# Ecological Flora of the Central Chilterns

Section 17: *Gunneraceae, Grossulariaceae,* Saxifragaceae, Crassulaceae, Halogoraceae, Vitaceae



White stonecrop with late-season form of holly blue

# Family: Gunneraceae Gunnera

# Giant-rhubarb Gunnera tinctoria

This is one of the species that the Victorians delighted in importing into their gardens - gigantic, ugly and unfortunately often highly invasive, like Japanese knotweed, bamboo and giant hogweed. It was a form of one-upmanship to show that one had a garden large enough to accommodate these beasts. Gunnera, fortunately, is not so invasive as some of the others and in our area is not a problem, because it really needs humid shady river-valleys or extensive lake-shores to become one. The plant, from South American jungles, has no ecological significance in this country other than its ability to shade out anything else. It was planted by the Garden Centre pond in the late 20th century and did not spread from there. It has recently been removed. It is more usually a feature of large estates with artificial lakes.



Young giant-rhubarb with its massive flower-spike, Bledlow Lyde

# Family: Grossulariaceae Currant family

### Gooseberry Ribes uva-crispa

Probably a very early introduction to this country that is now wellestablished and acts much like a native species in our woodlands, such that some botanists regard it as such (eg Mabey 1996). As a garden fruit-bush it is familiar to most, and it continues to escape because of birds taking the fruits and excreting the seeds sometimes far afield. It is not possible to differentiate a long-established plant from those of recent garden origin, because the latter soon lose their larger succulent fruits when untended. In the shade of woodlands fruit set is often very low.

**Identification** The spines on the stems distinguish gooseberry from other members of this family (the currants), although sometimes in woodland they may only be found on the older wood at the base. All this family have palmate leaves, the lobes toothed, although in gooseberry they are more deeply cut than in the others. The flowers are small pink bells until the small petals fold back to show the tuft of stamens, 1-3 in a cluster. The fruit, which usually have long bristly hairs, are 1-2cm across, larger than in the currants.

**Notable sites** It is well-distributed across our area, appearing as odd plants in many woods and hedgerows, occasionally forming small thickets, eg Hampdenleaf Wood, Nanfan Wood, Widnell Wood, Hampden Common and hedges along Hotley Bottom Lane. **Galls** Two galls are recorded on gooseberry, but neither are common.

The more frequent of these, the fungus *Puccinia caricina var. pringsheimiana*, causes yellow swellings on leaves and fruit. I have recorded it regularly in my garden; it also affects sedges in our area.



Gooseberry in flower

**Mines** Several leaf-miners are known on *Ribes* in Europe that are not recorded for Britain, but I have had the mines of the moth *Coleophora potentillae* on my garden plants.

Other ecological associates Infestations of the larvae of the Gooseberry Sawfly Nematus ribesii are very common, often defoliating whole branches. Two moths also attack gooseberry in gardens and allotments - The Phoenix and V-moth. Bees are active fertilising the flowers in April. Tiny colourless orbicular mites Cecidophyopsis grossulariae can often be found with a lens, feeding on the undersides of the leaves. The fungus Drepanopeziza ribis forms small brown lesions on the leaves, called Currant Leaf Spot, while the mildew Sphaerotheca mors-uvae is common. Various birds take the fruit. Human associations Grown for its fruit, which is rather sharp and needs sugar to balance it - gooseberry "tart" is a regular "sweet"; it can also be made into a wine. All garden cultivars are derived from our (native) species, such cultivation (from large-fruited genetic sports) beginning in the 16th century. So familiar is it that the word "gooseberry" has become a metaphor for a third unwanted person with a couple (perhaps because their presence is "sour").

**Derivation** It is difficult to find any connection with "geese", unless the term is used to mean "common" as in "dog-rose" and "horse-radish". The first syllable is therefore much more likely to be a corruption of the old German *krus* meaning "crisp" with reference to the taste, which also gives rise to the family name "<u>Gross</u>-ulariaceae".



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Hedgerow gooseberry in fruit

#### Red currant *Ribes rubrum*

Frequent inhabitant of hedgerows and woods, this plant may well be native, often being found in areas of woodland far from housing, although many specimens are clearly bird-sown escapes near habitations.

**Identification** In fruit the difference from gooseberry is obvious, with red berries only half the size in pendant racemes. Even in the absence of fruit or the more numerous flowers, the absence of spines is usually sufficient to tell it apart. The leaves are slightly larger and not so downy.

Notable sites Common in College Plantation, Nanfan, Longfield, Sergeant's and Angling Spring Woods. Present in most other woods, both ancient and recent plantations, usually as distinct bushes or patches clear of other vegetation. Galls One of the 3 British galls on red currant has been noted locally: the aphid *Cryptomyza ribis*. which produces very distorted lumpy leaves (below, right). Mines As for gooseberry.

**Other ecological associates** Pests of currant crops include those noted above for gooseberry. Others are the Apple capsid *Lygocoris rugicollis*, Spinach moth and the Currant pug. Rust spots on the leaves are *Puccinia caricina var. pringsheimiana*. Bees are involved in fertilisation. Birds eat the fruit. **Human associations** This species is the origin of our garden cultivars, including some white-berried types, often crossed with *Ribes spicatum*.







Puccinia caricina on gooseberry



Red currant in flower

## Black currant Ribes nigrum

Once considered native, this is now thought to be an early introduction by man. The scattered records, however, are often in apparently "wilder" situations than red currant and gooseberry, particularly in wet swampy conditions to which it is more partial than the other two.

**Identification** The black fruit tell it apart from red currant, although it also lacks spines. The leaves are larger, darker green, hairless, somewhat shiny, and have orange glands beneath that exude the unmistakable smell of black currant when crushed, sometimes detectable from a distance.

**Notable sites** Very sparse in woodlands, but persistent at Sheepwash and Blakemore Ponds. Escapes sometimes established in hedges by gardens.

**Galls** Of the three known galls, only the yellow leaf swellings caused by the rust *Puccinia caricina var. pringsheimiana* have been recorded locally.

#### Mines As for gooseberry.

Other ecological associates As for red currant, but usually self-fertile and less visited by bees.

**Human associations** The origin of our garden cultivars. Well before the days of commercial Ribena a hot syrup made from black currants was thought a good antidote to sore throats. The fruit do contain high levels of Vitamin *C*, L-ascorbic acid and antioxidants that are genuinely effective against colds.

Derivation "Currant" ultimately derives from Corinth in Greece, an ancient export centre for currant species.



Flowering currant Ribes sanguineum



#### [Mountain currant Ribes alpinum

This native of northern England is sometimes grown in gardens in the Chilterns and may escape (as in Barn Wood, Wendover, where it grows with gooseberry, red and black currants). The flower- and fruit-spikes stand erect, not pendant, and the leaves are more deeply lobed and toothed.]



There are half a dozen records of this garden escape, all since 1997. The racemes of bright pink flowers are distinct and the wrinkled leaves are scented. I find its musty suffocating smell distasteful. A large bush is established in Angling Spring Wood towards the west end of the central ride.



Mountain currant in flower

# Family: Saxifragaceae (Saxifrages)

Most British native saxifrages are northern and in our area we mostly have to make do with a few occasional garden escapes that seldom establish.

# Rue-leaved saxifrage Saxifraga tridactylites

This is our one native, an annual that seldom finds suitable habitat in our area, with just two records. It is more common in some other parts of the Chilterns.

**Identification** This undemonstrative little plant has white 5-petalled flowers above sticky-haired stems and three-lobed leaves (like "rue") that usually turn some degree of red.

**Notable sites** It usually grows on wall-tops, liking bare places with some calcareous influence (from, eg, mortar). At Hampden Bottom Farm it has survived at least since 2004 on stony ground often kept bare by vehicles and on roof-tops of nearby barns. It also grows by and on walls at Missenden Abbey. Druce (1926) does not mention the plant in our region.

**Ecological associates** There are no known galls or mines and it is usually self-pollinated. **Human associations** None.

**Derivation** "Saxifrage" comes directly from the Latin *saxifragus* "stone-crushing", from *saxum* "rock" and the root of *frangere* "to break" (the same root seen in "fragment" and "fracture"). Most saxifrages grow in mountainous areas in rock-clefts, and the habitat of *tridactylites* is not dissimilar, but the name may actually refer to medicinal uses in dispersing bladder-stones. The specific name refers to the leaves - "three-fingered".



## [Meadow saxifrage Saxifrage granulata

This is the only other native saxifrage that grows naturally in the south of Britain, on unimproved chalk grassland and ancient meadows. It has never grown in our area and is generally quite scarce (rare in Bucks according to Maycock & Woods, 2005). In the Chilterns it has long been known at Lodge Hill above Princes Risborough, where it now appears to be reduced to just one small patch.]

# London-pride *Saxifraga x urbium*

Garden rockery plant sometimes occurring as a garden throw-out. It was recorded in College Plantation in 1988, but not seen there recently. Heads of white flowers with pink stamens grow above spoon-shaped basal leaves. It is a sterile hybrid and so cannot regenerate. It has nothing to do with London! Perhaps it was given this name because it was thought to be "showy" and therefore metropolitan (cf. the specific name *urbium* "urban").



Meadow saxifrage



London-pride

# Fringecups Tellima grandiflora

An erect spike of small very ragged flowers ("fringed cups"), five petals pale green, more or less tinged red, rises above longstalked wrinkled basal leaves. It very occasionally escapes from gardens and may become established. I have recorded it from Prestwood, 2004, Great Missenden, 2014 and Little Kingshill 2015; it was recorded by Alan Showler from Peterley Wood in 2000 and again by me in 2008, but is no longer there; the latest record is from Hotley Bottom Lane, Prestwood, 2019 (Karen van Oostrum).



Flower of pick-a-back plant

#### Pick-a-back plant Tolmiea menziesii

Similar to Fringecups, but the reddish flowers have four very narrow petals reddish and hang downwards bell-like, the leaves are paler and yellow-green, and it often produces plantlets on stems from the base that root to form new plants ("piggybacking"). One record on the southern boundary of the field west of Lodge Wood in 2005, just beyond a garden hedge.

**Varieties** Various other similar garden plants generally referred to as *Heuchera* may also escape from time to time. The related *Bergenia* (Elephant-ears) may also occur as garden throw-outs.



Fringecups (Karen van Oostrum)



Bergenia x schmidtii planted at Prestwood Parish Church

#### [Opposite-leaved golden saxifrage Chrysosplenium oppositifolium

This native of very wet places such as shady stream-sides would not grow in our area, but there is a splendid colony just below the Chiltern escarpment at Bledlow Lyde, a narrow valley where a chalk spring creates a unique habitat. The plant creeps close to the marshy ground and the yellow-green flowers are inconspicuous.]



Opposite-leaved golden-saxifrage at Bledlow Lyde

# Family: Crassulaceae (Stonecrops)

# Orpine Hylotelephium telephium

This is the native equivalent of the familiar garden "butterfly plant" or "ice-plant", flowering late in the summer. It is a perennial, quite uncommon in our area, but hiding away in scattered hedgerows in various places. **Identification** The tight many-flowered pink heads are distinctive, but it is shy flowerer and most of the year it is identified by the flat toothed green or grey succulent leaves up rather floppy stems.

Notable sites Most colonies are very small. The largest is by the path that passes the west side of Grubbins Plantation. Other sites that have been known for decades are along Whitefield and Hyde Lanes. The former of these has suffered badly from road verge cutting for large vehicles to obtain access up the narrow road. It apparently favours old green lanes and ancient boundaries, for its also grows in Nanfan Hedge, a very old boundary hedge to the west of Prestwood, in a hedge near the old school at Great Hampden and Cobblershill Lane. Ecological associates No galls are known in this country, but three leaf-miners, one recorded on the plants at Nanfan Hedge in 2014, the fly Phytomyza sedicola, previously only recorded in Westmorland. Flowering into September and with easily accessible nectar it is popular with late-summer flies, bees and butterflies. Human associations Nowhere common in the Chilterns, this plant has played little role in folk traditions. **Derivation** The name is something of a conundrum, being derived from the French *orpin*, the name of a yellow pigment (orpiment), even though our plant has red flowers. The French term, however, covers all stonecrops, most of which do have vivid yellow flowers. Sometimes called "livelong", from its persistence where it does grow. Varieties Two related species are commonly grown in gardens - Hylotelephium spectabile (from far east Asia) and the sterile cultivar 'Herbstfreude', which is a hybrid between spectabile and telephium. These may be found as escapes, but all our local records appear to be the genuine native. It is told from spectabile by stamens no longer than the petals (much longer in spectabile) and leaves arranged alternately rather than opposite or in whorls of three. The hybrid has much shorter stamens (to 2mm) or none at all, and usually some alternate leaves.



Orpine in Nanfan Hedge (rain has made the leaves greener; drier patches are still grey)



Sedum spectabile



'Herbstfreude'

# White stonecrop Sedum album

Occasional escape from gardens, where it is a common rockery plant.

**Identification** Trailing habit, white flowers, small thick stubby leaves crowded along the stems. **Notable sites** Well established at Prestwood parish churchyard, where it was originally planted on some of the graves. Sometimes seen along bare roadsides near gardens (eg Warrendene Road, Lovell Estate in Prestwood).

**Ecological associates** None recorded, but visited for nectar by flies, bees, butterflies and moths. **Human associations** Grown in gardens.

**Derivation** "Stonecrop" is from the typical stony habitat in which all Sedums grow, with Anglo-Saxon *cropp*, a shoot or sprout.



White stonecrop with holly blue

#### Biting stonecrop Sedum acre

This generally common native of bare stony ground and walls is decidedly rare in our area, with only three sites recorded - Missenden Abbey in 1987, Hughenden Valley, and the former tennis courts of Rignall Lodge. Maycock and Woods (2005) say it is uncommon in Bucks generally. Killick at al. (1998) say it is common in west Oxfordshire, but increasingly infrequent as one moves east, and Crawley (2005) notes that it is missing from large tracts of Berkshire, but James (2009) has it as common in Hertfordshire. It is not clear why Bucks should be the centre of a "black hole" as far as this plant is concerned. It is not a recent phenomenon - Druce (1926) does not mention any records for our area. It is a small plant with typical stubby stonecrop leaves and yellow flowers, growing in dense patches where it does occur. It did not have a prominent role in folk medicine, but has been known to be used for skin problems (dermatitis, shingles). It has a bitter taste reflected in its English name and the Latin specific name (cf "acrid").



Biting stonecrop

# Thick-leaved stonecrop Sedum dasyphyllum

This garden escape has pink and white flowers and stubby leaves that are pinkish-grey with red or green spots. It has survived for at least two decades on a wall in the centre of Great Missenden just outside the Baptist Chapel, and has recently spread to a nearby wall in the High Street.

# Reflexed stonecrop Petrosedum rupestre

This yellow-flowered rockery plant sometimes escapes from gardens and may be found on old walls. The few local records we have are all for the 1980s-1990s. It used to grow on the railway bridge at the bottom of Whitefield Lane, Great Missenden, and may still be there. The leaves are rounded but linear, not stubby like *album* and *acre*, and the flowers appear in a head which hangs down (reflexed) in bud.

# Rock stonecrop Petrosedum forsterianum

Another garden escape, similar to the above, except the leaves are flattened and pointed and the flowers do not hang down in bud. Recorded in Prestwood parish churchyard 1998.

# Hybrid stonecrop Phedimus hybridus

This less common garden escape is a low creeping yellow-flowered stonecrop with flattened succulent leaves like small orpine ones. It was recorded outside Angling Spring Farm in 1998.

# New Zealand Pigmyweed Crassula helmsii

This is a recent introduction to this country, from Australia and New Zealand, which has devastated many ponds everywhere. Once a tiny fragment is brought to the margin of a pond, on say the feet of a bird or discarded by careless aquarists, it can swamp all native vegetation in a couple of seasons and is extremely difficult and costly to eradicate (usually involving the destruction of the pond).

**Identification** Stems can trail a third of a metre across mud and into shallow water. The leaves are small, linear, flattened, but succulent. Tiny flowers at the shoot-tips are 4-petalled and white.

Notable sites Recorded by Alan Showler at two ponds at Hughenden, where it was established in the early 21st century. Fortunately it has not spread to other ponds in our area, nor to those on Downley and Naphill Commmons. Major infestations have been known at many ponds in the Chilterns, eg Penn Street, College Lake, Gerrards Cross.

**Ecological associates** It spreads unchecked, lacking natural predators.

Human associations Used as a waterweed in aquaria.



Thick-leaved stonecrop



Reflexed stonecrop



Rock stonecrop



Hybrid stonecrop



New Zealand pigmyweed at pond on Gerrards Cross Common

#### House-leek Sempervivum tectorum

This plant from the mountains of Europe was introduced quite early on to plant on roofs, especially thatched, because it was thought to be a protection against lightning and fires, although its main use may well have been for its medicinal cooling properties, used to make an ointment to sooth a wide range of complaints. Roofs, reflecting better the native habitat of bare, usually stony, substrate, were just a handy place to grow it. Most of the time it is restricted to large rosettes of flattened succulent leaves, but it may from time to time throw up a leafy flowering stem with pink flowers at the top. It grew in the 1990s on the slate roof of October Cottage in Prestwood, but has since been cleaned off. It seldom lasts long, as it does not truly naturalise.



## Navelwort Umbilicus rupestris

This British native growing on walls and rocks in wetter regions of the west and north does not occur naturally in our area. It has, however, become well-established on a wall outside Lower Warren Farm, having been planted there by a previous resident (first recorded 2001). It appears to thrive there, along with another locally uncommon plant, shining cranesbill *Geranium lucidum*. It is a distinctive plant with succulent semi-evergreen round leaves having a central depression ("navel") and a tall spike of whitish flowers. Also known as "wall pennywort" for its coin-shaped leaves.



Navelwort on a wall in West Wales



Navelwort at Lower Warren Farm with old flower-spikes in winter

# Family: Halogoraceae (Water-milfoils)

#### Spiked water-milfoil Myriophyllum spicatum

Although a British native, the only records of this submerged aquatic plant in our area are known introductions. It was in the private Hughenden Chase Pond in 1996 and is probably still there; it was also planted by Prestwood Nature in the Sheepwash pond after restoration in March 2008, but was subsequently consumed by Mallards. The finely divided feathery leaves distinguish the water-milfoils (hence the name, Latin mille "thousand" folium "leaf"). They are used as aerators for aquaria and useful invertebrate habitat in ponds. Myriophyllum spicatum may never have grown naturally in our area, as it was not mentioned by Druce (1926), but its relatives Alternate water-milfoil M. alternifolium and Whorled water-milfoil *M. verticillatum* were said by him to be "local" at that time. These two are now both extinct as natives in the area. Alternate water-milfoil prefers acid water and has always been rare in the Chilterns. It used to grow in ponds on Naphill Common but was not found there in a recent survey. Both of the other two species are also said to be very rare in Bucks by Maycock & Woods (2005). Any modern records of these plants in the Chilterns will almost certainly be deliberate introductions.

#### Parrot's-feather Myriophyllum aquaticum

This South American plant is sold more extensively than our native species and ends up being discarded into our ponds from gardens and aguaria, because it is a very aggressive grower. It can soon clog up a small pond. I found some thrown into the small pond on Green Lane, Prestwood, in 1995, but fortunately it did not survive a subsequent period of desiccation. I subsequently found it Wibner Pond in 2002. This large pond is a candidate for restoration in the future and any surviving parrot's-feather would have to be thoroughly removed if this took place. Parrot's-feather has mostly five leaves in each whorl round the stem, more than spicatum and alternifolium, and each has usually less than 30 segments, while verticillatum has more; the leaves above the surface of the water are also densely dotted with shiny glands, unlike any of the other species. It only produces female flowers in this country (so that it can only spread vegetatively); the flowers are white, whereas our native species have reddish flowers. Its vigorous dense growth, however, usually alerts one to its presence.



Parrot's-feather



Spiked water-milfoil



Alternate water-milfoil



Whorled water-milfoil

# Family: Vitaceae (Vines)

#### Virginia-creeper Parthenocissus quinquefolia

This North American creeper was introduced as a garden plant to cover walls, bringing an intense colour in autumn when the leaves turn red. It has leaves with five fingers, split from the base, and tendrils ending in small sucker pads. It produces small black "grapes". It hardly escapes more than by scrambling over external walls, but it was recorded at Walter's Ash and Hughenden Valley by Alan Showler.

#### False Virginia-creeper Parrthenocissus inserta

Very similar scrambler also grown in gardens and escaping over the walls. It differs from *P. quinquefolia* in lacking the suckers at the end of the tendrils. It was planted on the Lovell Estate in the 1980s and is spreading; it also escapes over walls along Lodge Lane and occurs in Trafford Road, Great Missenden.

#### Grape-vine Vitis vinifera

This European vine, source of all the cultivars used in wine-making, is also occasionally grown in gardens, often forming arbours on trellises, where the bunches of grapes can hang down and hopefully ripen in the frugal British sun. The leaves are five-fingered but the segments are not separated right to the base. The leaves themselves are used as a foodstuff in the Middle East. I have recorded it escaping over a garden wall on Lodge Lane in 2010. Although we use "vine" nowadays to refer to any creeper, it originally referred specifically to the grape, from a Mediterranean word represented in Latin as *vinum* "wine". "Grape" on the other hand is from Old French *grape* "cluster" from a Germanic stem meaning "collect together" seen also in words like "grapple" and "cramp". So "vine" was the grape and "grape" was the cluster of berries.



Virginia-creeper growing in its natural habitat in Florida

False Virginbia-creeper

Grapes on vine