NEWTOWNSHANDRUM COMMUNITY BIODIVERSITY ACTION PLAN

funded by Community Foundation Ireland

MARCH 21, 2024

PHOEBE O'BRIEN BOTANY

NEWTOWNSHANDRUM COMMUNITY BIODIVERSITY ACTION PLAN

Table of Contents

Summary

The Newtownshandrum survey 2023 found 130 vascular plant species, in grassland, farmland, hedgerows and aquatic habitats in Newtownshandrum. A practical action plan focusing on these habitats was developed with community engagement to protect the current biodiversity and improve the quality of the habitats where possible.

Several events took place to engage with diverse groups in the community and explore their interests. These interactions informed the suggestions and recommendations in the Biodiversity Action Plan. Newtownshandrum Tidy Towns reviewed pollinator friendly planting through the village, discussed the maintenance of council areas and the quality of amenity grassland. A workshop with the school took place to explore our understanding of the ecological webs around us and inspire ongoing monitoring and recording of flowers and insects. Another event focused on farmers regarding the actions they are taking to support biodiversity in the greater area and how the community can support those actions.

The Biodiversity Action Plan for Newtownshandrum suggests several actions for the main areas in the village; focusing on grass cutting for biodiversity, actions to support bees and birds in the area and the creation of a nectar trail through the village via planting in the Tidy Town's containers and beds.

Additional actions for the wider area include improving water quality and working with the farming community. Monitoring Crab Apples, Pyramidal Orchids and grassland diversity is suggested for future work with the Green School and citizen scientists.

Many thanks to Angie Deering, Mary Murphy, Eileen Noonan, Nora Noonan and Joan Reidy for being so engaging and helpful.

FIGURE 1 PYRAMIDAL ORCHID

Introduction

In early 2023, Newtownshandrum Tidy Towns and Community Association secured funding from the Community Foundation Ireland (CFI) to appoint an ecologist to assist in the preparation of a biodiversity action plan for the village. Phoebe O'Brien, a panel ecologist with CFI, was appointed.

The funding specification was for an ecological study within the Newtownshandrum area with a focus on the following areas:
(1) The local G.A.A Grounds is a large space with surrounding ditches,
(2) Extensive green areas owned by the County Council.
(3) Church grounds and graveyard.
(4) 3 private Housing Estates
(5) a Glen area adjacent to the village with a stream and mature trees.

Background

Newtownshandrum (Baile Nua Sheandroma) is a small village in County Cork, west of Charleville and surrounded by dairy country. The name translates from Irish to mean 'new town of the old ridge'. The area is rich in biodiversity where farming and protection of the environment co-exist via schemes such as Glas which encourages the protection of hedgerows and streams. A recent EIP (European Innovation Partnership Scheme) focused on the Deel river water quality and actions were taken to improve ground water by tree planting near the tributary that flows from spring wells in the village. The community at large are keenly supportive of biodiversity initiatives and have completed several projects over the last few years, such as the Centenary Garden commemorating the 1916 Rising, and creation of a wildflower area, heritage orchard and pollinator friendly planting at the Schoolhouse Cross. An area where a stream had been completely covered over by briars and bushes was opened up, the stream was cleaned, stepping stones were built for easy access, a stone wall was erected, and a viewing area was created with placed pollinator friendly plants.

Aims:

- To raise awareness of biodiversity by improving and enhancing habitats at a local level through collaboration with all clubs and associations
- To involve, educate and support the farming community, the school, the sporting organisations, businesses and the wider community.

Maps

The area of focus for the study is shown below. The lane ways to the east and south, the Deel tributary, and community orchard at the Schoolhouse Cross were included.

For data collection purposes, Ireland is described in 10km-by-10km square areas, which are called hectads. They are further divided to 2km-by-2km squares (tetrads) which contain four 1km by 1km squares (monads). Newtownshandrum is in the hectad R42, in tetrad R42Q and monad R4721. If searching for records or uploading data from monitoring, please use these codes.

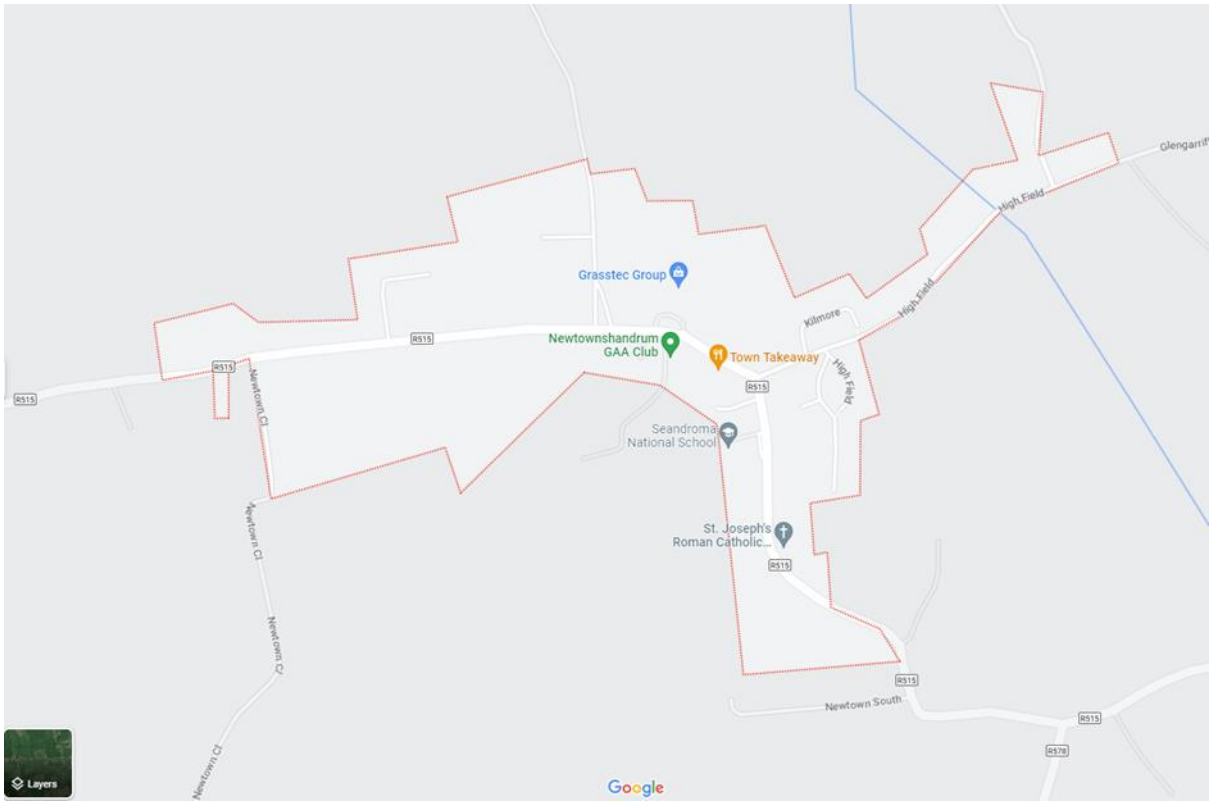


FIGURE 2 THE NEWTOWNSHANDRUM TOWNLAND BOUNDARY (RED) ENCLOSES THE MAIN AREA OF FOCUS FOR THE ACTION PLAN

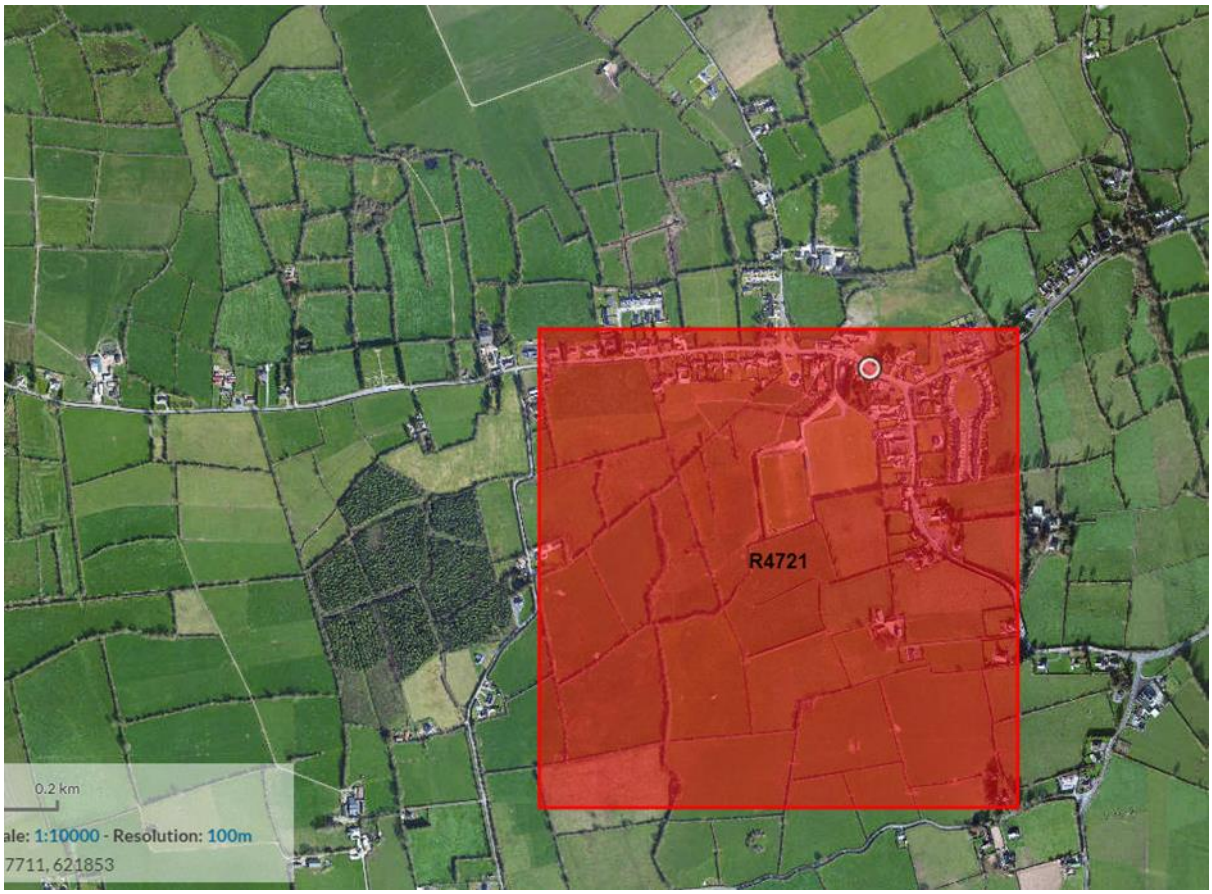


FIGURE 3 MOST OF THE VILLAGE LIES WITHIN THE 1KM SQUARE (MONAD) R4721

Consultation

Species in the area were well recorded prior to the survey. Goeff Hunt wrote an inventory of the biodiversity of Newtownshandrum in 2019, which gave species lists across many groups. Maria Long (NPWS) had also provided a species list of grassland and hedgerow vascular plants.

The community were particularly interested in getting help with planning actions to help these species. Short surveys updated records in the areas outlined by the funding specification. To develop ideas for actions we invited ecologist and gardener Linda Gilsenan to give a practical demonstration how planting through the village can be increasingly beneficial for wildlife. This resulted in designer Niall Maxwell drawing up a suggested planting scheme. (see Appendix).

The Deel Spatially Targeted Buffers EIP focused on the promotion of biodiversity through collaboration amongst farming groups, community, partners, and Ballyhoura Development. The initiative to improve water quality and biodiversity in the waterbodies known as Deel_020 in North Cork and Deel_050 in Limerick ended in 2022. This focused on improving water quality through creation of buffer zones and tree planting in 'flow pathways' to intercept and take up phosphorus. Phosphorus is lost from the land to drains/streams and the main river channel through overland flow during and after heavy rainfall. At the start of the project water quality was found to have Phosphate levels are 2 to 3 times higher than they should be. Phosphate is the nutrient of concern in this catchment wetlands and riparian planting are key areas for ongoing work in the community. Another nutrient of concern is ammonium which is also showing up at twice the recommended level.

Liz Gabbett the Project Officer from The Maigue Rivers Trust (www.maigueriverstrust.ie) suggested we look out for crayfish. To find these in the tributary of the Deel would be very exciting as the crayfish plague has decimated the population downstream. She also suggested getting in touch with Mike O'Connor, a Blue Dot ecologist and staff member at IRD Duhallow to ask him to help with invertebrate surveys.

The Local Authority Waters Programme (LAWPRO) was contacted to see how they can collaborate with the community to find and implement solutions to reduce high levels of undesirable chemicals. Some of the potential areas for grant funded help could be reinstallation of the Holy Well, and helping GAA with waste to avoid nutrients leaching in the wetland where the Maigue and Deel rivers have tributary springs.

The schoolchildren took part in a survey of the local GAA grounds to see how much clover was growing in the sward. Plants flowering in short grass are an excellent source of pollen and nectar for insects.

Donal Sheehan shared his experience with Farming for Nature over tea with local farmers to add their actions they had taken for biodiversity to feed into the local action plan. Donal Sheehan was involved in The BRIDE (Biodiversity Regeneration in a Dairying Environment) EIP Project, and he is an ambassador for Farming for Nature. The event was written up in the local newspapers.

Donal stressed the need for farmers to listen to what their customers are looking for and importantly vice versa. How can the community work with farmers to support nature? This was the beginning of a great opportunity for connection and understanding, it is hoped that the event will become a regular event in the village.

By discussing what actions farmers can do, Donal drew attention to the need for land to come out of production. This could be via the creation of hedgerows, and Donal gave instructions based on his experience and provided materials which explained in detail how to do the various actions.

The BRIDE project was not the only organisation to support the event. The All-Ireland Pollinator plan sent solitary bee posters and swatch booklets for insect identification; National Parks and Wildlife Service (NPWS) provided a range of learning materials and books 'Farming for Nature'; Irish Seed Savers Association, whose apples trees are being planted by many farmers on the ACRES program, sent gift boxes of flower and vegetable seeds. Even a family farm business Wild Irish Foragers sent some of their hedgerow jellies in support of farmer-to-farmer connections.

Data Collection and survey methodology

Desktop research was carried out to add information from the National Biodiversity Data Centre for the surrounding 2km x 2km (tetrad) areas and R42 (hectad). Searches were made about nearby protected habitats and species. The Deel EIP was asked for the results of the project.

Walkover surveys of the townland and surrounding area looked at plants, hedgerows and water bodies.

Land history.

Historical Newtownshandrum is shown on the maps below from the Ordnance Survey Ireland Geohive website. Many of the field boundaries remain the same, which means that there are old trees, and that local biodiversity has been largely undisturbed in hedgerows. While the main road at the School House Cross has been straightened, this has allowed for an area of grassland, now planted with biodiversity in mind. The long gardens in the village would have been tended for crops. Some of the fields in the village are now part of the GAA grounds. Both the 6 inch and 25-inch maps were consulted, these range back to the early 1800s.

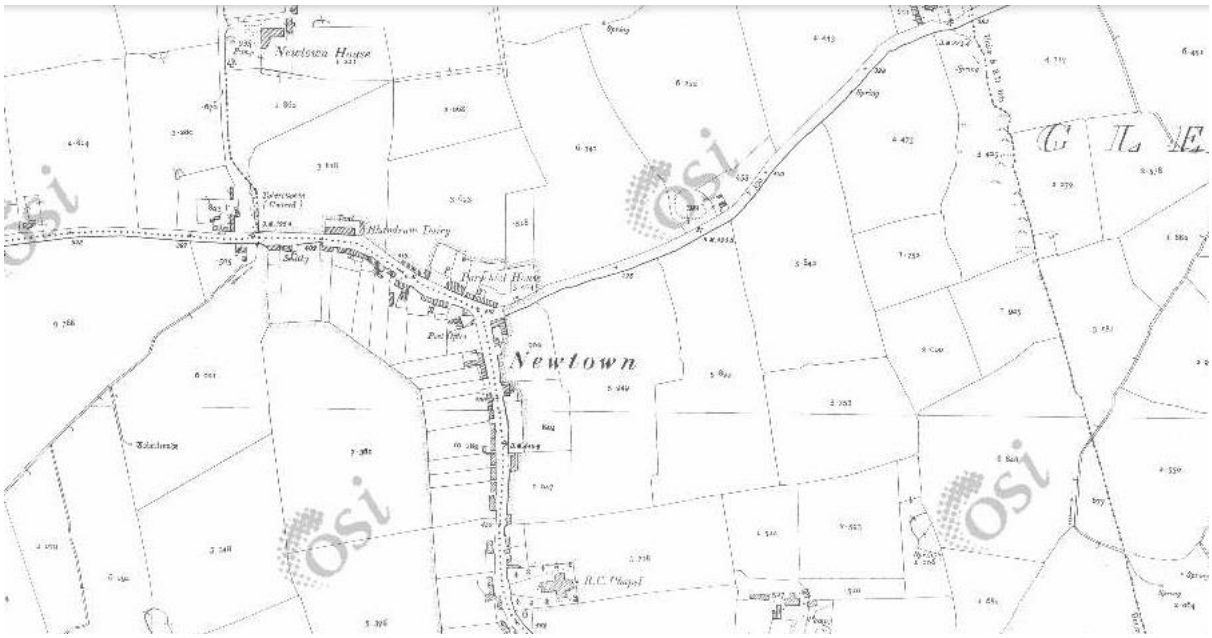


FIGURE 4 ORDNANCE SERVICE IRELAND (OSI) MAP OF NEWTOWNSHANDRUM C 1830

OSI Map Genie 25-inch map shows that much of the village remains the same as in the early 1800's.

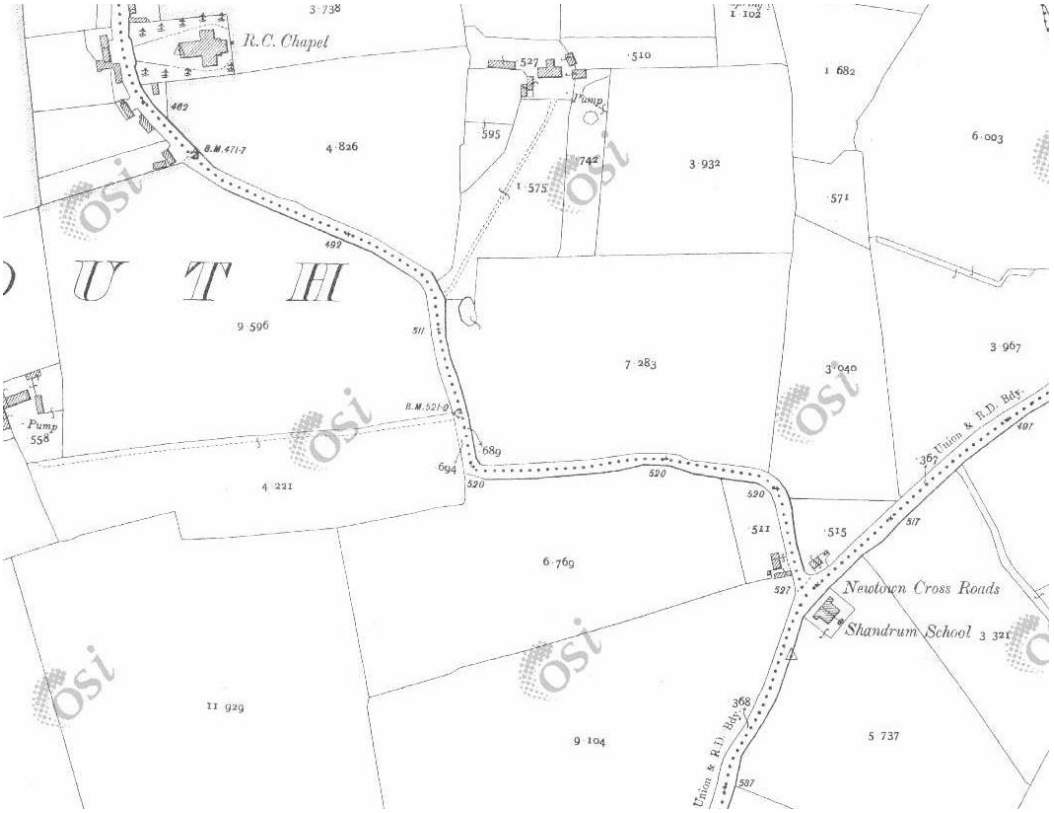


FIGURE 5 OSI MAP OF NEWTOWN SOUTH

Saint Joseph's Catholic church in the centre of the village was built after the famine by the community. The old Shandrum school was at the Schoolhouse Cross before the new primary school was built in the centre of the village.

FIGURE 6 NEWTOWN HOUSE

Historic environment viewer shows several sites in Newtownshandrum: St Joseph's church, the holy well known as St. Sinnades Well, Toberlenade, Valley Mount House, vernacular houses, and ringforts to south and north of the village.

FIGURE 7 VERNACULAR HOUSE AT CLARSON'S CROSSROAD WITH UNIQUELY CARVED FASCIA

Some of the buildings are also listed on the National Inventory of Architectural Heritage, such as the thatched house at Clarson's Crossroads. The built environment sets the scene for the habitats and species found in the village, and also allows for actions to reflect the very local cultural and environmental heritage of the area. Biodiversity Trails can consider some of these elements to interpret the plants and animals found though the townland.

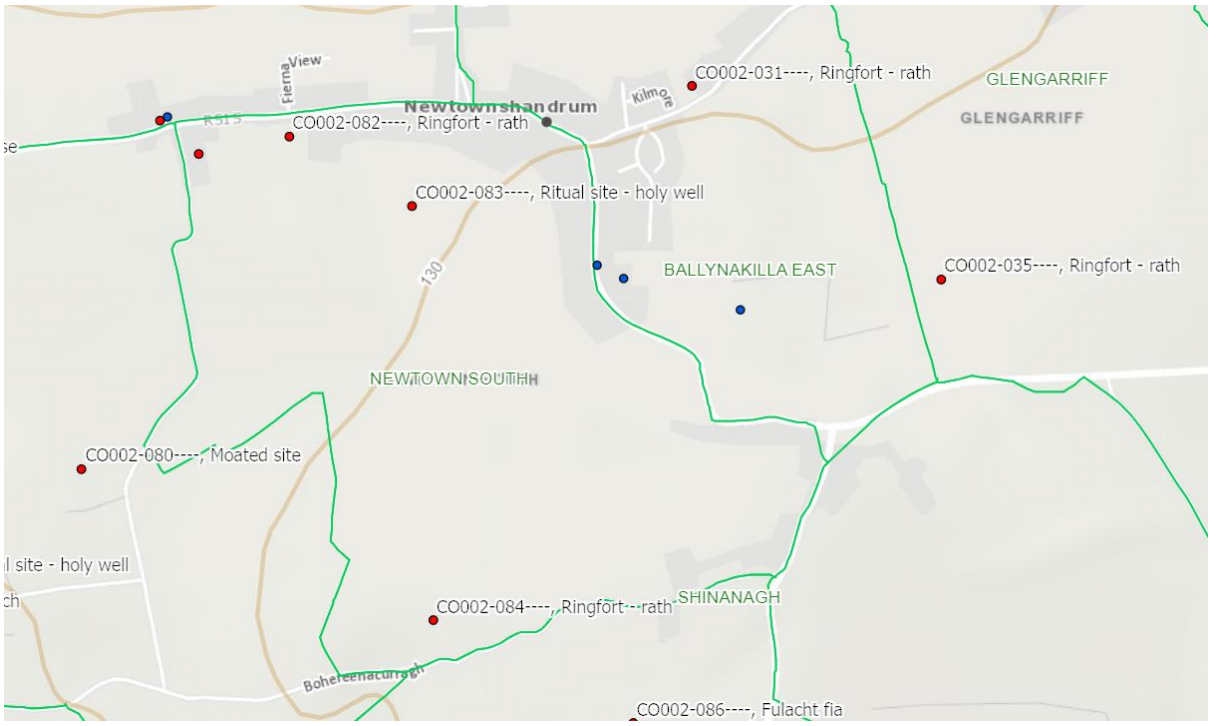


FIGURE 8 HISTORIC SITES IN NEWTOWNSHANDRUM

CO002-031: Ringfort BALLYNAKILLA EAST

Description in 2009: In level pasture, within roughly square, overgrown field (c. 40m N-S; c. 38m E-W). Circular raised area (25.5m NW-SE) enclosed by earthen bank (int. H 0.5m; ext. H 1.5m). Area to N and NE impenetrable due to heavy overgrowth; bank here shown as incorporated into NE corner of square field on 1905 and 1936 OS 6-inch maps. Bank and interior quarried into on E side. The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 4: North Cork' (Dublin: Stationery Office, 2000). In some instances, the entries have been revised and updated in the light of recent research. Date of upload/revision: 14 January 2009.

CO002-083 Ritual site holy well NEWTOWN SOUTH

Description: In pasture, on E side of field fence. Well, lined with wall of stone and cement. Wall built up on one side to encase flat unmarked slab. Metal cross mounted on top of wall. According to local information, 'visited in May and associated with Our Lady'. Local tradition that well moved to here from its original site at Crannavella Tree (14044) c. 1.4km to SW following use of well water for washing. Dunworth (1989, 51) names it 'Tobarineid that is St Sinnades well' and noted that it 'contained a cure for eye complaints and in the old days people with sore eyes used to come to it from far and near.' He (ibid.) also noted that it had a 'pattern day' but does not give a date. The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 4: North Cork' (Dublin: Stationery Office, 2000).

CO002-084 Ringfort rath NEWTOWN SOUTH

Description: In pasture, on S-facing slope. Depicted as hachured circular enclosure (diam. c. 25m) on 1842 OS 6-inch map; E portion of enclosure shown as levelled on 1905 and 1936 OS 6-inch maps. Circular area (32m N-S) defined by earthen bank (H 1.75m) SE->NE with external fosse (D 0.65m) E->NE. Bank partially overgrown with trees; interior under pasture. The above description is derived from the published 'Archaeological Inventory of County Cork. Volume 4: North Cork' (Dublin: Stationery Office, 2000).

During the survey we looked at some of the other older buildings, the site of Newtown House and its tree-lined fields and the Marian Shrine.

Life in Newtown

The school records from 1938 discusses the work and farm life in the area. It is an area primarily focused on milk production, as it is now.

'Chief industry dairy farming Milch cow's principal means of livelihood Land n. much suitable for milch cows - not very much tillage done until recent years.'

But what tillage there was focused on a few crops – *'very little tillage done beyond that necessary for house and animals. Potatoes, mangolds, turnips heaps of cabbage - Beet for Mallow and cows are grown.'*

This still shows in the vegetation and plant species are primarily those of grassland, weeds of tillage and hedgerow species, with no great changes in land usage. Members of the community shared memories of working together cutting hay, making square bales and jams from the local hedgerows.

Surveys and inventory

Habitats:

Built Habitats: Example Old buildings, stone walls, Marian Shrine and bridges. Amazing vernacular buildings with hipped tin roofs, a local speciality.

FIGURE 9 STONE WALLS WITH RUSTY BACK FERN AND LICHENS

Walls can be great habitats for invertebrates particularly when covered in lichens, mosses and small ferns like Rusty Back.

Flower gardens and flower beds: Borders alongside the GAA grounds, and church carpark. There is plenty of diversity in the choice of horticultural bedding and perennials.

Arable crops: Grasstec seed trial areas might fit best in this category. The area would have had some other fields under tillage in the past, and these might still be reflected in the soil seed bank when earth is exposed.

GA1: Improved grassland surrounded by a variety of hedgerows. Primarily with a long history of production. Some species mop up nutrients slowing their movement into the water courses. They are classed as negative indicators on some agricultural schemes but add species to otherwise low species numbers. Insects can utilise docks and nettles and be eaten by birds and other animals.

GA2: Amenity grassland. For the most part on short rotation cutting, so benefitting plants which grow low to the ground and have short flowering stems and associated insects.

GS2 some areas are left as longer meadows, in the top corner of the playing field, some other fields may be less improved and more akin to semi-natural grassland. These will have higher numbers of flowering species and support other fauna.

GS4 Some areas are semi-natural wet grassland, particularly where the springs rise.

WL2: Hedgerows and treelines. Newtown has both neat Hawthorn hedges and wider mixed deciduous species hedgerows with borders of tall herbs. https://hedgerows.ie/fireblight/

WD Small areas covered with stands of old trees are not quite big enough to function as woodland habitats, they are more parklands. Tree lines and hedgerows. They are some modified or more recently planted woodlands which are doing well.

FW Springs in semi-natural grassland, roadside and field boundary ditches. Open water at the well, in the Glen area.

Farm and ancient hedgerow survey at Newtownshandrum House found a very active honeybee hive in an outbuilding, a very exciting find meaning that there will be plenty of other nests in the area future years. It shows there is plenty of nectar and pollen for bees to forage for. We also found Pyramidal Orchids. These are the first records of orchids in the townland. There are in fact a fairly hardy species and hopefully will increase through the area. As they establish in grassland it is important to avoid mowing the plants as they start to flower. Some people like to place a few bricks around each plant to ensure the mower avoids them. The season is quite short, roughly May to the end of July.

Water sources and drainage ditches were another really exciting part of the survey. The springs which emerge in Seamus Kelleher's fields and other fields near the GAA grounds have the potential to provide habitat for native Crayfish. When the water is clean, before it picks up too much nitrate and phosphate, many insects and other aquatic plants and animals can live in ditches and small streams. The Deel EIP looked at water quality further downstream. Sadly, the Crayfish further down the river have the crayfish plague but the scientists involved are very excited about the potential for healthy populations nearer Newtownshandrum.

Grassland

Newtownshandrum has plenty of amenity grassland all of which is well managed as short sward. Fortunately, only a few problem plants were found growing in it: Three Cornered Leek, Himalayan Honeysuckle, Spanish Bluebell and just one piece of Japanese Knotweed.

No species were found which are on the Floral Protection Order but a new site for Pyramidal Orchids was found on an earth bank at Newtown House. This is the first time they have been found in the 10km square since 1990, and they are rarely recorded in Cork at all.

Hedgerows: Most of the hedgerows appear on the old maps and are in good condition. None connect pieces of old woodland, and this could be an opportunity to help create more ecological corridors. Many are associated with drainage ditches. In the village they are tightly cut to allow pedestrians to pass, while in the fields some older hedgerows with mature trees can be found, new planted whitethorn hedges are in others. Please remember that native species are best for filling gaps if natural regeneration is not possible. Avoid imported saplings. The school children could collect chestnuts and acorns locally and grow them at school, with a few extras just in case germination doesn't go as planned.

FIGURE 10 HEDGEROW FLORA WITH MEADOWSWEET, GREATER STICHWORT AND GERMANDER SPEEDWELL

At the base of hedgerows, and field margins Greater Stitchwort and Germander Speedwell grow among other herbs and tall grasses.

Particularly good examples were at Ger and Julie O'Sullivan's farm, the site of the former Newtown House. Here there are wide double banks and ditches, with an understory of herbs and mosses and liverworts.

FIGURE 11 PHOTO OF NEWTOWN HOUSE, ONLY THE BARNS AND FIELD MARGINS WITH MATURE TREES REMAIN

Ditches and water bodies: The water quality in the Maigue and Deel has improved quality from at risk to potentially moderate over the last few years. This is very good news, but more can be done. The Deel Spatially Targeted EIP newsletter from January 2022 mentions phosphates 2 to 3 times higher than they should be and ammonium at twice the level it should be. Creation of a healthy wetland to develop around the source of the rivers and their tributaries would go a long way to improve water quality. This would slow sediment too. The less disturbance of the ditches, the better. In general, shaded banks protect the ditch from becoming clogged with vegetation. Many of the river quality issues are located downstream, but much can also be achieved in Newtownshandrum.

Area by area walkover

FIGURE 12 NEWTOWNSHANDRUM'S VERNACULAR BUILDINGS

Vernacular buildings with hipped tin roofs,originally would have been thatched.

The Car Park at St Joseph's Catholic church

There is a border between the car park and the church, which is planted with mature horticultural shrubs, including Cherry Laurel and a Lonicera species, which was in flower with many visiting bees on the day of visit.

Church grounds and graveyard

Lesser celandine and Good Friday Grass (AKA Field woodrush) and white clover in short but diverse grass. Mature Hornbeam trees. Stone walls with small ferns.

Planters through the village had just gone-over daffodils. We discussed using the new planting guidance from the All-Ireland Pollinator plan to select species. But also extending the planting through the winter where possible. One planter outside the GAA has Lavenders, it might be nice to extend the planting towards a community herb bed with Chives, Feverfew, and Sage, to compliment the other herb bed at the orchard.

Village sidewalk and hedges

At the time of survey, it was nice to see Rue-leaved saxifrage a tiny white flowered annual species which harmlessly grows in the cracks of the pavement and on walls.

Cow parsley plants were not yet in flower, among some nettles, brambles and other plants used by insects and birds. We discussed where signage can be used to show the importance of areas which are not so 'tidy.'

Lonicera nitida, Poor man's box hedging is hard to keep neat, a non-native species. Elsewhere Privet shows that older hedgerow species which were planted in older times are still present in the village. Hedgerows are a mixture of traditional garden plants and native woody species.

We discussed keeping a traditional feeling of the heritage of Newtownshandrum. The corrugated steep rooves of the older buildings are unusual and worth preserving. Tin and cement can become habitats for lichen and mosses. In terms of garden design, the grey painted walls and rooves make an excellent backdrop for fresh green foliage and cream to pink flowers such as Apple and Cherry blossom through the village. As in the Burren Program, farmers are asked to think about the stone walling style and gates design as it can keep local businesses in work and creates a tidy look around wilder areas.

An Eircom building/shed in the village has a small dark yard at the roadside which is full of rubbish and has been treated with herbicide. If possible, plant this area with shade loving, low growing and easy maintenance plants: ivy snowdrops and crocuses.

Throughout the village there is a lot of plastic weed supressing fabric topped with gravel. In some areas it is unnecessary as there are established shrubs in short grass, maintained by the shade they cast and the grass cutting. In the east side of the GAA grounds the mulch has been grown over by weeds. I would recommend a policy of discontinuing the use of plastic to establish planting. Biodegradable farm plastic mulch is available from Sanco Systems in Adare (Samco.ie).

Remove the plastic bit by bit from the village.

At **the GAA entrance to the playing fields** there is a shady ditch, possibly wet in winter. This was one of the few places in the village with woodland species. Primrose, Woundwort and Cuckoo pint (Lords and Ladies) present. Some probably hybrid/Spanish Bluebells, both are invasive species. Lots of an old introduced plant called Alexanders, these smells of myrrh. It is important that debris from stimming or hedge maintenance is not thrown in the ditch. The village might consider buying a mulcher to help with this and other compostable materials. Mulch from woody

plants could be used as an alternative to gravel.

FIGURE 13 SPECIES RICH BANK AT THE GAA GROUND

The planting on the fabric along the eastern side of the playing fields includes older shrubs, which produce fruits which birds like to eat in the Autumn. Some of these shrubs are starting to spread in the UK, so it is important to keep an eye on them. *Cotoneaster horizontalis* is one for removal, as it is already causing problems in Ireland. It spreads by seed and layering.

We were delighted to see a Goldfinch flying near the caged rocks. Goldfinches like to eat seeds from wild herbs, so it will be beneficial to consider leaving some areas of grass longer on this side, or plant herbs into the border which birds can forage.

Gorse growing on the bank will offer local fauna a source of food during most of the year.

Behind the scoreboard there is a bench and planting in longer grass.

This area shows some nutrient enrichment from clippings composting, so has quite strong grass growth. There are Grape hyacinths, daffodils and crocuses planted in the grass with native Cuckoo flower (Lady's smock) and Selfheal. Cutting in late Spring as soon as the daffodils have finished will help keep this area as an early meadow.

Shady brook and dipping well at Dean Macnamara Place

Cuckoo flower is also present in the grassy square near the well. Missing a cut or two of the grass in both these areas will allow the pink flowers to grow. Orange tip butterflies in particular lay their eggs on this species, so ideally leave lots to grow to maturity through the village. It can be propagated from leaf cuttings.

The well area has a good compost pile. Creating good compost through the village would be great so that the nutrient rich resulting compost can be used to feed more nutrient-demanding flowers. It could also be used to grow vegetables if you decide to start a community garden.

The well is a beautiful place to relax in. Nigella has self-seeded into the gravel. Other annuals could be encouraged here, such as fumitory, red deadnettle, Herb Robert. It would be nice to seed a few more shade loving plants in the bank such as native Violets and Wild Strawberries.

The community might be interested in starting a Butterfly Transect or Flower Insect Timed Count for which an app is available from the National Biodiversity Data Centre. The results can be included in the BAP.

https://biodiversityireland.ie/surveys/fit-counts/#:~:text=FIT%20Counts%20are%20very%20simple,change%20in%20their%20local%20biodiversity.

https://biodiversityireland.ie/surveys/butterfly-monitoring-scheme/

https://pollinators.ie/wp-content/uploads/2023/04/Top-Ten-pollinator-plants-Guide-WEB.pdf

The Grotto

FIGURE 14 FORMAL AND NATIVE PLANTING AT THE GROTTO

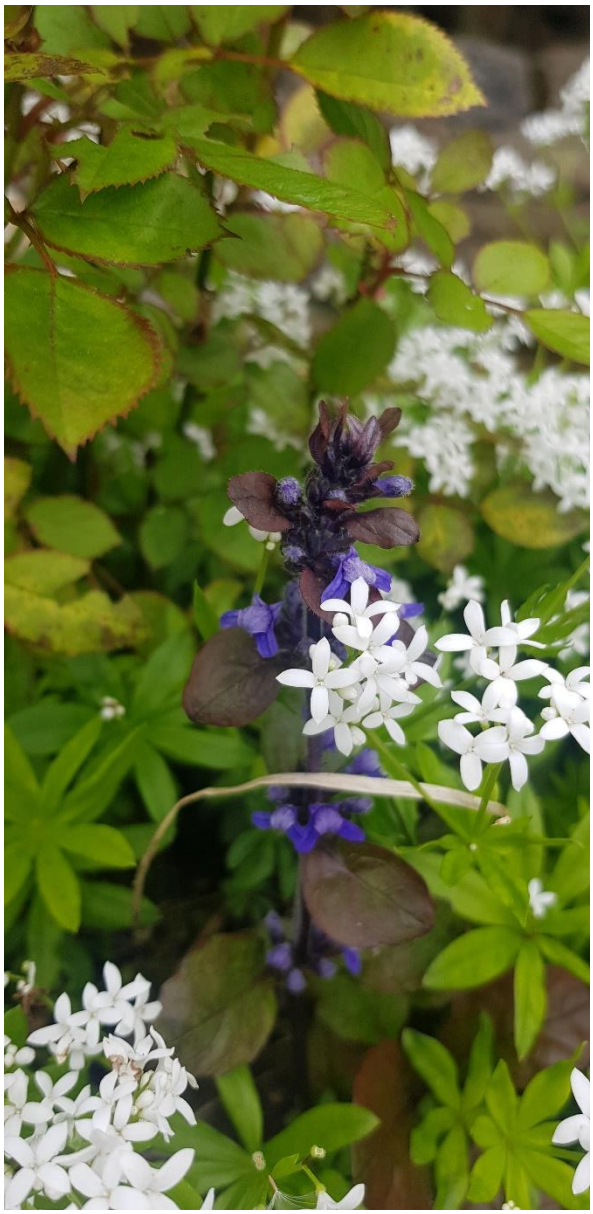


FIGURE 15 SWEET WOODRUFF AND BUGLE

A large elder tree, female Holly trees and quite hard pruned shrubs. In the gravel and borders there are daisies, Lesser celandine, Lord's and Ladies, Oxeye Daisies and lots of small native plants taking advantage of the decreased shade. Remove the Spanish and hybrid Bluebells, they are not native. The front of the Grotto has a pretty combination of Sweet Woodruff and Bugle, with Hart's tongue ferns, Roses and Saxifrages.

Roadside hedges and verges

The woody part of the hedgerows is tightly cut Hawthorn and Snowberry. Beneath is a verge of Cocksfoot grass, Nettles, Bush Vetch, and Meadow Vetchling. The steeper bank is species rich and benefits from the tight cut it receives in midsummer. Here, Ladies Bedstraw, Barren Strawberry, Herb Bennet, and Black Medic provide food for pollinators. Speckled Wood butterflies and Nomad bees were seen.

Biodiversity planting area with bee hotel and apple trees at the junction with the R578 School House Cross

One apple tree has died and should be replaced. Apple tree blossom is a good source of nectar for pollinators. The underplanting with a 'meadow' mix is still holding up but eventually should be changed to either more permanent planting or a more native seed source. Yellow Rattle seed can be spread around the rest of the grassy areas. At the back of the orchard is a dumping pile. This can be a habitat but needs attention to keep it functioning well. Towards the north at the main road there is some Japanese knotweed.

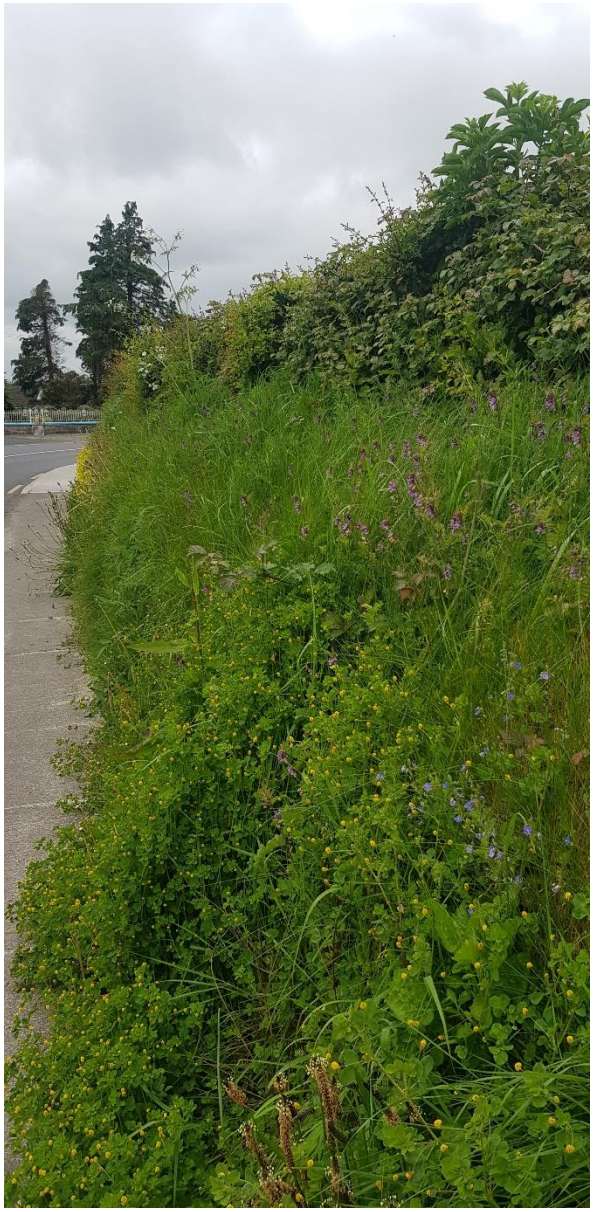


FIGURE 16 FLOWERING BANK ALONG THE PAVEMENT IS VISITED BY BEES AND BUTTERFLIES

Bed at the signpost

There are really nice plants here bordering a nettle bed and grass clipping pile. Alliums, Forget-me-nots create a luxurious burst of colour.

Across the road another planter has a mixture of perennials. Behind this are shrub borders with Guelder Rose and Copper Beech. Please remove the invasive the Himalayan Honeysuckle (Pheasant Berry). The short grass here, particularly on the thin soil covering the old road, is species rich. It could be kept as a meadow.

Two composting bins are a great addition here, but they may need to be emptied. A larger green waste area could be considered to keep things tidy.

FIGURE 17 ROADSIDE PLANTING OF TALL FLOWERS

FIGURE 18 COMPOST AND BEEHIVE AT THE SCHOOL HOUSE CROSS

The verges and hedges leading south toward Long's.

Fuchsia, Montbretia and Buddleia are all invasive so take care not to let them spread. The is some Ash dieback but the Hawthorn hedges are in good condition with an under story of Male Fern, Soft Shield fern and tall herbs. Elder and Sycamore add to tree diversity.

The laneway turning off Highfield has a ditch with a nice group of water loving wild plants including Brooklime and Great Willowherb. Three-cornered Leek should be carefully removed, being sure to keep footwear clean and not spread fragments.

At the **Glen area** a deep gorge allows water to pass into the river. There are ferns and mosses enjoying the cool shade beneath. Hazel, Hawthorn, Ash, and Elm make a high canopy. Look out for the small white flowers of Pignut in the spring here.

Opposite Ashwood Grove there is a well kept stonewall with ferns and small herbs. In the green at the estate, the grass has some nice red clover, ribwort plantain, white clover, and silverweed. Varying the cutting will allow some of these to flower and feed insects.

Further up the road the wall is covered with Virginia Creeper and Ivy Leaved toadflax. There may be herbicide being used here, which is a pity as this was the only place where we found Celery Leaved Buttercup, a rarely recorded species in North Cork.

Clarson's Crossroads Barns with swallows and two native Honeybee nests. Snowberry and Blackthorn hedges with Sycamore and Hawthorn above and some Vinca minor, Lords and Ladies, Ground ivy, ferns, and False Brome grasses

Bridge and water catchment area Deel tributary

At the old bridge there is native Crab Apple, quite a rarity in Ireland. The hedgerows continue to be species rich. There is an area of wet grassland between the forestry and water loving herbs in the ditch, all good signs that the catchment is being well looked after.

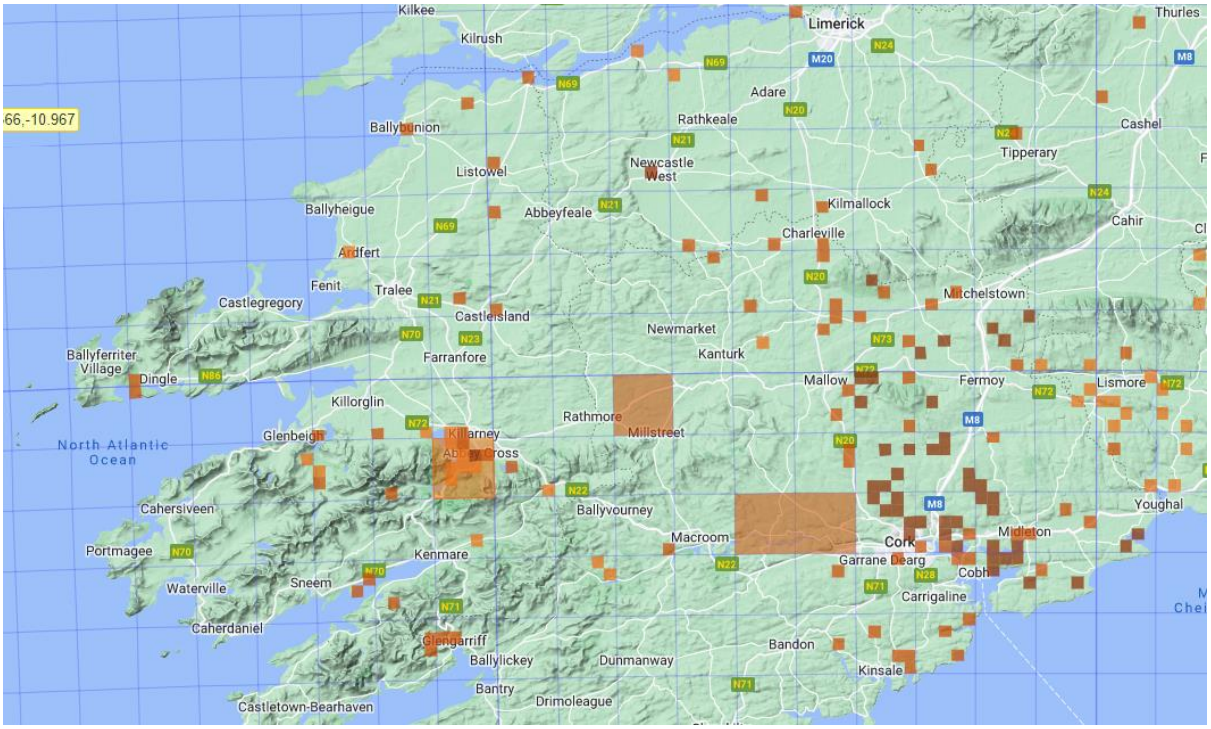


FIGURE 19 BSBI MAP SHOWING THE DISTRIBUTION OF CRAB APPLE

FIGURE 20 WET GRASSLAND AT THE DEEL TRIBUTARY

Species inventory

Birds recorded in the National Biodiversity Data Centre (NBDC) including data from Geoff Hunt

Peregrine Falcon (Falco peregrinus)	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex I Bird Species
Common Wood Pigeon (Columba palumbus)	Protected Species: Wildlife Acts || Protected Species: EU Birds Directive || Protected Species: EU Birds Directive >> Annex II, Section I Bird Species || Protected Species: EU Birds Directive >> Annex III, Section I Bird Species

Barn Swallow (Hirundo rustica)	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Common Linnet (Carduelis cannabina)	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Common Starling (Sturnus vulgaris)	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
House Martin (Delichon urbicum)	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
House Sparrow (Passer domesticus)	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Amber List
Black-headed Gull (Larus ridibundus)	Protected Species: Wildlife Acts || Threatened Species: Birds of Conservation Concern || Threatened Species: Birds of Conservation Concern >> Birds of Conservation Concern - Red List

Other birds to look out for:

- Black-billed Magpie (Pica pica)
- Blackcap (Sylvia atricapilla)
- Blue Tit (Cyanistes caeruleus)
- Chaffinch (Fringilla coelebs)
- Common Blackbird (Turdus merula)

- Common Bullfinch (Pyrrhula pyrrhula)
- Common Chiffchaff (Phylloscopus collybita)
- Eurasian Collared Dove (Streptopelia decaocto)
- Eurasian Jackdaw (Corvus monedula)
- European Goldfinch (Carduelis carduelis)
- European Greenfinch (Carduelis chloris)
- European Robin (Erithacus rubecula)
- Great Tit (Parus major)
- Grey Wagtail (Motacilla cinerea)
- Hooded Crow (Corvus cornix)
- Meadow Pipit (Anthus pratensis)
- Pied Wagtail (Motacilla alba subsp. yarrellii)
- Rook (Corvus frugilegus)
- Song Thrush (Turdus philomelos)
- Winter Wren (Troglodytes troglodytes)

Insects

Protected: Large Red Tailed Bumble Bee (Bombus (Melanobombus) lapidarius) Status Near threatened

- Green-veined White (Pieris napi)
- Holly Blue (Celastrina argiolus) Bombus lucorum agg.
- Early Bumble Bee (Bombus (Pyrobombus) pratorum)
- Early Mining Bee (Andrena (Trachandrena) haemorrhoa)
- Marsham's Nomad Bee (Nomada marshamella)
- Sloe Shieldbug (Dolycoris baccarum)
- Water Cricket (Velia (Plesiovelia) caprai)

Goeff Hunt recorded 49 butterflies, hoverflies, moths, and bees. There were no masonary bees or leaf cutting bees occupying the bee hotels. These are noticeable when they seal the ends of the tubes with mud or leaves.

Two Honeybee nest locations were at Clarson’s Crossroads and the Newtownshandrum house site.

Plants

FIGURE 21 CELERY LEAVED BUTTERCUP A RARELY RECORDED PLANT IN NORTH CORK

Celery leaved buttercup and Pyramidal Orchids were nice new additions to records form this survey. The survey found 130 plant species in Newtownshandrum. Full species lists can be found in the appendix.

The species are largely of diverse healthy hedgerows and verges, amenity grassland which is improving to potentially high nature value quality. Mature trees, even nonnative, are mature and producing seed which can be collected and grown by the school.

Springy turf moss is a nice moss found in every piece of amenity grassland in Newtownshandrum.

Invasive species

NBDC records for the village include:

- Butterfly-bush (Buddleja davidii) Invasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species
- Sycamore (Acer pseudoplatanus) nvasive Species: Invasive Species || Invasive Species: Invasive Species >> Medium Impact Invasive Species

Given the disease issues with Ash, Alder, and Hawthorn, leave Sycamore in situ. Buddlieja davidii Black knight is less likely to set seed.

The survey found Three-cornered Leek, Himalayan Honeysuckle, Japanese Knotweed which are all high priority for specialist removal. In the tetrad, remove Snowberry where it occurs and allow the habitat to regenerate naturally.

Community Biodiversity Action Plan

SWOT analysis of Newtownshandrum.

Strengths: Newtownshadrum has a wonderfully dedicated and active group which includes members of the Tidy Town and GAA. Their enthusiasm is a great strength. The recent Deel EIP has shown that local farmers can work together on actions for improving the quality of water in the local rivers. The community has great knowledge of the habitats and plants of the area.

Weaknesses: In a small village these members may be overwhelmed with work. The village itself is small and has few habitats available to the public.

Opportunities: The school is interested in participating in the creation of a new plant bordered path via the GAA ground. Some of the farmers are actively engaged in preserving biodiversity. The local housing estates are also enthusiastic to provide longer areas of grass and other actions for birds and bees. This offers the possibility of connection in the community to all discuss and work together on shared objectives.

Threats: Every community needs to adapt to changes due to climate change, and loss of biodiversity. Newtownshandrum can monitor the few invasive species in the area while providing connections to flora and fauna through the village and allowing further spread of wild native plants already present in the village. A well implemented slow approach to changes will be most beneficial.

Areas for practical actions

For each of the areas focused on by the survey, actions are suggested in blue which are expanded on below:

G.A.A Grounds is a large space with surrounding ditches, hedgerow, mature trees with lots of different species of birdlife and insects and surrounded by a walkway which is used daily by many walkers. Primary school children have access to the grounds.	***Actions: Grass cutting for short and long meadows, removal of weed suppressing fabric and tidying the shrub border, add local species of wildflowers to the banks, monitor low growing flowers and search for mining bee nests by school, management of green waste***
Extensive green areas owned by the County Council	***Actions: Grass cutting, flower bed planting for pollinators, pond, renovate and monitor the bee hotels***
Church grounds and graveyard.	***Actions: Protect mosses and lichens, optimise grass cutting for short meadow, flower boxes as continuation of the pollinator nectar trail.***
Private Housing Estates	***Actions: Grass cutting, flower bed planting for pollinators, bird feeding and addition of pollinator friendly plants***
Glen area adjacent to the village with a stream and mature trees.	***Actions: Removal of aggressive plants while keeping the area shaded, bird and bat boxes***

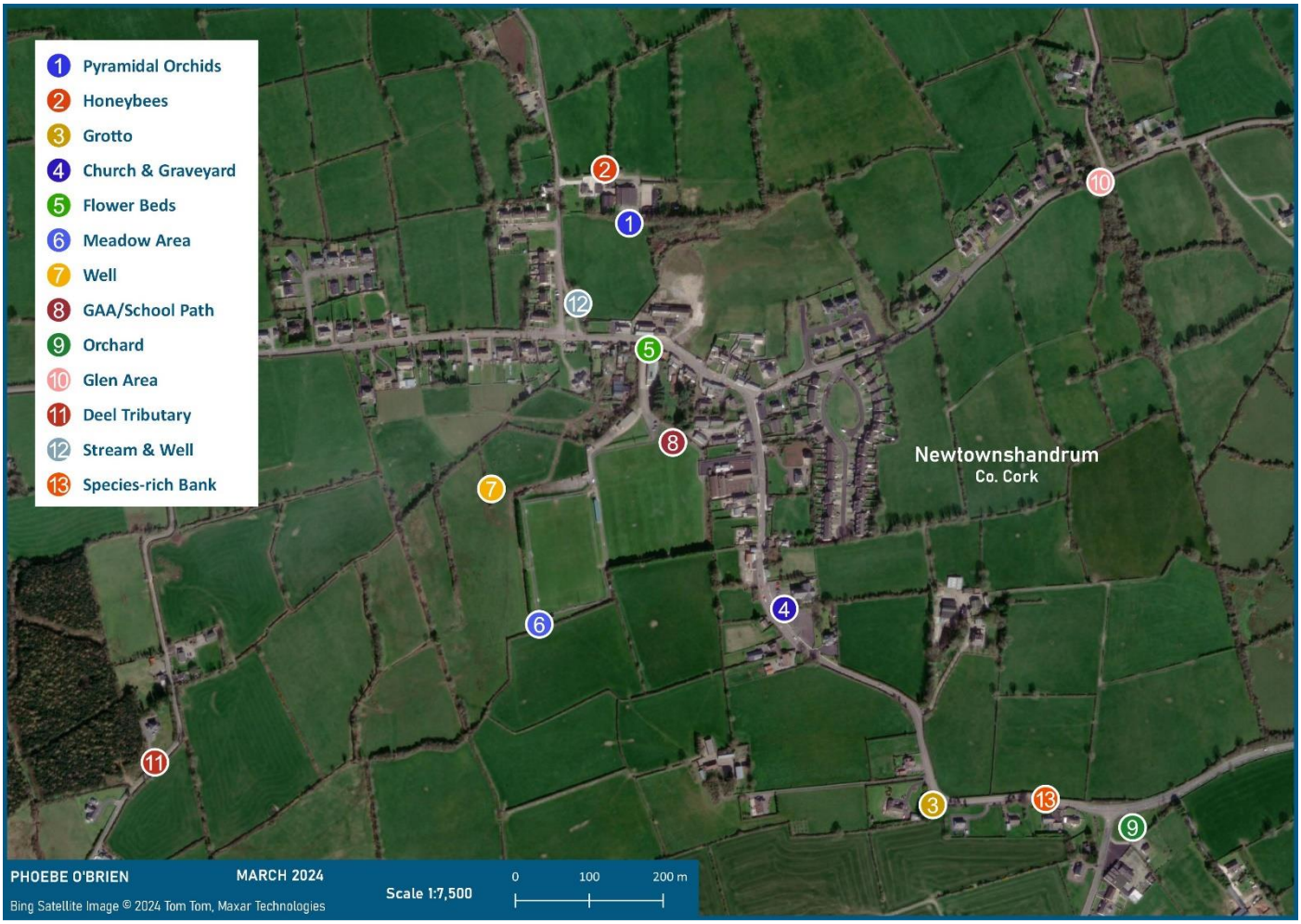


FIGURE 22 MAP OF VILLAGE SHOWING POINTS OF FOCUS

Local Farms

The local community can support local farmers as they adopt changes on farms. An annual meeting between the community and the landowners would be an excellent action.

Farming actions suggested by Donal Sheehan can be found on the website for the Biodiversity Regeneration in a Dairying Environment (BRIDE) project https://www.thebrideproject.ie/

The booklet with guidance on the following areas can be downloaded from the website:

- Annual Biodiversity Plots: seed mixes particularly benefiting birds. Approach Grasstec or to see if they can supply seed for wild bird cover.
- Bee-scrapes: habitats for mining bees (often more useful than bee hotels)
- Bat Boxes and Bird Boxes
- Field Margins and Hedgerows
- Ponds: an excellent increase in biodiversity if space can be found for ponds
- Riparian Buffer Strips, Wetland, Marsh: will all be of benefit to Freshwater crayfish, and possible Freshwater Mussel downstream. Locally all wet habitats will support huge biodiversity increases.
- Woodland, Scrub/Wasteland: where possible allow for natural regeneration.

Pollinator flower beds and garden corridor

Repeatedly planted species with long flowering can provide a much larger nectar and pollen source for insects through the village.

Award winning garden designer Niall Maxwell has drawn up a scheme for Tidy Town beds and planters. Homeowners in the estates and along the main road may choose to adopt some of the same species on their own land and thereby extend the number of flowers available. Insects will adapt best to reliable sources year-on-year, so rather than changing the look of flower beds try to maintain a Newtownshandrum look.

The full planting list can be found in the Appendix.

In general, avoid herbicide and pesticides. Reduce fertiliser use, avoid feeding grass. Use peat alternatives, avoid slug pellets.

Grassland management

In grassland, adopt two cutting regimes. One area near the school path seems to have good potential. A very interesting microspecies of dandelion was found here. Set mower high and cut on a two-week rotation from mid-March to May will allow dandelions to flower, a much-needed early nectar source for bumblebees.

TheAll-Ireland Pollinator plan and Farming for Nature have guidance on improving species diversity in short meadows.

For some species-poor areas which might suit a long meadow, cut only once in September. A method called Green Hay Transfer could be trialled. It has worked very well on a nearby farm. It will work best if you can find someone who owns a local species-rich hay meadow.

A guide to green hay transfer can be found here

Species identification

Real native Crab Apple (*Malus sylvestris*) is easy to get confused with domestic apple trees which have grown from seed and have small fruits. Crab apple leaves have long leaf stalks and are not hairy at all. The flowers open in late April and have really long sepals on the buds. Leaves look shiny.

Help young people connect with the older generation with a hedgerow forage and jam making event, or harvest festival.

FIGURE 23 NATIVE CRAB APPLE

Citizen science methods and ideas:

Learn insect identification and record Lady birds, Shield bugs, Bumble bees and Butterflies. Use swatches from All Ireland Pollinator and National Biodiversity Data Centre.

Look at the insect species recorded in Geoff Hunts report and see if they can be found again. Equipment for insect surveying is available from NHBS.com *Use a sheet to collect insects under a hedgerow when you shake a branch*

GAA grounds are great places to watch birds as they give a vantage point over a wide expanse of sky.

Use the photos in Geoff's report to create information boards at the GAA grounds about bird species which have been seen nearby.

How to share data with National Biodiversity Data Centre.

Go to https://records.biodiversityireland.ie/start-recording and click on the species group you are looking at. This will open a form that you can fill in.

Water protection:

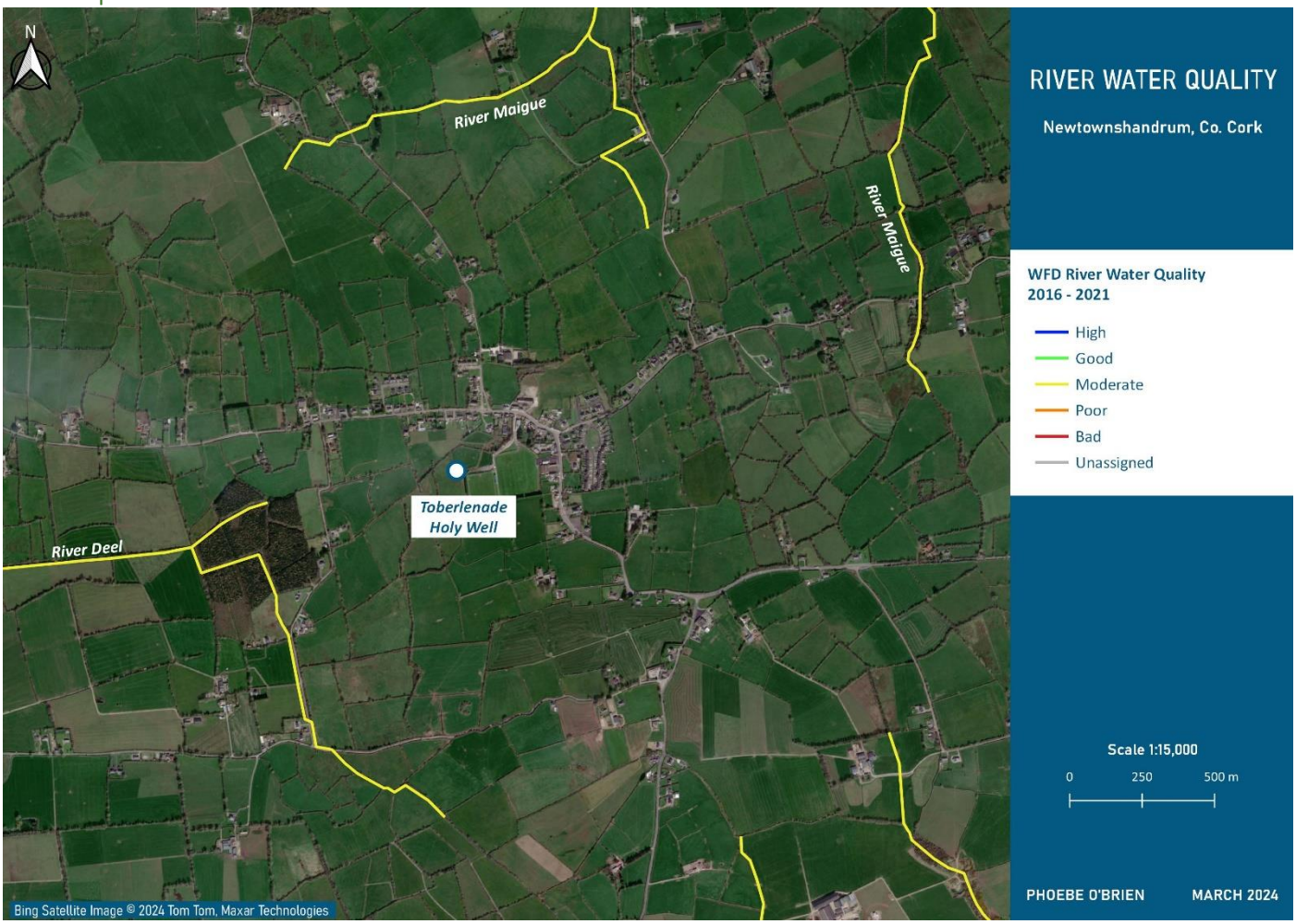


FIGURE 24 MAP OF THE WATER CATCHMENTS AROUND THE VILLAGE

The GAA can apply for waste management grant to help prevent nutrients leaching from grass clippings.

Contact LAWPRO regarding renovation of the well. Some of the original stones may be reclaimed. LAWPRO can provide push water fountains for the cattle.

Allowing some scrub or wet woodland to regenerate in wet areas will really improve water quality and create habitat for many creatures. See farming advice links above.

FIGURE 25 MOISTURE LOVING FLORA OF THE DITCHES

Birds:

Bird boxes of various shapes and sizes are useful to put up in sheds and gardens.

Everyone loves feeding birds, it brings great enjoyment and a sense of connection to the natural world. It is important to feed some species in cold months especially during a big freeze or unusual cold period.

There are many issues around bird food and biosecurity. Seed is often imported from other countries and may contain viable non-native plant species. Occasionally, mixes for birds which are intended to provide forage plants can be contaminated with unwanted species and problematic genetic provenance. For feeders, peanuts have less issues. They are more expensive but make less mess and last longer. *BirdWatch Ireland* will have the best recent information available on bird feeding.

Feed birds by letting some amenity areas and flower beds remain 'messy' at the end of the summer to allow plants to produce seed, and feed birds over a larger area and through the winter.

Plants to help birds:

Some plants are brilliant for birds. Finch species love any plants that have airborne seeds for example sow thistles, thistles, teasels, dandelions.

Managing some of the grass as a meadow or incorporating them into herbaceous borders and allowing these plants to reach maturity will help to encourage birds into the area.

Encourage ivy to be left on walls and trees for nesting and food. Leaving scrub in patches where it exists and can be left to help warblers, blackbirds, wrens, dunnocks, and all kinds of garden birds.

Insects:

Renew tubes in the bee hotel every year. You can cut dead native Hogweed stems at the nodes to make closed ended tubes.

FIGURE 26 BEE MUGS

There are suitable earth banks in the village for mining bees. These earthbanks have sparse vegetation from being shaded on one side and sunlight warms them only at certain times of the day.

Keep earth banks clear without using chemicals, and the bees will come.

Ponds:

If possible, add a small pond at the School House Cross

Linkages

Action funding opportunities (e.g. Leader, LAWPRO)

On the theme of water quality, the secondary school might be interested in https://greenschoolsireland.org/water_ambassadors/

Smaller farms might be interested in connections built through.

https://www.socialfarmingireland.ie/about-us/what-is-social-farming/

Cork City Council Heritage officer Niamh Twomey may know of other opportunities for funding. She has been helpful around water issues and grassland management 021 492 4018 niamh_twomey@corkcity.ie

Heritage in Schools has a hedgerow toolkit and can provide officers to visit and teach workshops.

https://www.heritageinschools.ie/teachers-resources

The recent Ireland's overarching strategy for biodiversity conservation will make efforts to tackle Invasive Alien Species and funding opportunities which stem from this should be sought.

Ireland's 4th National Biodiversity Action Plan 2023–2030

All-Ireland Pollinator Plan 2015-2020 – a national strategy for pollinator conservation, including a range of actions and many sub-guides for different sectors including farmers, businesses, and communities. For example, pledging your garden for pollinators.

https://pollinators.ie/gardens/

Last year there was a wild bee festival in Kerry lookout for similar events this year.

https://pollinators.ie/wild-bee-festival-2023/

NPWS Maps – maps showing Special Areas of Conservation (habitats), Special Protection Areas (birds) and Natural Heritage Areas - http://webgis.npws.ie/npwsviewer/

Biodiversity Maps – maps and datasets on mammal, bird, fish, invertebrate and plant species, plus lists of those that are protected, threatened or invasive - https://maps.biodiversityireland.ie/

Environmental Protection Agency

The Environmental Protection Agency is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. It operates independently under the Department of Communications, Climate Action, and Environment. EPA Maps – maps with details about soils, water quality, habitat - http://gis.epa.ie/EPAMaps/EnvironmentAndWellbeing

Local Authority Waters Programme LAWPRO

The programme is a shared service working with Local Authorities and state agencies to develop and implement River Basin Management Plans in Ireland, as required under the EU Water Framework Directive - http://watersandcommunities.ie/about/.

The Irish Wildlife Trust

Goeff Hunt mentioned that Badger, Bats, Brown Rat, Hedgehog, House Mouse, and Red Squirrel have been seen in the area. Both Irish Wildlife Trust and https://www.vincentwildlife.ie/have more information on mammals.

The Irish Wildlife Trust has branches around Ireland who organise events and conservation activities in their County. If you are interested in getting involved, please contact your local branch (https://iwt.ie/get-involved/our-branches/). If you are interested in setting up a branch in your County, please contact enquiries@iwt.ie

Botanical Society of Britain and Ireland

The BSBI is for everyone who cares about the wild plants of Britain and Ireland. Since 1836, they have been promoting the study, understanding and enjoyment of British and Irish botany. They have a huge number of resources on their website - https://bsbi.org/. Phoebe O'Brien is one of the vice county recorders for County Clare. There are active groups in nearby Limerick and Kerry.

Rivers Trust

The Rivers Trust is the umbrella organisation for 60 local member Trusts. They are the only group of environmental charities in the UK and Ireland dedicated to protecting and improving river environments for the benefit of people and wildlife. Member Trusts are independent community-led charitable organisations, recognised as important deliverers of education, water management advice and practical conservation work, from source to sea – improving land, rivers and wetlands at a catchment or river basin scale. Find your local Trust here https://www.theriverstrust.org/.

Appendix

Plants found in Newtownshandrum 2023

TABLE 1 SPECIES FOUND IN NEWTOWNSHANDRUM SURVEY 2023

Adria Bellflower	Campanula portenschlagiana	--
Alexanders	Smyrnium olusatrum	Lusrán grándubh
Annual Meadow-grass	Poa annua	Cuise bliantúil
Ash	Fraxinus excelsior	Fuinseog
Barren Strawberry	Potentilla sterilis	Sú talún bréige
Black Medick	Medicago lupulina	Dúmheidic
Black Mustard	Brassica nigra	Praiseach dhubh
Blackberry	Rubus fruticosus agg.	Dris
Blackthorn	Prunus spinosa	Draighean
Broad-leaved Dock	Rumex obtusifolius	Copóg shráide
Brooklime	Veronica beccabunga	Lochall
Bugle	Ajuga reptans	Glasair choille
Bush Vetch	Vicia sepium	Peasair fhiáin
Butterfly-bush	Buddleja davidii	Tor an fhéileacáin
Cleavers	Galium aparine	Garbhlus
Cock's-foot	Dactylis glomerata	Garbhfhéar
Common Bird's-foot-trefoil	Lotus corniculatus	Crobh éin
Common Chickweed	Stellaria media	Fliodh
Common Couch	Elytrigia repens	Broimfhéar
Common Figwort	Scrophularia nodosa	Donnlus
Common Knapweed	Centaurea nigra	Mínscoth
Common Mouse-ear	Cerastium fontanum	Cluas luchóige
Common Nettle	Urtica dioica	Neantóg
Common Soft-brome	Bromus hordeaceus	Brómas bog
Common Sorrel	Rumex acetosa	Samhadh bó
Common Valerian	Valeriana officinalis	Caorthann corraigh
Common vetch	Vicia sativa	Peasair chapaill
Cow Parsley	Anthriscus sylvestris	Peirsil bhó
Cowslip	Primula veris	Bainne bó bleachtáin
Crab Apple	Malus sylvestris	Crann fia-úll
Creeping Bent	Agrostis stolonifera	Feorainn
Creeping Buttercup	Ranunculus repens	Fearbán (reatha)
Creeping Cinquefoil	Potentilla reptans	Cúig mhéar mhuire
Creeping Thistle	Cirsium arvense	Feochadán reatha
Cuckooflower	Cardamine pratensis	Biolar gréagáin
Daisy	Bellis perennis	Nóinín
Dandelion	Taraxacum agg.	Caisearbhán
Dog-rose	Rosa canina agg.	Feirdhris
Dove's-foot Crane's-bill	Geranium molle	Crobh bog
Elder	Sambucus nigra	Trom
False Oat-grass	Arrhenatherum elatius	Coirce bréige
False-brome	Brachypodium sylvaticum	Brómas bréige
Feverfew	Tanacetum parthenium	Lus deartán
Fool's-water-cress	Apium nodiflorum	Gunna uisce
Fuchsia	Fuchsia magellanica	Fiúise

Germander Speedwell	Veronica chamaedrys	Anuallach
Gorse	Ulex europaeus	Aiteann gallda
Great Willowherb	Epilobium hirsutum	Lus na Tríoinóide
Greater Plantain	Plantago major	Cuach Phádraig
Greater Stitchwort	Stellaria holostea	Tursarraing mhór
Ground-elder	Aegopodium podagraria	Lus an easpaig
Ground-ivy	Glechoma hederacea	Athair lusa
Groundsel	Senecio vulgaris	Grúnlas
Hard Rush	Juncus inflexus	Luachair chrua
Hart's-tongue Fern	Asplenium scolopendrium	Creamh na muice fia
Hawthorn	Crataegus monogyna	Sceach gheal
Hazel	Corylus avellana	Coll
Hedge Bindweed	Calystegia sepium	Ialus fáil
Herb-Robert	Geranium robertianum	Ruithéal rí
Hogweed	Heracleum sphondylium	Feabhrán
Holly	Ilex aquifolium	Cuileann
Honeysuckle	Lonicera periclymenum	Féithleann
Horse chestnut	Aesculus hippocastanum	Crann cnó capaill
Ivy	Hedera helix	Eidhneán
Ivy-leaved Toadflax	Cymbalaria muralis	Buaflíon balla
Japanese Knotweed	Fallopia japonica	Glúineach bhiorach
Lesser celandine	Ficaria verna	Grán arcáin
Lesser Hawkbit	Leontodon saxatilis	Crág phortáin bheag
Lords-and-Ladies	Arum maculatum	Cluas chaoin
Love-in-a-mist	Nigella damascene	--
Maidenhair Spleenwort	Asplenium trichomanes	Lus na seilge
Male-fern	Dryopteris filix-mas	Raithneach mhadra
Marsh Thistle	Cirsium palustre	Feochadán corraigh
Marsh Woundwort	Stachys palustris	Cabhsadán
Meadow Buttercup	Ranunculus acris	Fearbán feír
Meadow Foxtail	Alopecurus pratensis	Fiteog léana
Meadow Foxtail	Alopecurus pratensis	Fiteog léana
Meadow Vetchling	Lathyrus pratensis	Peasairín buí
Meadowsweet	Filipendula ulmaria	Airgead luachra
Montbretia	Crocosmia pottsii × aurea = C. × crocosmiiflora	Feileastram dearg
Nipplewort	Lapsana communis	Duilleog Bhríde
Oxeye Daisy	Leucanthemum vulgare	Noínín mór
Perennial Rye-grass	Lolium perenne	Seagalach buan
Perennial Sow-thistle	Sonchus arvensis	Bleachtán léana
Pignut	Conopodium majus	Cúlarán
Primrose	Primula vulgaris	Sabhaircín
Procumbent Pearlwort	Sagina procumbens	Mongán sinte
Pyramidal Orchid	Anacamptis pyramidalis	Magairlín na stuaice
Ragged-Robin	Silene flos-cuculi	Lus síoda
Red Campion	Silene dioica	Coireán coilleach
Red Clover	Trifolium pratense	Seamair dhearg
Red Dead-nettle	Lamium purpureum	Caochneantóg dhearg
Red Fescue	Festuca rubra s.lat.	Feisciú rua
Ribwort Plantain	Plantago lanceolata	Slánlus

Rosebay Willowherb	Chamerion angustifolium	Lus na tine
Rowan	Sorbus aucuparia	Caorthann
Rue-leaved Saxifrage	Saxifraga tridactylites	Mórán balla
Rustyback	Asplenium ceterach	Raithneach rua
Selfheal	Prunella vulgaris	Duán ceannchosach
Sessile Oak	Quercus petraea	Dair ghaelach
Shepherd's-purse	Capsella bursa-pastoris	Lus an sparáin
Silver Birch	Betula pendula	Beith gheal
Silverweed	Potentilla anserina	Briosclán
Smooth Sow-thistle	Sonchus oleraceus	Bleachtán mín
Snowberry	Symphoricarpos albus	Póirín sneachta
Soft Shield-fern	Polystichum setiferum	Ibheag bhog
Soft-rush	Juncus effusus	Geataire
Spanish Bluebell	Hyacinthoides hispanica	--
Spear Thistle	Cirsium vulgare	Feochadán colgach
Sweet Vernal-grass	Anthoxanthum odoratum	Féar cumhra
Sycamore	Acer pseudoplatanus	Seiceamóir
Tufted Vetch	Vicia cracca	Peasair na luch
Wall Speedwell	Veronica arvensis	Lus cré balla
Wall-rue	Asplenium ruta-muraria	Luibh na seacht ngábh
Water Forget-me-not	Myosotis scorpioides	Ceotharnach uisce
Water Mint	Mentha aquatica	Mismín mionsach
Water-cress	Nasturtium officinale	Biolar
Wavy Bitter-cress	Cardamine flexuosa	Searbh-bhiolar casta
White Clover	Trifolium repens	Seamair bhán
Wild Carrot	Daucus carota	Mealbhacán
Wild Privet	Ligustrum vulgare	Pribhéad
Wilson's Honeysuckle	Lonicera nitida	--
Winter-cress	Barbarea vulgaris	Treabhach
Wood Anemone	Anemone nemorosa	Lus na gaoithe
Wood Avens	Geum urbanum	Machall coille
Wych Elm	Ulmus glabra	Leamhán sléibhe
Yarrow	Achillea millefolium	Athair thalún
Yellow Iris	Iris pseudacorus	Feileastram
Yellow-rattle	Rhinanthus minor	Gliográn
Yorkshire-fog	Holcus lanatus	Féar an chinn bháin

TABLE 2 PLANTS WHICH CAN BE FOUND IN THE GREATER AREA (10KM SQUARE) SUITABLE FOR PROPAGATION

Type	Name	Propagation
Ferns	Black Spleenwort	pin fronds upside down on damp soil
	Rustyback	pin fronds upside down on damp soil
	Wall-rue	pin fronds upside down on damp soil
	Hart's-tongue Fern	pin fronds upside down on damp soil
	Maidenhair Spleenwort	pin fronds upside down on damp soil
	Scaly Male-fern	pin fronds upside down on damp soil
	Broad Buckler-fern	pin fronds upside down on damp soil
	Male-fern	pin fronds upside down on damp soil
Grass and plants	Quaking-grass	seed
	Yarrow	seed
	Agrimony	seed
	Bugle	cuttings from Marian shrine
	Hairy Lady's-mantle	Caution, be sure of identification. Get rid of Garden Lady's Mantle
	Garlic Mustard	seed
	Wood Anemone	seed but slow plant growth
	Wild Angelica	seed, biennial
	Cow Parsley	seed, thuggish
	Lords-and-Ladies	seed or root
	Cuckooflower	leaf cuttings
	Common Knapweed	seed
	Common Centaury	seed, biennial
	Enchanter's-nightshade	shade
	Pignut	seed, be careful with identification
	Wild Carrot	seed, biennial
	Foxglove	seed, biennial
	Hemp-agrimony	strong growth
	Lesser celandine	spreads a lot
	Meadowsweet	spreads a lot
	Fennel	wild seed
	Wild Strawberry	cutting
	Lady's Bedstraw	seed
	Cut-leaved Crane's-bill	seed
	Dove's-foot Crane's-bill	seed, biennial
	Herb-Robert	
	Water Avens	seed
	Ground-ivy	cutting
	Hogweed	seed
	Bluebell	be careful of identification. Find local population
	Imperforate St John's-wort	seed
	Perforate St John's-wort	seed
	Square-stalked St John's-wort	seed
	Yellow Iris	spreads a lot
	Meadow Vetchling	Seed
	Oxeye Daisy	Seed
	Common Bird's-foot-trefoil	Seed
	Greater Bird's-foot-trefoil	seed, wetter areas
	Field Wood-rush	Good Friday Grass, nice in grass
	Yellow Pimpernel	Shade

	Yellow Loosestrife	be careful of identification. Not the garden plant
	Purple-loosestrife	spreads a lot
	Black Medick	easy seed onto gravel
	Water Mint	cuttings spread
	Field Forget-me-not	Seed
	Changing Forget-me-not	Seed
	Water Forget-me-not	Seed
	Wood Forget-me-not	Seed
	Wood-sorrel	root cuttings
	Mouse-ear-hawkweed	Runners
	Greater Burnet-saxifrage	Seed
	Burnet-saxifrage	Seed
	Heath Milkwort	Seed
	Trailing Tormentil	seeds and cuttings
	Tormentil	Seed
	Creeping Cinquefoil	seed and cuttings
	Barren Strawberry	seed and cuttings
	Cowslip	seeds, take a long time to ripen sow straight away
	Primrose	root divisions
	Selfheal	cuttings and seeds
	Lesser Spearwort	Seed
	Weld	seed, spreads
	Raspberry	canes from root division
	Common Sorrel	root divisions and seed
	Procumbent Pearlwort	seed, for cracks in the pavement
	Sanicle	seed
	Rue-leaved Saxifrage	seed, blow into walls
	Autumn Hawkbit	seed
	Red Campion	seed, but only if certain local
	Ragged-Robin	seed
	Alexanders	non-native, easy but spreads
	Marsh Woundwort	seed
	Hedge Woundwort	seeds
	Greater Stitchwort	cuttings or seed
	Devil's-bit Scabious	seed
	Lesser Trefoil	quite rare, try cuttings
	Zigzag Clover	seed
	Navelwort	seeds or leaf cutting
	Common Valerian	seed
	Blue Water-Speedwell	seed
	Brooklime	seed and cuttings
	Germander Speedwell	seed and cuttings
	Marsh Speedwell	seed
	Tufted Vetch	seed
	Bush Vetch	seed, but spreads

Pyramidal Orchid identification and care

Photo from Britian's Orchids: A field guide to the orchids of Great Britain and Ireland. Sean Cole and Mike Waller.2020

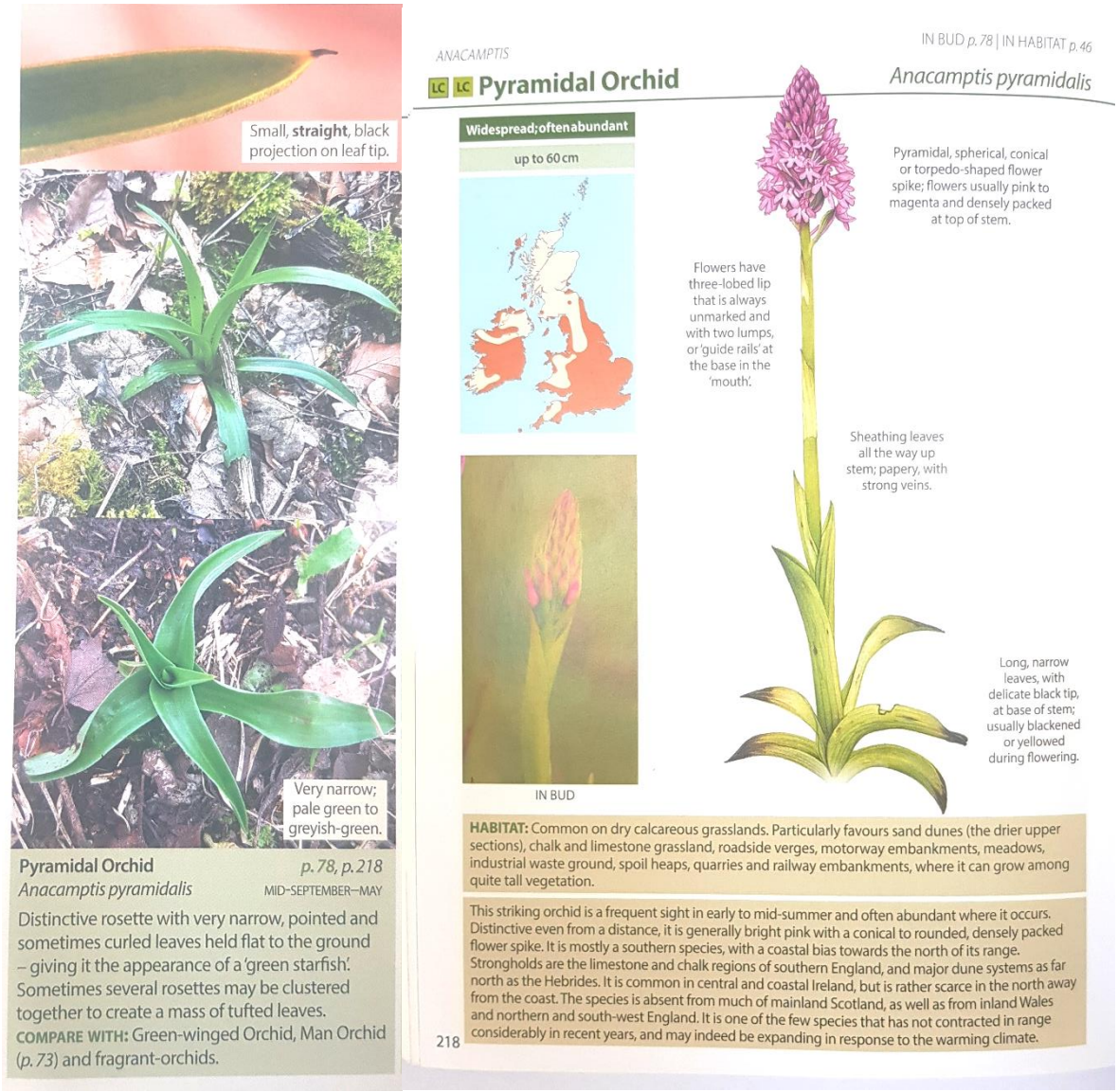


FIGURE 27 IMAGES TAKEN FROM BRITAIN'S ORCHIDS COLE AND WALLER 2023

In the spring strappy leaves are arranged in a star-like rosette. Thy can be found quite early in the year, starting to emerge from January until July, when the plants flower and the leaves die back. Usually, the early growth is short enough not to cut by mowing but stop cutting around the plants as they get larger until after flowering. The foxy smell of the flowers attracts moths to pollinate it. New plants need at least three years growth before they flower. There are small tubers at the base of the plants. Plants will only grow where there is compatible fungus in the soil. As the map shows the plants at Newtownshandrum are the edge of their range geographically.

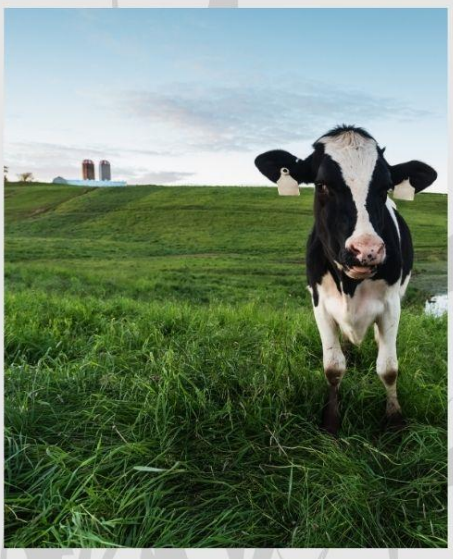
Newtownshandrum 23 September 2023

FARMLANDS KNOWLEDGE SHARING EVENT

11 am to 1 pm
23rd September
Village hall,
Newtownshandrum

COME AND TELL US ABOUT THE POSITVE ACTIONS FOR BIODIVERSITY WHICH ARE HAPPENING ON FARMS AROUND NEWTOWNSHANDRUM

You are invited to a round-table informal chat at the community hall. Over tea and sandwiches please tell us about your experiences on dairy farms. The community would love the opportunity to hear about the positive actions farmers are taking, something which isn't widely known about.
We will be joined by Donal Sheehan (dairy farmer and ambassador for Farming for Nature), and Phoebe O'Brien (author ACRES Plant Identification Key) who is working on a local biodiversity action plan.



Donal Sheehan farms a 70-cow dairy herd on 'Blossom Farm' near Castlelyons, Co. Cork. Donal believes farmers can make a huge difference in improving biodiversity, lowering their carbon footprint and improving the quality of our water. He is one of the main drivers of The BRIDE Project (Biodiversity Regeneration In a Dairying Environment) which rewards farmers for delivering measurable improvements in biodiversity over a 5 year period. Donal is a very eloquent advocate for - and exponent of - Farming for Nature.

FIGURE 28 EVENT WITH DONAL SHEEHAN AND THE LOCAL FARMERS

Linda Gilsenan on Planting for Biodiversity

Linda is an ecologist who has worked on numerous community biodiversity action plans. She is a brilliant gardener, with huge knowledge in planting for pollinators, how to manage problem plants in a caring way, and building a sense of local area through planting choices. This workshop will allow a conversation about all things related to gardening within your community, while sharing practical skills. You are encouraged to bring your own knowledge and experience for sharing with the group.

Date: Friday August 11th	Time: 10.30 AM- 12.30 PM	Location:

Workshop is free but please register your interest with Angie

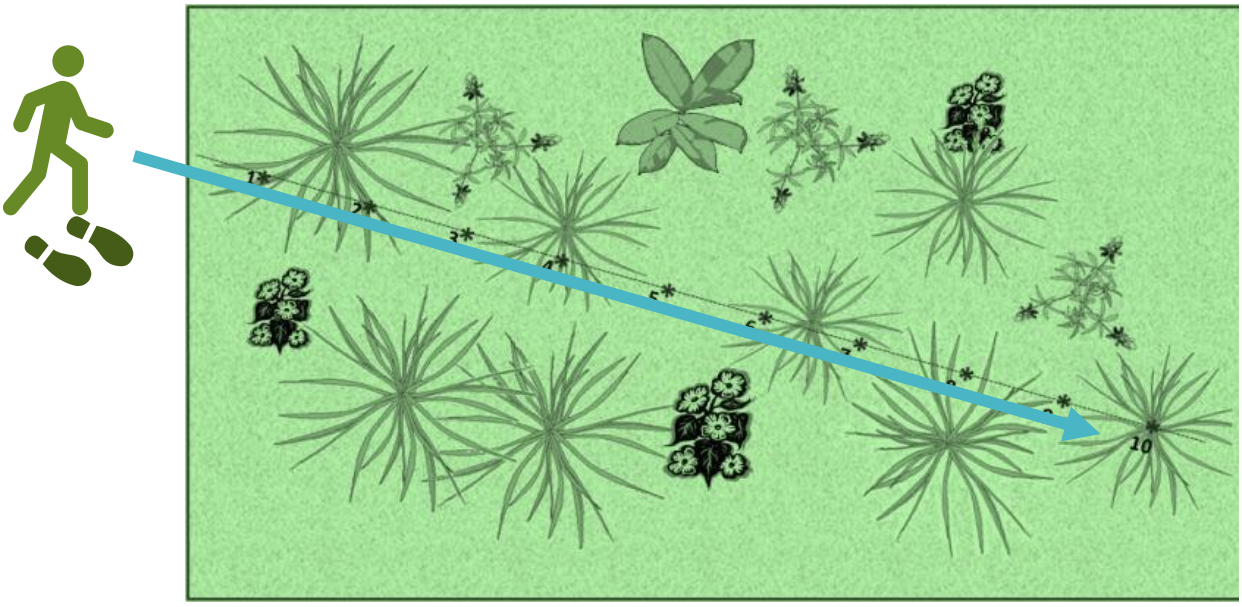
Workshop outline

Look at the ornamental planters from 2023:	 • Discuss what is working well • How could they be better next year • Can we do anything to help now?
Look at the grassy areas	

FIGURE 29 PLANTING WORKSHOP

Newtownshandrum School recording workshop

How to do a Step-Point Transect



A step-point transect is a simple method to help our study of grassy areas and other habitats. We will divide the children into groups of 6, with one adult per group. Two children will stand about 20 metres apart (20 big steps). Then, 1 child will start at one end and take one big step. The other 2 children will look down at the grass to see if the child's toe is touching a white clover plant. If yes, it is recorded. Then, the child takes another step, and it is repeated until reaching the child at the other end.

Why is this useful?

A grassy area is made up of lots of different plants, not just grass. Also, grass is not just one thing. Grass is the general term for over 100 species of plants in Ireland that belong to the plant family called Poaceae. Depending on the soil and the way the grassy area is managed, there may be quite a few different grass species along one 20 metre line. Different species mean different things and can give us information about the history of the grassy area, how it has been managed, and how many pollinating insects and birds it may support.

We may find other plants growing among the grass species that have different shaped leaves and flowers. These plants also give us a lot of information about the grassy area, including how healthy it is and whether it can act as a carbon store or not. All of this is important for knowing how to protect biodiversity in our local communities.

White clover

We will study white clover today. By counting how many white clover plants we find on our lines, we can understand how *abundant* it is. White clover is a good plant to find in grassy areas. It provides food for pollinating insects, and its roots have little nodules filled with beneficial bacteria called *Rhizobium*. These clever little bacteria can 'catch' molecules of nitrogen in the air and convert them into a form that the plant can use. This means a grassy area with lots of white clover will have lots of nitrogen in the soil which helps plants to grow healthy.

Difference between red and white clover

Recording Form

Abundance of White clover along a step-point transect.

Date:	
Location:	
Field-recorder:	
Transect length in steps	

Step	White clover plant present tick if yes	White clover flower present tick if yes
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
Total	plants	flowers

RESULTS

How tall were the flowers? Measure 5 plants in cm and average them.

Flower 1	Flower 2	Flower 3	Flower 4	Flower 5	Average
					cm

Total steps with White clover:

We can divide the number of times you touched a white clover plant by number of steps (20) to find out how much of the grass is clover.

E.g., 5 plants in 20 steps

5/20

We can make this into a fraction ¼ or a percentage 25%.

The higher the cover of white clover means that the grassy habitat is absorbing nitrogen.

It is a good sign that the balance of herbs to grass species is balanced. Too much grass means the lawn keeper will have cut the grass often.

If you found lots of flowers, then insects can collect nectar from them.

Questions:

How do you think White clover makes more plants if the flowers are cut off?

Did you find any other herb species?

Make a list of them or draw some pictures here.

Follow up: Do different flowers grow at different times of the year? You could do the same experiment in April to see how many Dandelions you find. Dandelions show that the soil is fertile. Daisies show that the grass is trampled and kept short most of the time.

Butterflies of Newtownshandrum and their foodplants

Butterfly			**Larval foodplant**	**Adult nectar**
Small Tortoiseshell	*Aglais urticae*	Ruán beag	Common nettle (Urtica dioica)	Bramble (Rubus fruticosus), Carline Thistle (Carlina vulgaris), Dandelion (Taraxacum agg.), Devil's-bit Scabious (Succisa pratensis), Field Scabious (Knautia arvensis), Greater Stitchwort (Stellaria holostea), Hawkweeds (Hieracium/Hypochoeris), Heather (Calluna vulgaris / Erica spp.), Hemp Agrimony (Eupatorium cannabinum), Ivy (Hedera helix), Knapweeds (Centaurea spp.), Marjoram (Origanum vulgare), Primrose (Primula vulgaris), Privet (Ligustrum vulgare), Ragwort (Senecio jacobaea), Thistles (Cirsium spp. and Carduus spp.), Thyme (Thymus polytrichus) and Water Mint (Mentha aquatica).
Orange Tip	*Anthocharis cardamines*	Barr bui	Cuckooflower (Cardamine pratensis)	Bluebell (Hyacinthoides non-scriptus), Cuckooflower (Cardamine pratensis), Dandelion (Taraxacum agg.), Greater Stitchwort (Stellaria holostea), Hawkweeds (Hieracium/Hypochoeris), Ragged Robin (Lychnis flos-cuculi), Red Campion (Silene dioica) and Vetches (Vicia spp.).

Ringlet	*Aphantopus hyperantus*	Fáinneog	Cock's-foot (Dactylis glomerata), False Brome (Brachypodium sylvaticum), Tufted Hair-grass (Deschampsia cespitosa), Common Couch (Elytrigia repens), and meadow-grasses (Poa spp.).	Bramble and Wild Privet
Holly Blue	*Celastrina argiolus*	Gormán cuilinn	Holly (Ilex aquifolium) and Ivy (Hedera helix)	Bramble (Rubus fruticosus), Bugle (Ajuga reptans), Buttercups (Ranunculus spp.), Forget-me-not (Myosotis spp.), Holly (Ilex spp.), Honeydew / Sap, Ivy (Hedera helix), Privet (Ligustrum vulgare), Thistles (Cirsium spp. and Carduus spp.) and Water Mint (Mentha aquatica).
Painted Lady	*Cynthia cardui*	Áilleán	Thistles (Cirsium spp.), Mallows (Malva spp.), Common Nettle (Urtica dioica)	Thistles (Cirsium spp. and Carduus spp.), Bird's-foot Trefoil (Lotus corniculatus), Carline Thistle (Carlina vulgaris), Hawkweeds (Hieracium/Hypochoeris), Heather (Calluna vulgaris / Erica spp.), Ivy (Hedera helix), Knapweeds (Centaurea spp.), Privet (Ligustrum vulgare), Ragwort (Senecio jacobaea) and Red Clover (Trifolium pratense)
Peacock	*Inachis io*	Péacóg	Nettle	thistle, betony, bluebell, cuckooflower, dandelion and teasel
Small Copper	*Lycaena phlaeas*	Copróg bheag	Common Sorrel (Rumex acetosa) and Sheep's Sorrel (R. acetosella) are the main foodplants. Broad-leaved Dock (R. obtusifolius)	Buttercups (Ranunculus spp.), Daisy (Bellis perennis), Dandelion (Taraxacum agg.), Fleabane (Pulicaria dysenterica), Hawkweeds (Hieracium/Hypochoeris), Heather (Calluna vulgaris / Erica spp.), Ragwort (Senecio

				jacobaea), Red Clover (Trifolium pratense), Thistles (Cirsium spp.
Meadow Brown	*Maniola jurtina iernes*	Donnóg fhéir	Fescues (Festuca spp.), bents (Agrostis spp.) and meadow-grasses (Poa spp.) are preferred, but some coarser species such as Cock's- foot (Dactylis glomerata), Downy Oat-grass (Helictotrichon pubescens), and False Brome (Brachypodium sylvaticum)	Knapweeds (Centaurea spp.) and Thistles (Cirsium spp. and Carduus spp.), Bramble (Rubus fruticosus), Buttercups (Ranunculus spp.), Carline Thistle (Carlina vulgaris), Devil's-bit Scabious (Succisa pratensis), Fleabane (Pulicaria dysenterica), Hemp Agrimony (Eupatorium cannabinum), Knapweeds (Centaurea spp.), Marjoram (Origanum vulgare), Privet (Ligustrum vulgare), Ragwort (Senecio jacobaea), Selfheal (Prunella vulgaris), Teasel (Dipsacus fullonum), Thistles (Cirsium spp. and Carduus spp.) and Yarrow (Achillea millefolium) are also used.
Large White	*Pieris brassicae*	Bánóg mhór	Cultivated Brassica spp., as well as Nasturtium (Tropaeolum majus)	Thistles (Cirsium spp. and Carduus spp.), Bluebell (Hyacinthoides non-scriptus), Bugle (Ajuga reptans), Carline Thistle (Carlina vulgaris), Dandelion (Taraxacum agg.), Devil's-bit Scabious (Succisa pratensis), Field Scabious (Knautia arvensis), Fleabane (Pulicaria dysenterica), Greater Stitchwort (Stellaria holostea), Knapweeds (Centaurea spp.), Ragged Robin (Lychnis

				flos-cuculi), Ragwort (Senecio jacobaea) and Teasel (Dipsacus fullonum)
Green-veined White	*Pieris napi*	Bánóg uaine	Brassicaceae, but especially on Cuckooflower (Cardamine pratensis). It also feeds on Garlic Mustard (Alliaria petiolata), Bitter-cress (Cardamine hirsuta), Watercress (Rorippa nasturtium-aquaticum), Wild Mustard (Sinapis arvensis), Nasturtium (Tropae olum majus) and a variety of cultivated Brassica spp.	Bluebell (Hyacinthoides non-scriptus), Bugle (Ajuga reptans), Buttercups (Ranunculus spp.), Cuckooflower (Cardamine pratensis), Fleabane (Pulicaria dysenterica), Greater Stitchwort (Stellaria holostea), Ragged Robin (Lychnis flos-cuculi), Ragwort (Senecio jacobaea), Red Campion (Silene dioica), Thistles (Cirsium spp. and Carduus spp.) and Vetches (Vicia spp.).
Small White	*Pieris rapae*	Bánóg bheag	Cultivated Brassica spp., as well as Nasturtium (Tropaeolum majus)	(Carduus spp. and Cirsium spp.). Bluebell (Hyacinthoides non-scripta), Bugle (Ajuga reptans), Common Bird's-foot-trefoil (Lotus corniculatus), Commo n Bird's-foot-trefoil (Lotus corniculatus), Commo n Fleabane (Pulicaria dysenterica), Daisy (Bellis perennis), dandelions (Taraxacum spp.), Greater Stitchwort (Stellaria holostea), hawkweed s (Hieracium spp.), Hemp-agrimony (Eupatorium cannabinum), knapwe eds (Centaurea spp.), Ragged-Robin (Silene flos-cuculi), ragworts (Jacobaea spp.), Red

				Campion (Silene dioica), Red Clover (Trifolium pratense), Sainfoin (Onobrychis viciifolia) and Wild Marjoram (Origanum vulgare)
Speckled Wood	*Parage aegeria*	Breac	False Brome (Brachypodium sylvaticum); Cock's-foot (Dactylis glomerata); Yorkshire-fog (Holcus lanatus); Common Couch (Elytrigia repens).	Honeydew in the treetops
Red Admiral	*Vanessa atalanta*	Aimiréal dearg	Common Nettle (Urtica dioica)	Anything juicy, sap, ivy, rotting fruit

Newtownshandrum Village Planting Design

Proposed by: Niall Maxwell – Epoch Green

Introduction:

Floral beds and planters through the town provide a source of pollen and nectar for butterflies and bees. Inspired by the herbs in the hedgerows, horticultural plants not only give a longer flowering season for pollinators but also connect biodiversity areas through the town from the community orchard, past the Grotto, Church, the site of the old blacksmith's house near St Sennane's well, to the vernacular buildings at the cross.

The chosen plants reflect the silver colour of those buildings and are suitably drought tolerant for containers. Cultural herbs are a nod to the importance of home life in farming villages. Repeated planting creates not only a nectar trail for insects but a scented walking 'pattern' for physical and mental well-being.

Flowers in this group of plants (Lamiaceae) are specifically shaped to benefit the long-tongued solitary bees found on the survey. Picking up on a white and blue theme from wild Bugle and Sweet Woodruff at the Shrine, Greater Stitchwort and Germander Speedwell in the verges and Valerian and Brooklime in the ditches, white flowers are particular chosen by Hoverflies (yellow flowers too) which are well represented in the locality. Blue flowers (purple and pink) generally have deeper nectar suitable for bees and butterflies.

The scheme sits comfortably within the greater habitat, from intentional curated design at the roadside, additional flowers and structural elements such as evergreen Ivy and Holly (the larval food plant of Holly Blue Butterflies) in gardens and the wilder areas in hedgerows and field margins with abundant Hawthorn.

The butterflies in Newtownshandrum are generalists and so adults nectar on many wild and garden plants, others have high flight paths and nectar on honeydew in the canopy of trees. For their young, long grass is important as are nettles.

I hope that the planting plan gives you all a sense of place, reflects a long history of local values and traditions and brings you pleasure.

The plant list selected has been chosen on the following criteria:

- Pollinator and wildlife friendly
- Flower colour
- Seasonal interest
- Moderate drought tolerance
- Hardiness
- Ease of care

The list includes a mix of flowering perennials, herbs and bulbs.

The listed perennials and herbs blossom at different times of the year and are to be planted in combination with each other and supplemented with seasonal annuals to extend the colour interest throughout the year.

Containers:

Containers to be minimum depth 45cm and 35cm wide, with adequate drainage. Ideally Hanging Baskets would be a minimum diameter of 60cm (the larger the better for retaining moisture)

Planting Medium Guide:

65% screened topsoil

30% certified organic compost

5% horticultural sand

Flowering Perennials	
Achillea millefolium	Yarrow
Nepeta racemosa 'Walkers Low'	Catmint

Perovskia atriplicifolia 'Blue Spire'	Russian Sage
Erysimum 'Bowles Mauve'	Perennial Wallflower
Stachys byzantia	Lambs Ears
Sedum matrona 'Spectabilis'	Stonecrop
Lavandula angustifolia	Lavender
Geranium 'Roxanne' Geranium 'Ann Folkard'	Geranium/ Cranesbill
Salvia nemerosa 'Caradonna'	Ornamental sage
Salvia 'Amethyst'	
Aquilegia 'Yellow Queen'	Granny's Bonnet
Rudbeckia 'Goldstrum'	Cone Flower
Dianthus spp.	Pinks/Carnations
Scabiosa spp.	Scabious/Pin Cushion
Anthriscus Sylvestris 'Ravenswing'	Cow Parsley
Grasses	
Millium effusum	
Sesleria autumnalis	
Brizia media/maxima	
Herbs	
Origanum spp.	Oregano
Lavandula angustifolia	Lavender
Allium schoenprasum	Alliums
Thymus serpyllum	
Salvia officinalis	Sage
Rosmarinus officinalis 'Prostratus'	Rosemary
Bulbs	
Allium aflatunense 'Purple Sensation' Allium Christophii Allium sphaerocephalon Allium 'Globemaster'	Alliums
Galanthus nivalis	Snowdrops
Eranthis hyemalis	Winter Aconite
Trees	
Prunus padus	Wild Cherry
Malus sylvestris	Crab Apple
Sorbus aucuparia	Rowan

Prunus avium	Bird Cherry

Bedding Plants	
Primula spp.	Primroses
Viola spp.	Viola
Antirrhinum spp.	Snapdragons
Erysimum	Wallflowers
Pelargoniums	Bedding Geraniums

Hanging Basket Plants	
Lobellia maritima	Lobelia
Helitropium arborescens	Heliotrope
Bidens aurea	Bidens
Diascia var.	Diascia
Petunia var.	Petunia
Pelargoniums (Trailing and Upright)	Bedding Geranium
Verbena 'Temari Coral Pink'	Annual verbena
Nemesia var.	Cape Jewels
Calibrachoa var	Million Bells

FIGURE 30 VARIEGATED HOLLY (FEMALE)