



## Biodiversity Issues & Planning 2024

### **What is Biodiversity?**

Biodiversity means the variety of life on Earth that is vital to the continued health of our society, economy, species, and planet. Diversity within species, between species, and of ecosystems are deteriorating globally at rates unprecedented in human history, which is steadily destroying the essential basis for our health, sustenance, prosperity and quality of life.

Biodiversity is essential for the processes that support all life on Earth, including humans. Without a wide range of animals, plants and microorganisms, we cannot have the healthy ecosystems that we rely on to provide us with the air we breathe and the food we eat. People all over the world also value nature of itself.

Some aspects of biodiversity are instinctively widely valued by people but the more we study biodiversity the more we see that all of it is important – even bugs and bacteria that we cannot see or may not like the look of. Pollinators such as birds, bees, butterflies and other insects are estimated to be responsible for much of the world's crop production. Without pollinators, we would not have apples, cherries, blueberries, almonds and many other foods that we eat. Agriculture is also reliant upon invertebrates – they help to maintain the health of the soil that crops grow in. Soil is teeming with microbes that are vital for liberating nutrients that plants need to grow, which are then also passed to us when we eat them. Life from the oceans provides the main source of animal protein for many people.

Trees, bushes, wetlands and wild grasslands naturally slow down water and help the soil to absorb rainfall. When they are removed, it can increase the risks of flooding. Trees and other plants clean the air we breathe and help us tackle the global challenge of climate change by absorbing carbon dioxide.

Many of our medicines, along with other complex chemicals that we use in our daily lives such as rubber, shellac, cotton and silk also originate from plants or insects. Spending time in nature is increasingly understood to lead to improvements in people's physical and mental health. Simply having green spaces and trees in cities has been shown to decrease hospital admissions, reduce stress and lower blood pressure.



## Baltinglass Golf Club Biodiversity Programmes

Baltinglass Golf Club is committed to continue maintaining its efforts in preserving the Club's natural environment working to reverse declines in habitat richness, increase biodiversity and support systemic changes to bring about long-term sustainability for future generations including generations of our Club golfers.

### What Can the Club Do!

Tips for Attracting Bees and Other Pollinators. Bees are the most important pollinating insects. In Ireland, there are approximately 100 species of bee including the familiar honey bee (1 species), and bumblebees (20 species). The remaining species are solitary and they don't form colonies.

It is estimated that of the 100 crops that provide 90% of the world's food supply, approximately 70 are pollinated by bees. While some plants self-pollinate, most plants have developed mechanisms to prevent or reduce self-pollination (inbreeding) and therefore are dependent on outside agencies for this pollination to occur.

- ❖ Build insect nest sites. Plant native flowers with lots of different colours and ones flowering at different times of the year. The colours blue, purple, violet, white and yellow are particularly attractive to bees.
- ❖ Plant in both the sunniest and in the shaded areas.
- ❖ Provide a range of flower shapes which benefit a variety of bees. Include open cup-shaped flowers such as foxgloves which especially attract bees.
- ❖ Plant flowers clustered of one species in clumps approximately 1m in diameter as clusters attract more pollinators than individual plants scattered throughout the habitat patches.
- ❖ Reducing Cutting Grass areas around the golf course- More natural 'Rough' areas.
- ❖ Cutting grass (fairways and semi-rough when the grass is at its driest).
- ❖ Reducing, as a result, the quantity of diesel fuel used and fuel emissions, as well as being less hard on machinery. Only cutting when and where it is necessary.
- ❖ Maintaining our cutting areas – cut adjustments for fairways & designated semirough areas - uncut areas are left as natural 'meadowing' areas.
- ❖ The Club is environmentally active providing large areas of natural diverse vegetation, home to bats, red squirrels, woodpeckers, kestrels, buzzards, bees & butterflies.
- ❖ The club needs a very necessary automated irrigation system for Greens & Tees using but conserving our natural source of golf course water. Our present



system is seriously outdated, wasteful and needs upgrading. Our large storage water tank & pump require upgrading. - A SCEP grant is required for these improvements.

## **We will continue in/to**

- ❖ Developing Wildflower (rewilding) areas around the course.
- ❖ Establishing natural habitats around the course for birds and pollinating insects and bugs. (Insect Hotels & Bat Boxes)
- ❖ Planting some fruit trees & fruit bushes randomly around the course.
- ❖ Establishing hedgerows. \*(See biodiversity and sustainability benefits of a diverse hedgerow and planting tips below.) ☑ Ensure that Insecticides are never used.
- ❖ Planting Programme - Thousands of native deciduous trees planted during the past years - Care of these trees by golfers - Annual planting reviews planned. 3000 saplings have been sewn all over the course in the last 2 years. This project has been run in conjunction with Eazy Treesy Crann project. Since January 2024, we have planted 500 beech plants for hedging along the entrance roadway adjacent to the clubhouse.
- ❖ Bird Feeders established – Awareness of ground-nesting birds.
- ❖ Woodland management – setting up eco-piles here and there where suitable.
- ❖ Water testing – Improve pond water quality on the 2<sup>nd</sup> & 16<sup>th</sup> holes to give aquatic life conditions to thrive by having flowering oxygen-generating plants.
- ❖ Herbicides, used as a last resort, are reduced to once a year in early spring. ☑ Fungicides are only used if necessary with one annual application desirable.
- ❖ Reduce nitrogen inputs per annum on greens to a sustainable level. We have started to spread Sow Back fertiliser which reduces synthetic nitrogen spreading and increases the micro-organisms and worm activity which deepens the root zone into the ground.
- ❖ Recycle cut grass and fallen leaves to create habitats.
- ❖ Investigate the use of further organo-mineral fertiliser to enhance grass growth.
- ❖ Club buggies are all electric – Phase out the use of privately owned petrol buggies.
- ❖ Recycling of all items that can be recycled – Plastics, packaging, metals, etc.
- ❖ Investigate the future use of electric mowers, when the time is right.
- ❖ To continue safeguarding our designated natural environmental course areas.
- ❖ Club House Issues - More efficient use of heating and electricity, automated lights. zone heating, Washing full loads of glasses, tableware, cutlery etc. at the most efficient temperature.



- ❖ Recycling of items; Posters, used golf cards, plastics, glass, used bulbs and batteries, food waste etc.

## Diverse Hedgerows

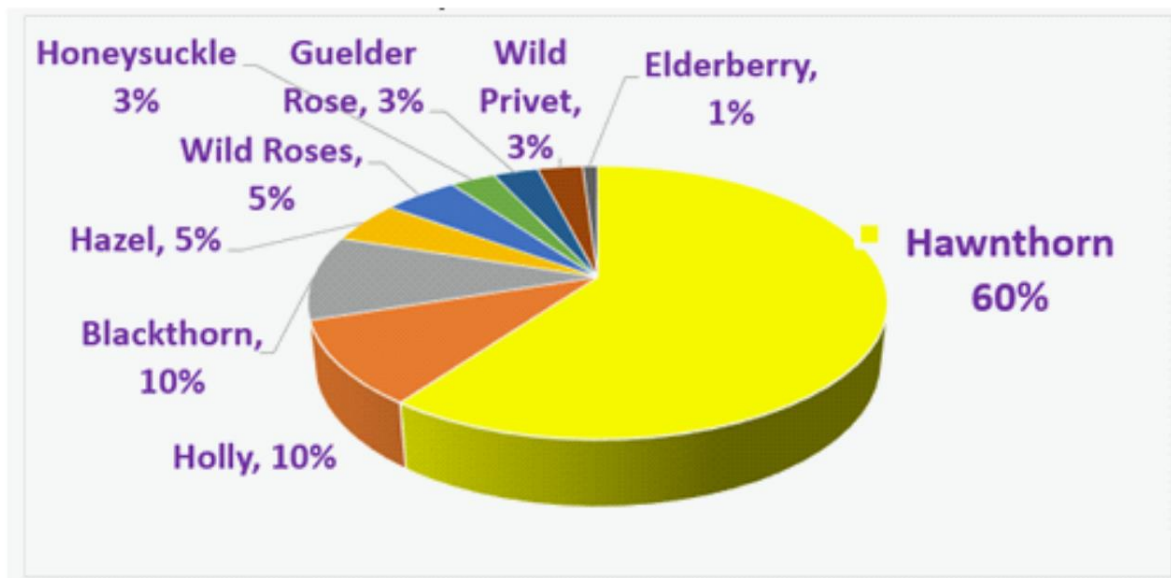
A hedgerow with a wide variety of plant species is aesthetically pleasing. It provides a retreat for mammals, birds and invertebrates and a corridor to navigate safely. The hedgerow's wildflowers will attract pollinators and provide some bird and animal food. A myriad of food chains occur within a hedgerow.

## Planting Process

A trench approximately 50cm deep and in width is required while removing weeds at the same time. Add compost or well-rotted manure to the base of the trench and mix it with soil. Cover this with a thin layer of soil so the plant roots don't touch the organic matter.

## Choosing Plants

Suitable plants in a hedgerow may vary in quantity but could include: Hawthorns 60%, Holly 10%, Blackthorn 10%, Hazel 5%, Wild roses 5%, Honeysuckle 3%, Guelder rose 3%, Wild privet 3%, and Elderberry 1%.





## **Planting Process**

Place the plants in two staggered rows with about 20cm between rows. Plant them in clusters for attracting pollinators and for better visual effects. Each plant should be planted to the soil mark on its stem. Backfill the trench with the excavated soil and firm in the plants by foot.

## **Immediate Aftercare**

Water the plants well. Cut off about one-third of each plant to encourage bushy growth. However, don't trim the holly for a couple of years.

## **Long Term Aftercare**

Hard prune the plants the following year. From then onwards, trim annually in winter. Decide the dimensions of the hedgerow. A desired height could be 1.5m-2m and its width around 1m.