

CARMARTHENSHIRE'S STATE OF NATURE – PLANTS



Lesser Butterfly Orchid © R.D. & K.A. Pryce



Annual Knawel © R.D. & K.A. Pryce



Tubular Water Dropwort © R.D. & K.A. Pryce

HEADLINES

- Despite its small size Wales has a relatively large flora, comprising 72% of all British species, including 78% of the native species ([BSBI Plant Atlas 2020](#))
- Over 2600 vascular plant 'taxa' have been recorded in Carmarthenshire (including charophytes/stoneworts) since 2000.
- There are 77 'Section 7' Priority Plant Species in Wales and 22 have been recorded in Carmarthenshire since 2000.
- Last seen in 2002 and subsequently thought to have become extinct in the county, the Fen Orchid was rediscovered near Pendine in 2022 following work to successfully recreate its habitat.
- Once more common species such as Juniper, Parsley Fern and Frog Orchid are now thought to be extinct in the county.
- Relatively common species such as our county flower, Whorled Caraway, have declined considerably over the last half century.
- Invasive Non-Native Species such as Sea Buckthorn, Japanese Knotweed and Himalayan Balsam continue to threaten valuable habitats with considerable effort and expense required to control them.

OVERVIEW

Although much reduced, Carmarthenshire continues to support a diversity of semi-natural habitats, from the uplands in the north to the coast in the south, and this is reflected in the diversity of plant species found in the county, including nationally rare species such as Fen Orchid, Dune Gentian, Deptford Pink and Killarney Fern.

Other rare or declining species are included as Priority species in Wales, and these include, Globeflower, Small-flowered Catchfly, Tubular Water-dropwort, Wood Bitter-vetch and Fragrant Orchid, whilst other, similarly rare species for which Carmarthenshire has a particular significance include Marsh Pea.

Some species, such as Bee Orchid, have become associated with post-industrial habitats and these sites can be particularly important for plants. They are however prime sites for development. A number of species formerly found in arable margins are now more likely to be found on disturbed land in brownfield sites.

As habitats are usually defined by their plant composition, changes to habitats reflect changes in plant composition. Since the 1950s, plant recording in Carmarthenshire by volunteer, expert county plant recorders, has become increasingly intensive and it is evident that plants of natural/semi-natural habitats such as ancient woodlands, flower-rich grasslands and moorlands have all declined as these habitats are lost, declined in quality and become more fragmented and isolated. Invasive Non-Native Species have gained a significant foothold over the past couple of decades, particularly in urban settings, include, for example, Bilbao's Fleabane, Water-bent grass and Himalayan Giant Blackberry.

CURRENT PRESSURES

- Continued loss and fragmentation of important habitats, e.g. semi-natural grassland and wetlands
- Changes in habitat management – e.g. reduced woodland management leading to a decline in ground flora, over and under grazing, abandonment of land, continued intensive agriculture.
- Land use change – development, especially loss of brownfield habitats
- Former agricultural land converted to horse and pony grazing.
- Climate change - flowering plants are now flowering up to a month earlier ([BBC website](#))
- Invasive species, e.g. Himalayan Balsam can smother riverbanks and Sea Buckthorn on sand dunes.
- Pesticides can cause a decline in pollinating insects.
- Air pollution, e.g. atmospheric Nitrogen can stimulate bramble, *Molinia* and other rank grass growth and acidifies soils causing changes to the species composition of habitats, particularly to the detriment of grasslands on calcareous soils.
- Scrub and bramble are much more aggressive than in the past and quickly smother valuable open habitats.
- Unimproved grassland, a habitat that has declined in significantly extent is still under pressure from national tree planting policy.

RECOMMENDATIONS FOR LOCAL ACTION

- Manage, restore, enhance, create and connect habitats at a landscape-scale.
- Be mindful of the specific needs of key species.
- Encourage good conservation management, work with projects that seek to do this, e.g. restore degraded grassland habitats and create new areas using local seed sources such as from green hay.
- Encourage monitoring/recording of key species, e.g. Wood Bitter-vetch, Adder's-tongue, Harebell
- Where monitoring identifies species population declines (even of still common but declining species such as Whorled Caraway), seek to reverse this by encouraging landowners to amend their management practices.

KEY AREAS

- All remaining semi-natural habitats including:
- Carmarthenshire sand dunes
- *Molinia* grasslands in south-east Carmarthenshire
- Waxcap grasslands
- Ancient woodland and parkland sites
- Brownfield habitats are generally ephemeral but are generally species rich and often support key species but are often under threat of redevelopment.

CASE STUDY

The [Carmarthenshire Meadows Group](#) is a county-wide community, members of which support each other to improve the diversity of plants, fungi and animals on meadows, large or small, across Carmarthenshire. It has established the [Big Meadow Search](#), a UK-wide project, to raise awareness and interest in grasslands and to record plant species. It also highlights associations between plants and other species by linking invertebrates and fungi with their host plants.



WANT TO FIND OUT MORE?

[Priority Vascular Plants in Carmarthenshire](#)

[A Vascular Plant Red Data List for Wales](#), Plantlife, 2008

[Plant Atlas 2020 - Britain's Changing Flora](#)

Commented on by the co-county plant recorders, 2024