

## THE DEVELOPMENT OF A COUNTY RARE PLANT REGISTER IN IRELAND

JULY 2008

Paul Green (BSBI VC Recorder) & Úna Fitzpatrick (National Biodiversity Data Centre)

### Introduction

A Botanical Society of the British Isles (BSBI) **Country Rare Plant Register (CRPR)** provides a very valuable source of information on the conservation status of plants species at the local level. In Britain the BSBI have produced excellent guidelines giving clear instructions on how to produce a CRPR [[www.bsbi.org.uk/CRPR\\_Guidelines.pdf](http://www.bsbi.org.uk/CRPR_Guidelines.pdf)].

### The need for standardisation

This document follows these guidelines and is intended to clarify the criteria for Ireland, providing a standardised method for the development of an Irish CRPR. It is stressed that a CRPR must be completed on a county basis by individuals fully aware of the distribution of plants within the county. However, an individual CRPR is all the more valuable if it is somewhat comparable between counties and these guidelines are intended to facilitate this where possible.

### What are the criteria for including species on a County Rare Plant Register?

As stated in the BSBI guidelines there are seven criteria:

1. Internationally rare
2. Threatened or rare in Ireland
3. Nationally scarce in Ireland
4. Locally rare
5. Locally scarce and declining
6. Extinct
7. Archaeophytes of particular interest

### Using these criteria in Ireland

Of the seven criteria the first three refer to plants that are internationally threatened or that are threatened, rare or scarce at the national level. If the criteria are defined more fully for Ireland then it becomes possible to produce a complete list of Irish species that can transfer to a CRPR under these criteria. This results in standardisation between counties and makes the first three criteria much simpler to apply for a VC recorder as it will be a matter of cross checking the county checklist against this defined list. The remaining four criteria refer to the county in question and must be applied individually at that level.

Below are details on how the seven criteria were more fully defined and then applied in County Waterford.

**Category 1: Internationally Rare.**

This includes all species which fall under any of the following:

EU Habitats Directive  
Bern Convention  
IUCN Global Red List  
Endemic species to Ireland

**Category 2: Threatened or Rare in Ireland**

This includes all species which fall under any of the following:

Flora Protection Order (1999) species  
The Wildlife (Northern Ireland) Order 1985, Schedule 8  
Revised Irish Red List (Critically endangered, endangered and vulnerable species)

As an interim solution in the absence of an updated Irish Red List the following has been used:

The Irish Red Data Book (Curtis & McGough, 1988) – all endangered, vulnerable and rare species in original text (extinct species that have been rediscovered have also been included).

**Category 3: Nationally Scarce**

This includes all species which fall under the following:

Revised Irish Red List (Near threatened species)

As an interim solution in the absence of an updated Irish Red List the following has been used:

List of nationally scarce plants taken from a draft NPWS document on the Botanic Gardens website (<http://www.botanicgardens.ie/gspc/news/news.htm>) - Red Data List of Threatened Vascular Plant Species in Ireland [rbdoct2005.xls]. Nationally scarce plants are those listed as such by Curtis and Neff, with the exception of those subsequently removed by NPWS (where this is the case it is stated in the comment column in the excel document).

Table 1 indicates those species which fall within Categories 1 to 3 as used in the Waterford County Rare Plant Register 2008.

#### **Category 4: Locally rare**

Species present in 3 or fewer existing sites within the county.

[For the County Waterford Rare Plant Register 2008 an existing population has been interpreted as one recorded from 2000 onwards; this should be adjusted on a county by county basis to take into account recording effort].

#### **Category 5: Locally Scarce and declining in Ireland**

- (a) Species that are known from 4-10 existing sites within the county
- (b) Species thought to be in serious decline within the county [an explanation must be provided]

**\*Note:** due to taxonomic difficulties and associated problems of under recording, *Rubus* and *Euphrasia* should not be considered under category 5(a) (unless in exceptional circumstances). Species within these genera should only transfer to the CRPR under category 4 (i.e., when they are present in 3 or fewer extant sites within the county).

#### **Category 6: Extinct**

Any species formerly native to the county but which is now thought to be extinct there. An absence of 50 years is suggested where recent comprehensive information is available for the County. In other cases recording effort should be taken into account and a decision as to the cut off period should rest with the vice county recorder, with this decision documented in the CRPR.

#### **Category 7: Archaeophytes of particular interest**

Any archaeophyte that is present in three or fewer sites in the vice-county, which has been established for a long time and which is of particular cultural, historical or ecological interest.

**General note:** A CRPR should apply only to species native to the county. However, where non native populations of a native species occur, it can be useful to assess these under the 7 categories. Where they are included in a CRPR it should clearly state that they are not native.

**What information to include in your County Rare Plant Register:**

A basic County Rare Plant Register should consist of a written list of all the species, which based on the information available, fall into one of the seven categories. For each species the following essential information should be provided:

1. Scientific name
2. Reason for inclusion
3. All locations of the species with an accompanying date, grid reference, recorder name and source of the record (e.g., field record, herbarium specimen, literature source).

The list should be distributed to as wide an audience as possible. 6-figure grid references (where possible) should be available to those with a legitimate use for the data (e.g., Heritage officers, local NPWS rangers, planning officials) but it is suggested that blurring to 1km square may be more appropriate for general distribution.

**Monitoring and updating**

As a conservation tool, a County Rare Plant Register is most useful if the information in it is up to date. New publications and research into the national and international status of a species can result in changes to incorporate; and taxonomic developments can lead to the recognition of new taxa worth considering. A simple CRPR should be fairly easy to update particularly if the information is held on computer. It is suggested that a CRPR should be officially updated on a five yearly basis.

**Table 1: Species which fall within Categories 1 to 3 as used in the Waterford County Rare Plant Register in 2008.**

	CATEGORY 1				CATEGORY 2			CATEGORY 3
	EU Habitats Directive	Bern Convention	Global Red List	Endemic	Flora Protection Order	Wildlife (NI) Order, 1985; schedule 8	Irish Red Data Book (Curtis & McGough, 1988)	Nationally Scarce (NPWS)
<i>Acinos arvensis</i>					1			
<i>Adiantum capillus-veneris</i>								1
<i>Adoxa moschatellina (V)</i>						1	1	
<i>Ajuga pyramidalis (rare)</i>						1	1	
<i>Alchemilla alpina (rare)</i>							1	
<i>Alchemilla glaucescens</i>								1
<i>Allium oleraceum</i>								1
<i>Allium schoenoprasum (rare)</i>					1		1	
<i>Alopecurus aequalis</i>					1			
<i>Althaea officinalis</i>								1
<i>Anacamptis morio (V)</i>						1	1	
<i>Andromeda polifolia</i>						1		
<i>Anthemis cotula</i>								1
<i>Anthriscus caucalis</i>								1
<i>Arabis petraea (rare)</i>							1	
<i>Arbutus unedo</i>								1
<i>Arenaria ciliata (rare)</i>					1		1	
<i>Arthrocnemum perenne</i>					1			
<i>Asparagus officinalis</i>					1			
<i>Asparagus officinalis subsp. prostratus (rare)</i>					1		1	

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<i>Asplenium obovatum</i> (V)							1	
<i>Asplenium obovatum</i> subsp. <i>Lanceolatum</i>					1			
<i>Asplenium onopteris</i>								1
<i>Asplenium septentrionale</i> (rare)					1		1	
<i>Astragalus danicus</i> (rare)					1		1	
<i>Avena strigosa</i>								1
<i>Berberis vulgaris</i>								1
<i>Brachypodium pinnatum</i>								1
<i>Bromus commutatus</i>								1
<i>Bromus racemosus</i> (rare)							1	
<i>Calamagrostis epigejos</i> (rare)					1		1	
<i>Calamagrostis stricta</i> (V)						1	1	
<i>Callitriche truncata</i> (rare)					1		1	
<i>Campanula trachelium</i> (V)							1	1
<i>Cardamine amara</i> (rare)							1	
<i>Cardamine impatiens</i> (rare)					1		1	
<i>Cardaminopsis petraea</i>					1			
<i>Carex depauperata</i>					1		1	
<i>Carex divisa</i> (EX)					1		1	
<i>Carex magellanica</i> (rare)						1	1	
<i>Carex pauciflora</i> (V)						1	1	
<i>Centaurea cyanus</i> (EX)							1	
<i>Centaurium littorale</i> (V)						1	1	
<i>Centaurium pulchellum</i> (V)					1		1	
<i>Cephalanthera longifolia</i> (V)					1		1	
<i>Ceratocapnos claviculata</i>								1
<i>Ceratophyllum submersum</i>								1
<i>Cirsium heterophyllum</i> (rare)						1	1	

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<i>Clinopodium acinos (V)</i>							1	
<i>Colchicum autumnale (EN)</i>					1		1	
<i>Cryptogramma crispa (rare)</i>					1		1	
<i>Cynoglossum officinale</i>								1
<i>Dactylorhiza traunsteineri</i>						1		
<i>Deschampsia cespitosa subsp. alpina</i>								1
<i>Deschampsia setacea (rare)</i>					1		1	
<i>Draba incana (rare)</i>							1	
<i>Dryas octopetala</i>						1		
<i>Dryopteris oreades</i>								1
<i>Elatine hydropiper (rare)</i>						1	1	
<i>Eleocharis parvula (V)</i>						1	1	
<i>Epilobium alsinifolium (rare)</i>					1		1	
<i>Epipactis atrorubens</i>								1
<i>Epipactis palustris</i>						1		
<i>Epipactis phyllanthes (V)</i>						1	1	
<i>Equisetum × moorei</i>					1			
<i>Equisetum pratense (rare)</i>							1	
<i>Erica ciliaris (V)</i>							1	
<i>Erica mackaiana (rare)</i>							1	
<i>Erica vagans (V)</i>						1	1	
<i>Erigeron acer (V)</i>						1	1	
<i>Eriophorum gracile (rare)</i>					1		1	
<i>Erodium maritimum</i>								1
<i>Euphorbia amygdaloides</i>								1
<i>Filago minima (rare)</i>							1	
<i>Filipendula vulgaris (rare)</i>							1	

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<i>Frangula alnus (rare)</i>						1	1	
<i>Galeopsis angustifolia (V)</i>					1		1	
<i>Gentianella amarella subsp. hibernica</i>				1				
<i>Geranium purpureum (V)</i>							1	
<i>Geranium pusillum</i>								1
<i>Geranium rotundifolium (V)</i>							1	
<i>Geranium sylvaticum (V)</i>						1	1	
<i>Gnaphalium sylvaticum (rare)</i>					1		1	
<i>Groenlandia densa (V)</i>					1		1	
<i>Gymnocarpium dryopteris (V)</i>							1	
<i>Gymnocarpium robertianum (V)</i>					1	1	1	
<i>Hammarbya paludosa (rare)</i>					1	1	1	
<i>Helianthemum nummularium (rare)</i>					1		1	
<i>Helianthemum oelandicum subsp. piloselloides (rare)</i>				1			1	
<i>Hieracium basalticola</i>				1				
<i>Hieracium hartii</i>				1				
<i>Hieracium hibernicum</i>				1				
<i>Hieracium scullyi</i>				1				
<i>Hieracium sparsifrons</i>				1				
<i>Hierochloa odorata (rare)</i>						1	1	
<i>Hordelymus europaeus</i>						1		
<i>Hordeum secalinum (V)</i>					1		1	
<i>Hottonia palustris (rare)</i>						1	1	
<i>Hydrilla verticillata (V)</i>					1		1	
<i>Hyoscyamus niger (rare)</i>							1	
<i>Hypericum canadense (rare)</i>					1		1	
<i>Hypericum hirsutum (V)</i>					1		1	
<i>Hypochaeris glabra</i>						1		



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<i>Inula salicina</i> (V)					1		1	
<i>Isoetes echinospora</i>								1
<i>Juncus compressus</i> (rare)							1	
<i>Kickxia elatine</i> (V)							1	1
<i>Lamiastrum galeobdolon</i> subsp. <i>montanum</i> (rare)							1	
<i>Lamium confertum</i>								1
<i>Lathyrus japonicus</i> subsp. <i>maritimus</i>					1			
<i>Lathyrus palustris</i>						1		
<i>Lepidium campestre</i>								1
<i>Ligusticum scoticum</i> (rare)							1	
<i>Limonium binervosum</i> agg.						1		
<i>Limonium recurvum</i> subsp. <i>pseudotranswallianum</i>				1				
<i>Limosella aquatica</i> (rare)					1	1	1	
<i>Linaria repens</i>								1
<i>Logfia minima</i>					1			
<i>Lolium temulentum</i> (EX)							1	
<i>Lotus subbiflorus</i> (rare)					1		1	
<i>Luronium natans</i>	1	1						1
<i>Luzula multiflora</i> subsp. <i>hibernica</i>				1				
<i>Lycopodiella inundata</i> (rare)					1	1	1	
<i>Lythrum hyssopifolium</i>								1
<i>Melampyrum sylvaticum</i> (V)						1	1	
<i>Mentha pulegium</i> (V)					1	1	1	
<i>Mertensia maritima</i> (rare)					1	1	1	
<i>Minuartia hybrida</i>								1
<i>Minuartia recurva</i> (rare)					1		1	
<i>Minuartia verna</i>								1
<i>Misopates orontium</i> (V)					1		1	

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<i>Monotropa hypopitys (rare)</i>						1	1	
<i>Najas flexilis (rare)</i>	1	1			1		1	
<i>Neottia maculata</i>								1
<i>Neottia nidus-avis</i>						1		
<i>Oenanthe pimpinelloides (rare)</i>							1	
<i>Ophioglossum azoricum</i>								1
<i>Ophrys apifera</i>						1		
<i>Ophrys insectifera</i>								1
<i>Ornithopus perpusillus (rare)</i>							1	1
<i>Orobanche alba</i>								1
<i>Orobanche hederæ</i>						1		
<i>Orobanche rapum-genistæ (rare)</i>							1	
<i>Orthilia secunda (EN)</i>						1	1	
<i>Otanthus maritimus (EN)</i>					1		1	
<i>Papaver argemone</i>								1
<i>Papaver hybridum (EN)</i>					1		1	
<i>Parapholis incurva</i>								1
<i>Pilularia globulifera (rare)</i>					1	1	1	
<i>Poa alpina (rare)</i>							1	
<i>Poa compressa</i>								1
<i>Poa palustris (rare)</i>							1	
<i>Polygonum maritimum (rare)</i>							1	
<i>Polygonum viviparum</i>					1			
<i>Polystichum lonchitis (rare)</i>						1	1	
<i>Potentilla fruticosa (rare)</i>							1	
<i>Primula veris</i>						1		
<i>Pseudorchis albida (V)</i>					1	1	1	
<i>Puccinellia fasciculata (rare)</i>					1		1	

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<i>Pyrola media (rare)</i>							1	
<i>Pyrola minor</i>								1
<i>Pyrola rotundifolia ssp maritima (rare)</i>					1		1	
<i>Pyrola rotundifolia subsp. rotundifolia (rare)</i>							1	
<i>Ranunculus fluitans (rare)</i>						1	1	1
<i>Ranunculus parviflorus</i>								1
<i>Ranunculus tripartitus (rare)</i>							1	
<i>Rorippa islandica (rare)</i>							1	
<i>Rosa obtusifolia</i>								1
<i>Rubus chamaemorus (V)</i>						1	1	
<i>Rubus hesperius</i>				1				
<i>Rubus lettii</i>				1				
<i>Rumex maritimus (rare)</i>							1	
<i>Rumex pulcher</i>								1
<i>Salix myrsinifolia</i>								1
<i>Salix phylicifolia (rare)</i>							1	
<i>Salvia verbenaca (rare)</i>							1	
<i>Sanguisorba officinalis (V)</i>					1		1	
<i>Sarcocornia perennis (V)</i>							1	
<i>Saussurea alpina (rare)</i>						1	1	
<i>Saxifraga aizoides (rare)</i>						1	1	
<i>Saxifraga granulata (EN)</i>					1		1	
<i>Saxifraga hartii (rare)</i>				1	1		1	
<i>Saxifraga hirculus (EN)</i>	1	1			1	1	1	
<i>Saxifraga nivalis (rare)</i>					1		1	
<i>Saxifraga oppositifolia (rare)</i>						1	1	
<i>Saxifraga rosacea</i>								1
<i>Scandix pecten-veneris (EX)</i>							1	

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<i>Schoenoplectus triqueter (V)</i>					1		1	
<i>Scleranthus annuus</i>					1			
<i>Scrophularia umbrosa (V)</i>							1	
<i>Sibthorpia europaea (rare)</i>							1	
<i>Silene acaulis (rare)</i>						1	1	
<i>Silene gallica</i>								1
<i>Silene noctiflora</i>								1
<i>Simethis planifolia (V)</i>					1		1	
<i>Sisyrinchium bermudiana</i>						1		
<i>Sorbus anglica</i>			1					
<i>Sorbus devoniensis</i>								1
<i>Sorbus hibernica</i>				1				
<i>Spiranthes romanzoffiana (rare)</i>					1	1	1	
<i>Stachys officinalis (V)</i>					1	1	1	
<i>Stellaria neglecta</i>								1
<i>Stellaria pallida</i>								1
<i>Subularia aquatica</i>								1
<i>Taraxacum amarellum</i>				1				
<i>Taraxacum gotlandicum (rare)</i>							1	
<i>Taraxacum webbii</i>				1				
<i>Teesdalia nudicaulis (rare)</i>						1	1	
<i>Thalictrum alpinum</i>								1
<i>Trichomanes speciosum (rare)</i>	1	1			1	1	1	
<i>Trifolium glomeratum (V)</i>					1		1	
<i>Trifolium ornithopodioides</i>								1
<i>Trifolium scabrum</i>								1
<i>Trifolium striatum</i>								1
<i>Trifolium subterraneum (V)</i>					1		1	

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<i>Trollius europaeus (V)</i>					1	1	1	
<i>Tuberaria guttata (rare)</i>							1	
<i>Valerianella rimosa</i>								1
<i>Vicia lathyroides (rare)</i>							1	
<i>Vicia orobus (V)</i>					1		1	
<i>Viola hirta (V)</i>					1		1	
<i>Viola lactea (V)</i>					1		1	
<i>Viola lutea</i>								1
<i>Viola persicifolia (rare)</i>						1	1	
<i>Vulpia fasciculata</i>								1
<i>Wahlenbergia hederacea</i>								1
<i>Zostera angustifolia</i>								1
<i>Zostera noltei</i>								1

Brackets following species name indicate status in the Irish Red Data Book (Curtis & McGough, 1988)