

Devon Biodiversity Action Plan

PRIMROSE

"Whether carpeting a glade or peeping from a February hedgebank, it makes joy and thanksgiving in the hearts of humanity..." Rev'd Keble Martin & Gordon T Fraser (1939) in Flora of Devon.

- The primrose is the *prima rosa* - first rose of the year - the flower which heralds the coming of spring and decorates countless miles of hedgebank and roadside verge around the County in the early months. It is attractive, popular and recognised by all. Widespread across Devon - being more abundant here than in most other counties - it grows in many places from coastal cliffs to urban gardens. As such, it forms part of the very essence of this beautiful shire and contributes to the quality of life of its residents and the many who visit as holidaymakers.
- Primrose has important links with man. For generations bunches of primroses have been picked as presents for parents and decorations for churches. Indeed, there has long been a tradition of commercial primrose picking in Devon, particularly by the owners of a number of South Devon paper mills who sent the blooms to their customers as a '*breath of Devon air*'. Our literature abounds with references to primroses.

Description

- The primrose demonstrates vividly the role of widespread and commonplace plants and animals in shaping the character and special quality of the County and the need to value and cherish these no less than the rare or unusual. The primrose is a useful indicator of our concern for the world around us: unless we succeed in maintaining the status of this robust yet attractive species, what hope have we of saving those habitats or species which are already rare or vulnerable? By promoting the conservation of the primrose, we can look after the many habitats in which it is found - woodlands, hedges, coastlands, churchyards, roadside verges and railway banks - and the many species which are commonly found alongside it - violets, early-purple orchids and lady's smock or less well known pollinating insects such as the Bee Fly or the Sword Grass moth.
- This Plan is intended raise public awareness of the need to value and conserve characteristic and commonplace elements of Devon's environment - in particular the primrose - and to generate action which might help to achieve this. Far from promoting a '*hands off - don't pick the flowers!*' attitude, its central purpose is to involve people in their local environment, to marvel in its beauty and to take a hands-on approach to its care and future management.

Why an Action Plan?

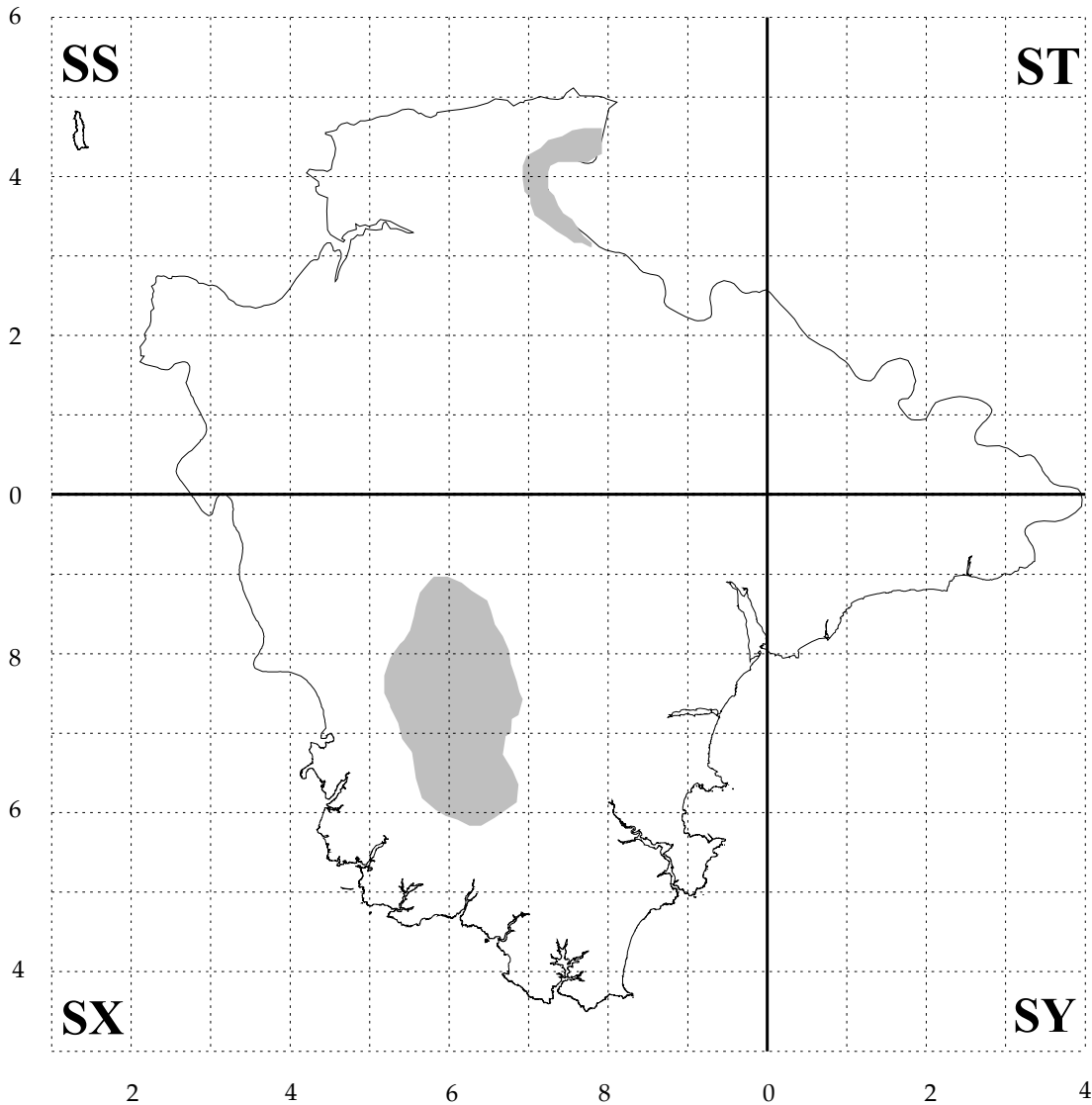
- The primrose is a low, perennial herb whose pale yellow flowers are universally recognised in spring. The primrose family (the *Primulaceae*) comprises almost a thousand species throughout the world although no more than a couple of dozen of these occur as native species in Britain, with the most well-known being the primrose itself and its close relatives - the cowslip and oxlip. Much cultivated in gardens, the white, pink and even double-flowered forms of primrose can sometimes become naturalised, but it is the native form of primrose, *Primula vulgaris*, which is so widely encountered. It was formerly an important medicinal plant - the roots are said to be a strong, but safe, emetic. The primrose occurs in Devon in open, sunlit conditions where it can be found together with cowslip (*Primula veris*), although this latter species usually prefers drier and more lime-rich soils and can be distinguished by its later appearance and its nodding cluster of darker-yellow flowers.

Relevant Ecology

Although shade tolerant, growth and reproduction in primrose are favoured by relatively open conditions which allow the plant to spread both vegetatively and by seed.

- The primrose has long been cultivated and bred in Devon nurseries with many well-known varieties developed here - notable among them being the Primula 'Buckland Wine' and the Primula 'Harry Adams'.
- Primroses are pollinated by a range of insects - particularly by the long tongues of brimstone butterflies fresh out of hibernation - and provide a vital nectaring plant in the early spring.

Relevant Ecology



Shading displays areas where there are no records of primrose

Distribution of Primrose in Devon

- The primrose does not benefit from any legal status or protection other than that which is afforded to all wild plants through the Wildlife and Countryside Act 1981, which makes it an offence deliberately to uproot a plant without the landowner's consent.

Current Protection

<ul style="list-style-type: none"> The primrose is a native and widespread species found in a range of habitat including woodlands, hedgebanks, coastal slopes and, where associated with damp and heavy soils, in open grasslands. Although distributed widely across the lowland parts of the British Isles, it remains a local species in many areas and in the eastern side of the Britain it is associated with shaded habitats such as woodland. The reverse is true in Devon where humid conditions and moist soils result in it being locally common and more often associated with open habitats such as hedge bottoms and roadside verges. It is absent only from the higher moorland zones, although it remains infrequent in areas with light and sandy soils. 	Current Population
<ul style="list-style-type: none"> There is evidence of a decline in primrose in parts of Britain such as South Wales and Herefordshire. Anecdotal information in Devon certainly suggests that primrose is less common now than it was in the past although this cannot be quantified at all. In the mid 1930s and 40s gypsies picked pillowcases full of primroses to sell in Devon towns; collecting on this scale would be extremely difficult in most parts of the County today. 	Recent Changes in Population
<ul style="list-style-type: none"> <u>Primrose Picking/Uprooting</u> - There has long been a suspicion that primrose collecting in Devon has led to a decline in the species. Reverend Keeble Martin and Gordon T Fraser in their 1939 'Flora of Devon' suggested that: <i>"Even in its own area in some village lanes, especially near towns, it is picked almost to extinction, but often survives on the reverse side of the bank."</i>. Adverse publicity in the mid-1970s about the possible impact of the commercial picking and distribution of primrose blooms by South Devon paper mills eventually resulted in the abandonment of this Devon tradition. This decision was taken despite a study by Plymouth Polytechnic which concluded that: <i>"the level of picking carried out is not a serious biological threat to the survival of Primrose in the South Hams"</i>. More damaging than the picking of primrose blooms is the uprooting of the whole plant as people transfer them to their own gardens. <u>Agricultural Improvement</u> - Given the frequent occurrence in Devon of primrose in open grassland, the species will clearly have declined significantly as a result of the very extensive agricultural improvement (i.e. ploughing, re-seeding and fertilising) of flower-rich permanent pasture. In arable areas, ploughing to the very margins of the field and fertiliser and spray drift (or direct application) to hedge bottoms are likely to be damaging. Although vast lengths of hedges remain across the Devon countryside, the significant losses which have occurred over the last Century will inevitably have resulted in parallel losses in primrose in one of its favoured Devon habitats. Management practices result in mixed fortunes for primroses: regularly cut hedges often have open, sunlit banks favoured by primroses while neglected hedges can be over-shaded. <u>Woodland Management</u> - Although common in deciduous woodlands, primroses favour the open conditions associated with rides or the occasional removal of the tree canopy as happens in coppice rotations. Changes in woodland management - including replacement of native deciduous trees by densely planted conifers, neglect of many small woodlands and the decline in coppice management - are all likely to have been detrimental to primrose. <u>Management of Roadside Verges</u> - Devon County Council and the Highways Agency operate roadside verges policies which result in most verges being cut just once in every three year period - other than the metre strip directly alongside the carriageway and in visibility areas. This cutting rotation is likely to have favoured primroses - and many other wild flowers - by allowing them to grow unchecked and to set seed in most years whilst preventing the encroachment of scrub or excessive growth of coarse herbage. The verges and embankments associated with new roads have provided new habitats for the primrose in parts of the County. Primroses fare less well in narrow lanes where there is extensive vehicular damage to verges and banks, compounded by the smothering effect of deep way-soil when repaired. 	Current Problems for Primrose in Devon

<ul style="list-style-type: none">• <u>Air Pollution</u> - There is a belief nationally that primrose might be a species which is sensitive to air quality. There may be implications in Devon from the air pollution generated in the industrial areas of South Wales where a marked decline in primrose has already occurred.	
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<p>Although there are no current measures in Devon which are targeted specifically at primroses the flower does benefit indirectly from various existing initiatives. These include:</p> <ul style="list-style-type: none"> • The general work of the Devon Hedge Group which promotes management practices which favour the wildlife and landscape value of Devon’s hedges. • The recently introduced Hedgerow Regulations offer protection for ‘important hedgerows’, with primrose being one of the ‘woodland species’ which helps to determine this importance. • The development of maintenance strategies and policies for Devon’s roads which aim to benefit the wildlife and landscape value of the roadside verges. • Countryside Stewardship and Environmentally Sensitive Areas which provide incentive payments to support the restoration and management of wildlife habitats - including those where primroses are frequently found - such as hedgerows and coastal grasslands. • Churchyard conservation initiatives which have become increasingly popular in recent years with support from national bodies such as English Nature. • Parish Path Partnerships whereby the County Council provides funding for Parish Councils to reinstate and maintain their rights of way networks, which provides a haven for primroses. • The only research relevant to primrose which has been undertaken in Devon is that carried out by Plymouth Polytechnic in 1977 as already mentioned above. This work was based on a comparative assessment of a number of primrose plots, some of which were subject to commercial picking, and was designed to assess the ecological effect of this activity. • Current national research is studying how woodland populations of primrose are formed and become extinct (i.e. meta-population processes) with changes in the woodland canopy. 	Current Positive Initiatives for Primrose in Devon
<ul style="list-style-type: none"> • The Devon Biodiversity Action Plan forms a key link in the chain of biodiversity planning from the UK Plan, through Regional guidance, to local delivery. • The UK Steering Group Report contains no national, costed action plan for primrose. Neither has such a plan been produced as part of the South West Regional Biodiversity Initiative. This reflects the status of primrose as a relatively common species. Despite this, an action plan at the Devon level is justified because of the species’ important contribution to the character of the County and the value local people place upon it. It also acts as a focus for attention towards the conservation of other commonplace and characteristic features. <p>UK Plans relevant to primrose:</p> <ul style="list-style-type: none"> ⇒ <i>Ancient and/or Species-rich hedgerows</i> ⇒ <i>Upland oakwood</i> ⇒ <i>Sea cliff and slope</i> <p>Regional Plans relevant to primrose:</p> <ul style="list-style-type: none"> ⇒ <i>Upland oak woodland</i> ⇒ <i>Sea cliff and slope</i> ⇒ <i>Species-rich hedges</i> <p>Associated Action Plans within the Devon BAP:</p> <ul style="list-style-type: none"> ⇒ <i>Species-Rich Hedges</i> ⇒ <i>Oak Woodlands</i> 	Biodiversity Planning Context

⇒ *Sea Cliff and Slope*

⇒ *Flower-Rich Meadows and Pastures*

These objectives are intended not only to promote the conservation of primrose specifically but to generate wider benefits for nature conservation in Devon:

Objective 1

To raise appreciation of primroses as an important element of quality of life in Devon.

Target

- By 2005 for two thirds of all residents of and visitors to Devon to value primroses as an important part of the County's natural environment.

Objective 2

To use the primrose as a flagship species to achieve greater awareness of and community involvement in wildlife issues in Devon and particularly to emphasise the importance of conserving the commonplace and characteristic elements of our natural environment.

Target

- By 2010 to ensure that within every Parish in its natural range there is at least one accessible location with abundant primroses.

Objective 3

To maintain the status of primrose as a widespread and common species throughout those parts of Devon where its occurrence is to be expected.

Target

- No decline in distribution or overall populations between the years 2000 and 2010.

Biodiversity Objectives & Targets for Primrose in Devon

- The pursuit of the Objectives and Targets set out in this Plan will not only benefit the primrose. Conservation has wider benefits and advantages for society, by providing a resource which is the basis of many aspects of the local economy, and by adding to quality of life in ways which are beyond financial measure. Thus enhancing the interests of biodiversity also enhance those of society as a whole. Some of the wider benefits are as follows.
- Landscape - There is obvious landscape merit in maintaining the prolific spring-time bloom of primroses across the County.
- Tourism - The primrose could be used as a powerful marketing emblem for sustainable tourism initiatives in the Devon, with abundant primroses forming part of the continued attraction of Devon's coast and countryside.
- Quality of Life - The sight of primroses in the early spring months can bring with it a tremendous 'feel good factor' for residents of Devon.
- Commonplace Wildlife - Promoting the appreciation and conservation of primrose should

Wider Benefits from Pursuing these Objectives

bring wider benefits for a whole range of commonplace forms of wildlife.	
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Actions for Primrose in Devon

Action	Potential Deliverer		Year for action/year to be in place or complete by					Meets Objective number
	Lead	Partners	98	99	00	05	10	
A. Communication and Publicity								
1. Establish a Devon Primrose Action Group to spearhead the communication and publicity elements of this action plan.	DCC, EN, DWT	CCD, PCs, NPAs, CPRE		✓				1, 2
2. Promote the re-staging in Devon of the former National Primrose Day.	DPAG			✓	✓	✓	✓	1, 2
3. Produce, through community involvement, a popular document on the primrose in Devon, possibly in the style of the Flora Britannica.	DPAG	DCC, CCD		✓				1, 2
4. Encourage the primrose to be used in promotional / tourism literature for Devon	DPAG	DCC, TICs		✓	✓	✓	✓	1, 2
5. Encourage Garden Centres to stock native primroses grown from native seed and Devon-specific varieties of cultivated primrose.	DPAG			✓	✓	✓	✓	1, 3
6. Seek to influence 'Best Kept Village' and other such events to give greater emphasis to the importance of local wildlife interests - such as stands of primroses.	DPAG	CPRE, CCD		✓	✓			1, 2
B. Policy and Legislation								
1. Include policy provision in Local Plans for the conservation of commonplace, characteristic and locally distinctive features.	LPAs	EN, DWT	✓	✓	✓	✓	✓	1, 2, 3
2. Where necessary, raise awareness of the legal protection for wild flowers to avoid problems of excessive up-rooting.	LAs	EN, DWT	✓	✓	✓	✓	✓	3
3. Keep the Rural Roadside Verges Policy under review to ensure that it favours the conservation of primrose and other characteristic roadside verge flowers.	DCC, HA, UAs	Verges Working Group	✓	✓	✓	✓	✓	3
C. Site Safeguard and Management								
1. Ensure existing and future agri-environment schemes are sympathetic to the requirements of primrose where appropriate - especially in coastal situations and hedges.	MAFF, FRCA	DHG	✓	✓	✓	✓	✓	3
2. Undertake management to favour primroses and other characteristic and commonplace forms of wildlife - and provide ready access to these - within LNRs, Country Parks, Public Open Space and other community land.	LAs, PCs	NPAs	✓	✓	✓	✓	✓	3

Action	Potential Deliverer		Year for action/year to be in place or complete by					Meets Objective number
	Lead	Partners	98	99	00	05	10	
3. Ensure existing site management plans and agreements take adequate and appropriate account of the conservation of characteristic and commonplace features such as primrose.	EN, DWT, FRCA, WT	NPAs	✓	✓	✓			1, 2, 3
4. Manage key roadside verge locations to achieve stunning displays of primroses.	DCC, HA, UAs		✓	✓	✓	✓	✓	1, 2, 3
D. Advisory								
1. Incorporate appropriate mention of primrose and other commonplace forms of wildlife in conservation advisory literature.	DPAG	DWT, CCS, NPAs, FWAG		✓	✓	✓	✓	2, 3
2. Encourage the further sympathetic management of Devon churchyards - with particular emphasis on primroses.	DPAG	CCD, CCS, PCs, NPAs		✓	✓	✓	✓	2, 3
E. Research and Monitoring								
1. Set-up and operate a community-based programme to monitor the distribution and population of primrose at a local level.	DPAG	DDC, LAs, DBRC		✓	✓	✓	✓	2,3
2. Encourage research into primrose status and decline, particularly in relation to the effects of pollution by industry.	Industry	EN, Universities		✓	✓	✓	✓	3
3. Undertake an attitude survey to determine to what degree primrose is valued.	DPAG	Universities		✓				1
4. Encourage research into effects of different forms of hedge and roadside verge management and their effects on primroses.	DHG	Universities	✓	✓	✓	✓	✓	3
5. Encourage research into pollination of primroses in Devon to assess possible links with conservation of other key species.	DPAG	Universities	✓	✓	✓	✓	✓	2

Primrose Action Plan Champion - Devon County Council / East Devon District Council

Abbreviations used in text and tables

CCD - Community Council for Devon
 CCS - Local Authority Coast & Countryside Services
 DBRC - Devon Biodiversity Record Centre
 DCC - Devon County Council
 DHG - Devon Hedge Group
 DPAG - Devon Primrose Action Group
 MAFF - Ministry of Agriculture, Fisheries and Food
 FRCA - Farming and Rural Conservation Agency
 UAs - Unitary Authorities (Torbay and Plymouth)

DWT - Devon Wildlife Trust
 FWAG - Farming and Wildlife Advisory Group
 HA - Highways Agency
 LAs - Local Authorities
 LPAs - Local Planning Authorities
 EN - English Nature
 PCs - Parish Councils
 WT - Woodland Trust

