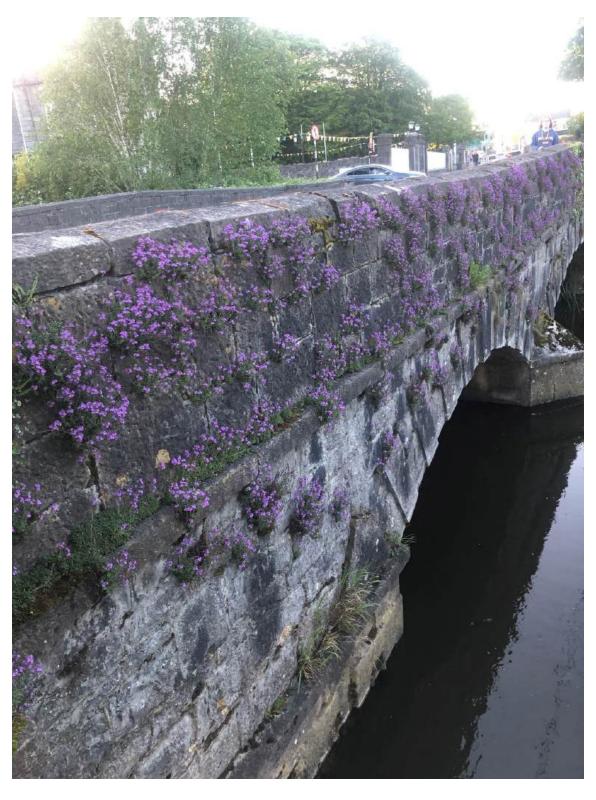
The flora of the walls of Birr



Fairy foxglove (*Erinus alpinus*)

Introduction

The old limestone walls of Birr are an intrinsic backdrop to the town. From the impressive walls and towers of Birr Castle Demesne to the fine stone bridges crossing the Camcor River and the various boundary walls about the town, they are part of our heritage and history. The walls were built using stone from local quarries, mostly limestones. Stone from Clorhane, near Clonmacnoise, locally called "Clorhane marble" which is especially rich in fossils, was prized for use in threshold stones, steps and other areas of importance in buildings. This topic was explored by Dr John Feehan in The Geology of Laois and Offaly (Feehan, 2013).

These old walls, with their lime mortar, mimic now rare natural habitats. Lichens, mosses, ferns, plants and invertebrates of cliffs, rockfaces and scree find a home in this urban setting thus adding to the biodiversity of the town. Many commoner plants find a home there too and plants that have "escaped" from gardens have become naturalised on the walls such as Fairy foxglove (*Erinus alpinus*) and Aubretia (*Aubrieta deltoidea*).

Some of the commoner species are Rue-leaved saxifrage (*Saxifraga tridactylites*), Pellitory of the Wall (*Parietaria judaica*), Ivy-leaved toadflax (*Cymbalaria muralis*), Fern-grass (*Catapodium rigidum*) and Red fescue grass (*Festuca rubra*).

Ferns

The trinity of *Asplenium* ferns, Wall rue, (*Asplenium ruta-muraria* Maidenhair spleenwort (*Asplenium trichomanes*) and Rustyback, (*Asplenium ceterach*) are found throughout the town on suitable walls. The rare Maidenhair fern, (*Adiantum capillis veneris*) with its stronghold in the Burren, occurs at three sites in Birr. One site, and probable source, is the hothouses at Birr Castle Gardens, where it was cultivated in Victorian times and still clings on to the surviving walls. It also occurs on a vault wall in Clonoghill cemetery and on the sluice gates in Mill Island Park.

New additions

Rats's-tail fescue (*Vulpia myuros*), a grass first recorded in Birr in the 1990s is now a common denizen of this habitat. Navelwort (*Umbilicus rupestris*) is also a recent addition to the flora of Birr along with Wall lettuce (*Lactuca muralis*).

Other residents

Although this article is based on the flora of the walls, many species of invertebrates, bats and birds also make their homes in the crevices of these walls. The swift colony in the Castle walls is a good example. Bumble and solitary bees are also residents, an important consideration in these times of biodiversity loss and these will benefit from the carful management of the walls.

The Care of old walls

There are a few plants that are detrimental to old mortared walls. Red valerian (Centranthus ruber), with its thick rootstock can almost be called a stone mover. Ivy, although excellent for a wide range of wildlife, is also a problem on old walls. The control of ivy (Hedera helix) needs special care as, when it is well established, its removal may damage the wall. Buddleia and Cotoneasters are increasingly a problem around Birr, with substantial bushes growing on old buildings and walls. Ivy-leaved toadflax (Cymbalaria muralis) can form quite large if straggly plants but as they are not deep rooted they are not a threat to the wall and are easily kept in check.

Repairs on the old walls should only be carried out using traditional lime mortar, as was done by Offaly County Council on Oxmantown Bridge some years ago. The use of modern cement results in damage to the walls during frosty weather.

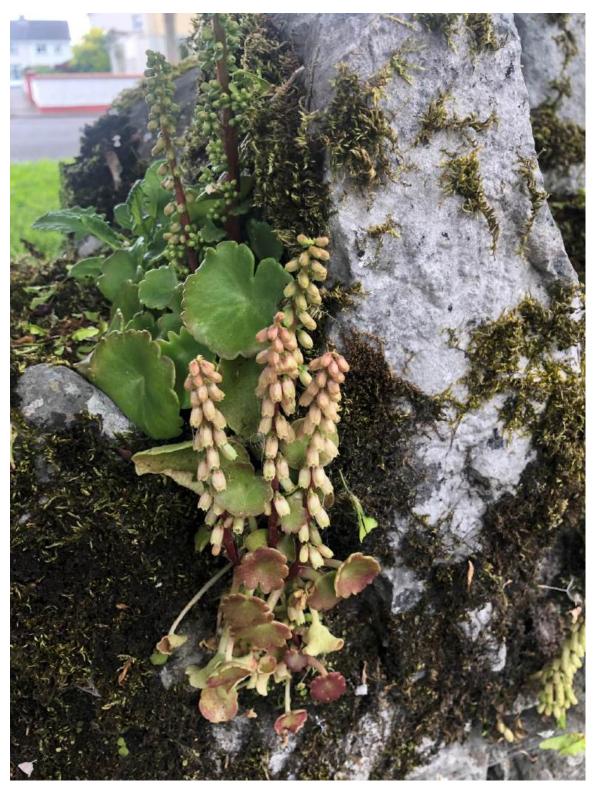
Birr Tidy Towns endeavours to preserve the biodiversity of the stonewalls of Birr. Care is taken to leave the majority of flowering plants, ferns, mosses and lichens and only remove woody plants and ivy where appropriate. It is hoped that this article will foster an appreciation of these special plants.

A full list of plants species recorded on the walls of Birr is attached below.

A link is provided below to an informative paper from the Dublin Naturalist Field Club on the subject.



Maidenhair fern Adiantum capillus-veneris



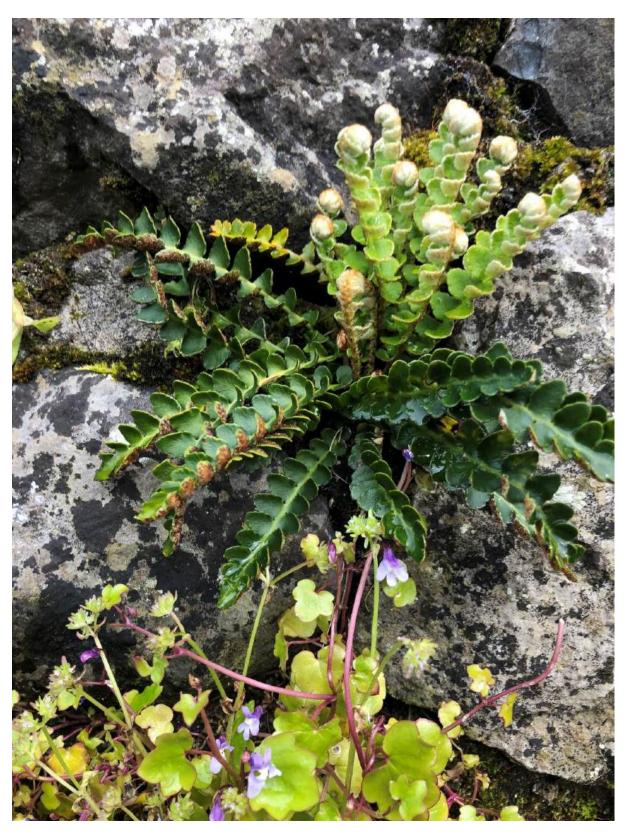
Navelwort Umbilicus rupestris



Wall rue Asplenium ruta-muraria



Rue-leaved saxifrage Saxifraga tridactylites

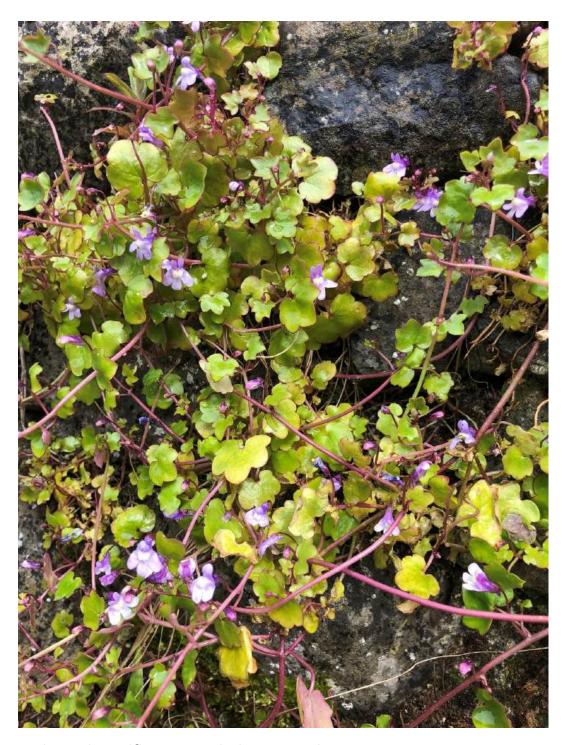


Rusty-back fern Asplenium ceterach



Intermediate polypody

Polypodium interjectum



Ivy-leaved-toadflax Cymbalaria muralis



References

Feehan, John. (2013) The geology of Laois and Offaly Walsh Printers, Roscrea

Species List	
Adiantum capillus-veneris	Maidenhair fern
Arabidopsis thaliana	Thale cress
Arenaria serpyllifolia	Thyme-leaved sandwort
Asplenium ceterach	Rusty-back fern
Asplenium ruta-muraria	Wal- rue
Asplenium scolopendrium	Hart's tongue
Asplenium trichomanes	Maidenhair spleenwort
Aubrieta deltoidea	Aubrieta
Buddleja davidii	Butterfly-bush
Capsella bursa-pastoris	Shepherd's-purse
Cardamine flexuosa	Wavy bittercress
Cardamine hirsuta	Hairy-bittercress
Catapodium rigidum	Fern-grass
Centranthus ruber	Red valerian
Cheiranthus cheiri	Wallflower
Chelidonium majus	Greater celandine
Clematis vitalba	Traveller-joy
Cotoneaster	Cotoneaster
Crepis capillaris	Smooth hawksbeard
Cymbalaria muralis	Ivy-leaved toadflax
Erigeron karvinskianus	Mexican fleabane
Erinus alpinus	Fairy foxglove
Erophila verna	Common whitlowgrass
Festuca rubra	Red fescue
Galium aperine	Goosegrass
Geranium lucidium	Shining cranesbill
Geranium robertianum	Herb Robert
Hedera helix	Common ivy
Leycesteria formosa	Pheasant berry
Linaria purperea	Purple toadflax
Mycelis muralis	Wall lettuce
Papaver dubium	Long-headed poppy
Parietaria judaica	Pellitory -of-the-wall
Polypodium cambricum	Southern polypody
Polypodium interjectum	Intermediate polypody
Sagina apetalata	Annual pearlwort
Sagina procumbens	Procumbent pearlwort
Saxifraga tridactylites	Rue-leaved saxifrage
Sedum acre	Bitter stonecrop
Sedum album	White stonecrop
Senecio jacobaea	Common ragwort

Senecio vulgaris	Common groundsel
Soncus oleraceus	Sow-thistle
Taraxacum officinale	Dandelion
Umbilicus rupestris	Navelwort
Urtica dioica	Common nettle
Valerianella carinata	Keeled-fruited Cornsalad
Veronica arvesis	Wall speedwell
Vulpia myuros	Rat's-tail fescue