad Buckler-fern | | | | | | | | R | F | R | | R | | | | |
| | | *Dryopteris filix-mas* | Male-fern | | | | | | | | | | R | | R | R | | | R |
| | | *Polypodium sp.* | Polypody | | | | | | | | | | R | | R | | | | R |
| | | *Polystichum setiferum* | Soft Shield-fern | | | | | | | | F | R | F | | R | F | | F | R |
| | | *Pteridium aquilinum* | Bracken | | | | | | | | R | | | R | R | O | R | O | O |
| | forbs (broad-leaved herbs) | *Achillea millefolium* | Yarrow | | R | O | R | | | | | | | | | | | R | R |
| | | *Aegopodium podagraria* | Ground-elder | | | | | | | | | R | R | | R | R | | | |
| | | *Anagallis arvensis* | Scarlet Pimpernel | | | | | | | | | | | | | | R | R | |
| | | *Angelica sylvestris* | Wild Angelica | | | | | R | | | | R | | | | R | | | |
| | | *Apium nodiflorum* | Fool's-water-cress | F | | | | | | | | R | R | | | R | | | |
| | | *Arum maculatum* | Lords-and-Ladies | | | | | | | | | | R | | | | | | |
| | | *Bellis perennis* | Daisy | | F | | | | | | | | | | | | | R | |
| | | *Cardamine flexuosa* | Wavy Bitter-cress | | | | | | | | | R | | | | | | | |

| Layer | Category | Scientific name | English name | FW4 | GA | GS1 | GS2 | GS3 | GS4 | GM1 | WN2 | WN6 | WD1 | WS1 | WL1 | WL2 | ED3 | BL1 | BL2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ground layer | forbs (broad-leaved herbs) | *Centaurea nigra* | Common Knapweed | | | R | R | | | | | | | | | | | | |
| | | *Cerastium fontanum* | Common Mouse-ear | | | R | | | | | | | | | R | | | | |
| | | *Chamerion angustifolium* | Rosebay Willowherb | | R | | | | | | | | | | R | | | | |
| | | *Chrysosplenium oppositifolium* | Opposite-leaved Golden-saxifrage | | | | | | | | | | R | | | | | | |
| | | *Circaea lutetiana* | Enchanter's-nightshade | | | | | | | | | | R | | | | | | |
| | | *Cirsium arvense* | Creeping Thistle | | O | O | R | | | O | | | | O | R | R | | | R |
| | | *Cirsium palustre* | Marsh Thistle | | | | | | | | | | | | R | R | | | |
| | | *Cirsium vulgare* | Spear Thistle | | | | R | | | | | R | | | R | | R | | |
| | | *Conyza floribunda* | Bilbao's Fleabane | | | R | | | | | | | | | | | F | | |
| | | *Crepis capillaris* | Smooth Hawk's-beard | | | | | | | | | | | | | | R | O | |
| | | *Crocosmia pottsii x aurea = C. x crocosmiiflora* | Montbretia | | | | | | | R | | R | | | | R | | | R |
| | | *Daucus carota* | Wild Carrot | | | O | R | | | | | | | | | | | | |
| | | *Digitalis purpurea* | Foxglove | | | | | | | | | | R | | O | F | R | | R |
| | | *Dipsacus fullonum* | Wild Teasel | | | | R | | | | | | | O | | | | | |
| | | *Epilobium ciliatum* | American Willowherb | | | | | | | | | | | | R | | R | | |
| | | *Epilobium hirsutum* | Great Willowherb | | R | | | | F | A | | | | | R | R | R | | |
| | | *Epilobium montanum* | Broad-leaved Willowherb | | | | | | | | | | R | R | R | R | | | |
| | | *Epilobium parviflorum* | Hoary Willowherb | | | | | | | | | | | | | | O | | |
| | | *Euphorbia helioscopia* | Sun Spurge | | | | | | | | | | | | | | R | | |
| | | *Filipendula ulmaria* | Meadowsweet | | | | | | | | | | | | R | R | | | R |
| | | *Fumaria sp.* | Fumitory / Ramping-fumitory | | | | | | | | | | | | | | R | | |
| | | *Galium aparine* | Cleavers | | | | | | | | | | R | | R | | R | | R |
| | | *Geranium lucidum* | Shining Crane's-bill | | | | | | | | | | | | R | | | | |
| | | *Geranium molle* | Dove's-foot Crane's-bill | | O | | R | | | | | | | | | | | O | R |

| Layer | Category | Scientific name | English name | FW4 | GA | GS1 | GS2 | GS3 | GS4 | GM1 | WN2 | WN6 | WD1 | WS1 | WL1 | WL2 | ED3 | BL1 | BL2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | *Geranium robertianum* | Herb-Robert | | | | | | | | R | R | O | R | R | O | | A | R |
| | | *Geum urbanum* | Wood Avens | | | | | | | | R | R | R | | R | R | | | |
| | | *Glebionis segetum* | Corn Marigold | | | | | | | | | | | | | | R | | |
| | | *Glechoma hederacea* | Ground-ivy | | | | | | | | F | | | | R | F | | | |
| | | *Heracleum sphondylium* | Hogweed | | R | | | | | | | R | R | | R | O | | | R |
| | | *Hyacinthoides non-scripta* | Bluebell | | | | | | | | | | R | | | | | | |
| | | *Hypericum androsaemum* | Tutsan | | | | | | | | | | | | | R | | | |
| | | *Hypericum perforatum* | Perforate St John's-wort | | | | R | | | | | | | | | | | | |
| | | *Hypericum pulchrum* | Slender St John's-wort | | | | | | | | | | | | | | | | R |
| | | *Hypochaeris radicata* | Cat's-ear | | O | O | | | | | | | | | | R | R | F | R |
| | | *Lapsana communis* | Nipplewort | | | | | | | | | | | | R | | R | | |
| | | *Lathyrus pratensis* | Meadow Vetchling | | | O | R | | | | | | | | | | | | |
| ground layer | forbs (broad-leaved herbs) | *Lemna minor* | Common Duckweed | A | | | | | | | | | | | | | | | |
| | | *Leucanthemum vulgare* | Oxeye Daisy | | | R | R | | | | | | | | | | | | |
| | | *Lotus corniculatus* | Common Bird's-foot-trefoil | | | F | | | | | | | | | | | | | |
| | | *Lotus pedunculatus* | Greater Bird's-foot-trefoil | | R | | R | F | O | F | | | | | | | R | | |
| | | *Luzula sylvatica* | Great Wood-rush | | | | | | | | | | R | | | | | | |
| | | *Lysimachia nemorum* | Yellow Pimpernel | | | | | | | | | R | | | | | | | |
| | | *Medicago lupulina* | Black Medick | | | O | R | | | | | | | | | | | F | |
| | | *Mentha aquatica* | Water Mint | | | | | | | | | R | | | R | R | | | |
| | | *Nasturtium officinale* | Water-cress | | | | R | | | O | | | | | R | R | R | | |
| | | *Parietaria judaica* | Pellitory-of-the-wall | | | | | | | | | | | | | | | #N/A | |
| | | *Persicaria hydropiper* | Water-pepper | | | | R | | | | | | | | | | | | |
| | | *Persicaria maculosa* | Redshank | | | | | | | | | | | | | | O | | |
| | | *Petasites fragrans* | Winter Heliotrope | | | O | | | | | | R | R | R | R | | | | R |
| | | *Plantago lanceolata* | Ribwort Plantain | | F | R | O | O | R | | | R | | O | | | R | D | R |

| Layer | Category | Scientific name | English name | FW4 | GA | GS1 | GS2 | GS3 | GS4 | GM1 | WN2 | WN6 | WD1 | WS1 | WL1 | WL2 | ED3 | BL1 | BL2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ground layer | forbs (broad-leaved herbs) | *Plantago major* | Greater Plantain | | | | | | | | | | | | | | R | | |
| | | *Polygonum aviculare* | Knotgrass | | | | | | | | | | | | | | R | | |
| | | *Potentilla anserina* | Silverweed | | | | R | | R | | | | | | | | | | |
| | | *Potentilla reptans* | Creeping Cinquefoil | | R | | R | | | | | | | | R | | R | | |
| | | *Potentilla sterilis* | Barren Strawberry | | | | | O | | | | | | | | | | O | |
| | | *Primula vulgaris* | Primrose | | | | | | | | | R | R | R | R | | | R | |
| | | *Prunella vulgaris* | Selfheal | | | | | | | | | | | R | | R | | O | |
| | | *Ranunculus acris* | Meadow Buttercup | | | R | R | | | | | | | | R | | | | |
| | | *Ranunculus repens* | Creeping Buttercup | O | A | R | R | | | F | | O | | O | R | R | F | | R |
| | | *Rhinanthus minor* | Yellow-rattle | | | R | R | | | | | | | | | | | | |
| | | *Rumex acetosa* | Common Sorrel | | R | R | | | O | | | R | | | | R | | | |
| | | *Rumex conglomeratus* | Clustered Dock | | | | | | | | | | | | R | | | | |
| | | *Rumex crispus* | Curled Dock | | O | R | R | | R | | | | | R | R | | R | | |
| | | *Rumex obtusifolius* | Broad-leaved Dock | | F | R | R | R | | | | R | | | R | R | F | | R |
| | | *Scrophularia auriculata* | Water Figwort | | R | | | | | | | | | | | | | | |
| | | *Scrophularia nodosa* | Common Figwort | | | | | | | | | R | | | | | O | | |
| | | *Senecio jacobaea* | Common Ragwort | | O | | R | | | | | | | O | | R | O | O | R |
| | | *Senecio vulgaris* | Groundsel | | | | | | | | | | | | | | O | | |
| | | *Silene flos-cuculi* | Ragged-Robin | | | | | | | | | R | | | | | | | |
| | | *Sisymbrium officinale* | Hedge Mustard | | | | | | | | | | | R | | | R | | |
| | | *Smyrnium olusatrum* | Alexanders | | | | | | | | | | R | | | | | | |
| | | *Solanum dulcamara* | Bittersweet | | | | | | | O | | R | | | | | | | |
| | | *Sonchus asper* | Prickly Sow-thistle | | | | | | | | | | | R | R | | | | |
| | | *Sonchus oleraceus* | Smooth Sow-thistle | | | | | | | | | | | | R | | O | F | |
| | | *Stachys palustris* | Marsh Woundwort | | R | | | | | | | | | | R | R | | | R |
| | | *Stachys sylvatica* | Hedge Woundwort | | | | R | | | R | | R | R | R | R | F | R | | |
| | | *Stellaria graminea* | Lesser Stitchwort | | | R | R | R | | R | | | | | | | | | |
| | | *Stellaria holostea* | Greater Stitchwort | | | | | | | | | | | | | | R | | |
| | | *Taraxacum agg.* | Dandelion | | F | R | R | R | | | | | | | F | | O | F | R |
| | | *Teucrium scorodonia* | Wood Sage | | | | | | | | | | | | R | R | | | R |

| Layer | Category | Scientific name | English name | FW4 | GA | GS1 | GS2 | GS3 | GS4 | GM1 | WN2 | WN6 | WD1 | WS1 | WL1 | WL2 | ED3 | BL1 | BL2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ground layer | forbs (broad-leaved herbs) | *Trifolium pratense* | Red Clover | | R | F | R | R | | | | | | O | | | | | |
| | | *Trifolium repens* | White Clover | | F | R | | | | | | | | R | | | O | | |
| | | *Typha latifolia* | Bulrush | | | | | | | | | | | | R | | | | |
| | | *Umbilicus rupestris* | Navelwort | | | | | | | | | | | | | | | F | |
| | | *Urtica dioica* | Common Nettle | | | | | | | | | | | | | | | | |
| | | *Verbascum thapsus* | Great Mullein | | | | | | | | | | | | | | | | |
| | | *Veronica beccabunga* | Brooklime | | | | | | | | | | | | | | | | |
| | | *Veronica chamaedrys* | Germander Speedwell | | | | | | | | | | | | | | | | |
| | | *Vicia cracca* | Tufted Vetch | | | | | | | | | | | | | | | | |
| | | *Vicia sativa* | Common Vetch | | | | | | | | | | | | | | | | |
| | | *Vicia sepium* | Bush Vetch | | | | | | | | | | | | | | | | |
| | | *Vinca major* | Greater Periwinkle | | | | | | | | | | | | | | | | |
| | | *Viola arvensis* | Field Pansy | | | | | | | | | | | | | | | | |
| | | *Viola riviniana* | Common Dog-violet | | | | | | | | | | | | | | | | |
| ground layer | grasses, sedges and rushes | *Agrostis capillaris* | Common Bent | | A | O | O | D | | | | | | | | | | | R |
| | | *Agrostis stolonifera* | Creeping Bent | | D | O | R | O | A | A | | O | | O | O | F | R | | R |
| | | *Anthoxanthum odoratum* | Sweet Vernal-grass | | O | | R | F | O | | | | | | | | | | |
| | | *Arrhenatherum elatius* | False Oat-grass | | O | O | F | | O | | | | | F | A | R | R | D | O |
| | | *Brachypodium sylvaticum* | False-brome | | | | | | | | R | | R | | | O | | F | |
| | | *Carex divulsa* | Grey Sedge | | R | | R | O | | | | | | R | | | | | |
| | | *Carex pendula* | Pendulous Sedge | | | | | | | | | | | | | R | | | |
| | | *Convolvulus arvensis* | Field Bindweed | | | R | | | | | | | | | | | | | |
| | | *Cynosurus cristatus* | Crested Dog's-tail | | F | R | | | | | | | | | R | | | | |
| | | *Dactylis glomerata* | Cock's-foot | | O | A | R | O | O | | | R | R | R | R | O | | D | O |
| | | *Elytrigia repens* | Common Couch | | F | R | R | | | | | | | O | R | R | O | | R |
| | | *Festuca ovina* | Sheep's-fescue | | | | | | | | | | | | | | | | R |
| | | *Festuca rubra* | Red Fescue | | A | A | O | R | | | | | | | | | | F | R |
| | | *Glyceria fluitans* | Floating Sweet-grass | F | | | | | | | | R | | | | | | | |
| | | *Holcus lanatus* | Yorkshire-fog | | D | R | O | O | A | | | | | R | R | | | | R |

| Layer | Category | Scientific name | English name | FW4 | GA | GS1 | GS2 | GS3 | GS4 | GM1 | WN2 | WN6 | WD1 | WS1 | WL1 | WL2 | ED3 | BL1 | BL2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ground layer | grasses, sedges and rushes | *Juncus acutiflorus* | Sharp-flowered Rush | | | | | | O | F | | | | | | | | | |
| | | *Juncus conglomeratus* | Compact Rush | | R | | | | | | | | | | | | | | |
| | | *Juncus effusus* | Soft-rush | | R | | | R | A | F | | R | | | R | R | R | | |
| | | *Juncus inflexus* | Hard Rush | | | | R | | | | | | | | | | | | |
| | | *Lolium perenne* | Perennial Rye-grass | | A | | | | | | | | | | | | | | |
| | | *Poa pratensis* | Smooth Meadow-grass | | A | R | | | | | | | | | | | | | |
| | | *Poa trivialis* | Rough Meadow-grass | | | | | | | | | O | R | | | | | | |
| ground layer | trees, shrubs and woody climbers | *Acer pseudoplatanus* | Sycamore | | | | | | | | | | R | | R | R | | | |
| | | *Calystegia sepium* | Hedge Bindweed | | | | | | | F | | | | O | | | O | | |
| | | *Fraxinus excelsior* | Ash | | | | | | | | | | R | | | R | R | | |
| | | *Hedera helix* | Ivy | | | | | | | | A | O | A | | A | O | | D | R |
| | | *Ilex aquifolium* | Holly | | | | | | | | | | R | | R | | | | R |
| | | *Ligustrum vulgare* | Wild Privet | | | | | | | | | | | | | | | | R |
| | | *Lonicera periclymenum* | Honeysuckle | | | | | | | | | R | R | | | | | O | R |
| | | *Prunus spinosa* | Blackthorn | | | | | | | | | | | | | | | | R |
| | | *Quercus robur* | Pedunculate Oak | | | | R | | | | | | R | | | | | | |
| | | *Rubus fruticosus agg.* | Blackberry | | O | R | R | O | O | O | F | F | F | | R | O | O | | R |
| | | *Sambucus nigra* | Elder | | | | R | | | | | | | | R | | | | |
| | | *Ulex europaeus* | Gorse | | O | | R | R | | | | | | F | | R | | | R |
| | | *Ulmus sp.* | Elm | | | | | | | | | | R | | | | | | |

DAFOR scale: D = dominant; A = abundant; F = frequent; O = occasional; R = rare. Habitats are indicated by habitat codes from Fossitt (2007).

## INVERTEBRATES

Detailed invertebrate surveys were not included in the scope of survey work for the Glounthaune Community Biodiversity Action Plan. However, a number of invertebrate species were recorded as incidental records during the habitat and vegetation surveys. These are listed in Table A3.3, along with other invertebrate records for the study area.

Table A3.3. Invertebrate species recorded in the study area.

| Group | Scientific name | Common name | Source | Notes | Status |
|---|---|---|---|---|---|
| Dragonflies and damselflies | *Anax imperator* | Emperor Dragonfly | NBDC | one record | |
| Grasshoppers and crickets | *Omocestus viridulus* | Common Green Grasshopper | this survey | occasional | |
| Beetles | *Lilioceris lilii* | Lily Beetle | NBDC | one record | invasive species |
| Flies | *Drosophila funebris* | a fruit fly | NBDC | one record | |
| | *Eristalis arbustorum* | a hoverfly | this survey | frequent | |
| | *Eristalis tenax* | a hoverfly | this survey | frequent | |
| | *Helophilus pendulus* | a hoverfly | this survey | occasional | |
| Bees, ants and wasps | *Bombus lapidarius* | Red-tailed Bumblebee | this survey | one record | near-threatened |
| | *Bombus pascuorum* | Common Carder Bumblebee | this survey | frequent | |
| | *Halictus rubicundus* | a solitary bee | this survey | one record | |
| | *Vespula vulgaris* | Common Wasp | this survey | occasional | |
| Butterflies | *Aglais urticae* | Small Tortoiseshell | this survey | occasional | |
| | *Aphantopus hyperantus* | Ringlet | this survey | occasional | |
| | *Maniola jurtina* | Meadow Brown | this survey | occasional | |
| | *Pieris rapae* | Small White | this survey | one record | |
| | *Polygonia c-album* | Comma | this survey | one record (see text) | |
| | *Vanessa atalanta* | Red Admiral | this survey | occasional | |
| Moths | *Cydia ulicetana* | a moth | NBDC | one record | |
| | *Elachista argentella* | a moth | NBDC | one record | |
| | *Elachista rufocinerea* | a moth | NBDC | one record | |
| | *Epinotia immundana* | a moth | NBDC | one record | |

Source: NBDC = Butterflies of Ireland, Dragonfly Records, General Biodiversity Records from Ireland, Moths Ireland and National Invasive Species Database datasets held by the National Biodiversity Data Centre ; this survey = habitat and vegetation surveys carried out by Tom Gittings for the Glounthaune Community Biodiversity Action Plan, July-September 2020.

## BIRDS

During the habitat survey field walkover work, checklists were recorded of all bird species observed. Across all the habitat survey work, a total of seven separate checklists were recorded. These covered a total duration of 956 minutes and a total length travelled of 27.5 km. The species recorded on these checklists are listed in Table A3.4, along with their frequency of occurrence (the

percentage of checklists that they were recorded) and their relative abundance (the total birds per hour recorded across all the checklists). Table A3.4 also records additional species that have been recorded in the study area from other sources.

Table A3.4. Bird species recorded in the study area.

| Species | *Scientific Name* | Source | Frequency | Birds-hour | Status |
|---|---|---|---|---|---|
| Mallard | *Anas platyrhynchos* | NBDC | - | - | |
| Buzzard | *Buteo buteo* | this survey | 43% | 0.2 | |
| Whimbrel | *Numenius phaeopus* | this survey | 14% | 0.0 | |
| Curlew | *Numenius arquata* | this survey | 14% | 0.4 | SPA |
| Black-tailed Godwit | *Limosa limosa* | other | - | - | SPA |
| Black-headed Gull | *Chroicocephalus ridibundus* | this survey | 29% | 28.0 | SPA |
| Lesser Black-backed Gull | *Larus fuscus* | this survey | 29% | 0.4 | SPA |
| Feral Pigeon | *Columba livia* | this survey | 14% | 0.1 | |
| Woodpigeon | *Columba palumbus* | this survey | 86% | 7.5 | |
| Magpie | *Pica pica* | this survey | 100% | 1.2 | |
| Jackdaw | *Corvus monedula* | this survey | 100% | 9.1 | |
| Rook | *Corvus frugilegus* | this survey | 86% | 31.2 | |
| Hooded Crow | *Corvus cornix* | this survey | 71% | 1.0 | |
| Goldcrest | *Regulus regulus* | this survey | 14% | 0.0 | |
| Blue Tit | *Cyanistes caeruleus* | this survey | 86% | 1.4 | |
| Great Tit | *Parus major* | this survey | 57% | 0.4 | |
| Swallow | *Hirundo rustica* | this survey | 29% | 1.5 | |
| Chiffchaff | *Phylloscopus collybita* | this survey | 43% | 1.6 | |
| Blackcap | *Sylvia atricapilla* | this survey | 29% | 0.5 | |
| Treecreeper | *Certhia familiaris* | this survey | 14% | 0.1 | |
| Wren | *Troglodytes troglodytes* | this survey | 100% | 1.8 | |
| Starling | *Sturnus vulgaris* | this survey | 14% | 0.2 | |
| Blackbird | *Turdus merula* | this survey | 57% | 0.6 | |
| Song Thrush | *Turdus philomelos* | this survey | 14% | 0.0 | |
| Robin | *Erithacus rubecula* | this survey | 100% | 2.4 | |
| Stonechat | *Saxicola torquatus* | this survey | 29% | 0.9 | |
| Wheatear | *Oenanthe oenanthe* | this survey | 14% | 0.7 | |
| Dunnock | *Prunella modularis* | this survey | 57% | 1.1 | |
| House Sparrow | *Passer domesticus* | this survey | 14% | 0.3 | |
| Grey Wagtail | *Motacilla cinerea* | this survey | 14% | 0.0 | |
| Pied Wagtail | *Motacilla alba yarelli* | this survey | 57% | 0.3 | |
| Meadow Pipit | *Anthus pratensis* | this survey | 57% | 0.4 | |
| Chaffinch | *Fringilla coelebs* | this survey | 57% | 0.8 | |
| Bullfinch | *Pyrrhula pyrrhula* | NBDC | - | - | |
| Linnet | *Carduelis cannabina* | this survey | 29% | 0.8 | |
| Goldfinch | *Carduelis carduelis* | this survey | 86% | 0.9 | |
| Yellowhammer | *Emberiza citrinella* | this survey | 29% | 0.7 | |

Frequency is the percentage of checklists during which the species was recorded. Birds/hour is the total number of birds recorded across all checklists, divided by the total survey duration across all checklists. Status: SPA = species that are qualifying interests of the Cork Harbour SPA. Source: NBDC = Birds of Ireland dataset held by the National Biodiversity Data Centre; this survey = habitat and vegetation surveys carried out by Tom Gittings for the Glounthaune Community Biodiversity Action Plan, July-September 2020; other = other observations by Tom Gittings.

## OTHER FAUNA

Table A3.5. Amphibian and mammal species recorded in the study area.

| Group | Common name | Scientific name | Source | Notes | Status |
|---|---|---|---|---|---|
| Amphibians | Common Frog | *Rana temporaria* | NBDC | four records | protected species |
| Mammals | Red Squirrel | *Sciurus vulgaris* | NBDC; this survey | five records | protected species |
| | Badger | *Meles meles* | this survey | three records | protected species |
| | Red Fox | *Vulpes vulpes* | NBDC; this survey | widespread | |
| | Irish Hare | *Lepus timidus hibernicus* | NBDC; this survey | two records | protected species |
| | Rabbit | *Oryctolagus cuniculus* | NBDC; this survey | widespread | invasive species |

Source: NBDC = Atlas of Mammals in Ireland 2010-2015 and Mammals of Ireland 2016-2025 datasets held by the National Biodiversity Data Centre ; this survey = habitat and vegetation surveys carried out by Tom Gittings for the Glounthaune Community Biodiversity Action Plan, July-September 2020.