

# *Helpful Recording Notes, ver.2 (2015)*

## **1 Introduction**

Making records of wildlife is essentially simple. You see a species you recognise, you write down the place and date and send it to the person who collects the records. Over the years this basic procedure has been elaborated to the point where the idea of sending in a record can be daunting. These notes are intended to remove any concerns about how to record plants in Dorset. It really isn't difficult and we need your observations.

There are two organisations that would like to receive your records: Dorset Environmental Records Centre (DERC) and the Botanical Society of the British Isles (BSBI). The BSBI appoints a recorder for every vice-county<sup>1</sup>. In Dorset the vice-county recorder and DERC work closely together and you may send the information to either. We have reviewed the forms and procedures to make collecting records as straightforward as possible for all stages in the process.

Broadly speaking, records are collected in two ways: a list of all species within a defined area, or a record(s) of a single species of interest. In the latter case, it is common for much more information to be collected about its location and a Rare Plant Recording form has been designed for this. Special surveys are run from time to time and different forms may be designed for them, with guidance on how to complete them.

## **2 Basic requirements**

The essential for all databases is that the information must be accurate, reliable and complete. What constitutes complete, of course, depends on the purpose, but here are some minimum requirements for all plant records:

- Species name: ideally the Latin name, but commonly used English names are acceptable. Where a plant has suffered from name changes it is helpful to add the authority to remove any doubt, or failing that, the identification book used, for example Stace III.
- Site name: the nearest village (please use a name that can be found on an OS map) and the actual name of the site, if there is one. The extent of the search area should be apparent from the name. A map is helpful where a verbal description is not clear.
- Grid reference: the precision of this depends on the site size. Usually a six figure reference of the site centre is most appropriate. This can be found from an Ordnance Survey (OS) map, but use of a GPS should improve accuracy and eight or ten figure accuracy is appreciated for small sites.
- Date: a single date for each visit is preferable to a range covering multiple visits.
- Recorder(s) names: your own name, plus any friends helping, or a group name if it is a Flora Group outing, for instance. If you only rarely contribute records, it would be helpful if you could add an address or contact number.

The forms have boxes for this information as a reminder.

A very useful addition to the record is the time spent on site as this will give some indication of the completeness of the record. The amount of effort expended in searches is a variable that influences estimates of biodiversity at a site. So it is important to have some measure of this if comparisons are to be made. Time is the most readily available measure of 'effort'.

It may be obvious that accurate identification of the plant is important. Most of the time, identifying the species will not be a problem, but where there is a doubt it should be acknowledged. It is perfectly acceptable to identify to genus only (e.g. *Hieracium* sp.) or to use an aggregate name such as *Rubus fruticosus* agg., and some record cards have these listed. If not make a note in the margin or add at the end of the list. Only record the subspecies or variety if you are sure.

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<sup>1</sup> A vice-county is a county or part of a county that has historically been used for recording purposes since the mid nineteenth century without changes to the county boundaries. For the most part the modern administrative boundary coincides with the vice-county. The major difference for Dorset is that most of Bournemouth and Christchurch are in the vice-county of S. Hants.

Occasionally you will come across a plant that is known to be difficult to identify and requires critical examination. If the population is sufficiently large (see below) you should collect a specimen for examination by an expert. If the plant is a rare species or present as only a few plants, take pictures and make notes, including as accurate a grid reference as you can. Often a single leaf or a flower from a spike will be enough for an expert to determine the species and this can be collected without risk to the plant.

### 3 Tick lists

Most botanists find it more convenient to tick species on a pre-printed form than to write the names in a notebook. However, if you prefer to send in a hand-written list, that is fine so long as they are legible, the names are unambiguous and the basic information (site, date etc) is included.

The tick list is used for recording all species:

- in a grid square
- at a site or a habitat
- on a walk

You can download a tick list for any vice county from the BSBI website (no need to be a member). DERC has also prepared a sheet for Dorset. The former has the advantage of having the Biological Records Centre (BRC) numbers which makes data entry into databases easier. It also has nearly all the species you will find in the county, but the writing is small and the sheet is densely packed. The DERC sheet is a little friendlier, with a larger font size and it has the notable species<sup>2</sup> in bold, making it easier to see if you have found any species that are typical of good quality habitat. Any species that is not on the sheet can be listed on the back should be regarded as a rare plant (*i.e.* take a grid reference and complete a RPR form if you have time).

Recording all species in a grid square is a common way of structuring major surveys, such as preparing an atlas of the UK or a county flora. Often a 10km grid square (hectad) or a 1km grid square (monad) is used and the grid reference is the bottom left-hand corner of the square. At other times, listing species for a named site or habitat is preferable to a grid square. You should give the grid reference of the centre of the site. If recording species on a walk, a new sheet should be started when a new 1km grid square is entered.

The best way to tick is with a horizontal line through the specific name only (or underlining it if done neatly), leaving the genus unmarked. It is often helpful to have an idea of the amount of each species. There are accurate, although time-consuming, ways of doing this that are not appropriate for general records. Most botanists use the DAFOR scale as a quick score to indicate the abundance of each species within the search area. The initials stand for: Dominant, Abundant, Frequent, Occasional, Rare, and the words have their ordinary meaning. It is usual for most species to be scored as occasional. Obviously only one, or possibly two species can be dominant (co-dominant) and only a few can be abundant or frequent without running out of space on the ground. Where the distribution is patchy, the amount can be described as locally dominant / abundant / frequent. For instance, a site with a lot of sticky mouse-ear, *Cerastium glomeratum* might appear thus:

Centr	rub		car
Cepha	dam		dil
Ceras	dif		fil
	fon		Echiu vul
	<u>gla</u>	F	Eleoc mul
	sem		pal
	tom		uni
Cerat	cla		Eleog flu
Cerat	dem		Elode can
Ceter	off		nut

### 4 Rare Plant Recording (RPR) form

There is a lot more to botany than ticking off where plants are growing. We would like to learn what affects their performance and how they in turn modify conditions around them. It is impractical to collect information on the ecology of all plants so we are concentrating on the scarcer species and those at risk of extinction in the county. For practical purposes these are the species in the Dorset Rare Plant Register (DRPR) and the species not on DERC's tick list. Any DRPR species on the list have been indicated by the use of italics.

The RPR form should also be used for alien species, whether rare or not, in situations where they might spread. Reliable observations of the population size on different dates will tell us how aggressive the species is and help to devise control measures, should they be needed.

The form indicates the sort of information to collect; it is not exhaustive and do not worry about completing every box. The essential data are the site, date etc. as listed in the basic requirements above. The grid

<sup>2</sup> Notable species for Dorset have been chosen to help the SNCI panel decide whether a site is a good example of a habitat. Some species are relatively common when the habitat is in favourable condition; others are scarce species that are associated with the habitat. Each notable species has one or more habitats where it is relevant.

reference should be at least 6 figure accuracy and preferably 10 figures now GPSs are available. The plant status in the country (use the red list for England<sup>3</sup>) and site status should be marked if known. The abbreviations are:

EX - extinct, CR – critically endangered, EN – endangered, VU – vulnerable, LC – least concern.  
DR – Dorset rare, DS – Dorset scarce, DN – Dorset notable,  
CASUAL – an alien that has not naturalised.

Please write in the name of the landowner if you know, but do not worry if not.

We would like some idea of the size of the population, a list of associated species and general notes on the site. The population should be recorded by counting the number of plants. This is rarely easy unless there are very few, so an estimate is acceptable. If it is not easy to distinguish individual plants, then the area covered is the best that can be done. This information is very useful when revisiting the site to see if there is any change in the extent of the population.

Associated species are those that are found within a metre of the target species (or further for large plants such as trees). If time permits, estimate the % cover in a quadrat, but DAFOR is fine. If you are familiar with the National Vegetation Classification or the Integrated Habitat System, please note the community, otherwise a simple habitat description (preferably as 'phase 1' phrases) is helpful. As much other information on the habitat as you can record should go into the Description of Habitat box; the list of characteristics there indicates the sort of thing that is wanted). There is space for a sketch map and any additional notes on the reverse of the form.

A photograph of the site is often a good record of features that are not easy to describe or you have forgotten to observe. If the population is large enough, it may be worth collecting a specimen of the target species for the herbarium. Apart from being a permanent record if the identification is questioned, it can be re-examined should the taxon be split into subspecies or varieties at a later date.

## 5 Submitting records

### 5.1 Online record entry

For the last few years we have found the internet based system called Living Record is the best way to collect records. It has the advantage that species names can be entered either as the scientific name or the common English name. To reduce the typing, either can be abbreviated so that six letters or so is all that is needed. Accurate location of the record is also helped by clicking the aerial photograph on screen to get the grid reference. Once entered, the records will add to the distribution maps which can be viewed. There is a link to Living Record on the DERC website, or see the end of this document.

### 5.2 Using a spreadsheet

Sending in your records as a spreadsheet will speed up incorporation into our databases. Most spreadsheets can be manipulated to be easily imported, but to minimise our work it is helpful if you can use the same standard format. The preferred format is in columns with the following headings:

Species	Grid Ref	Locality	locality (2)	date	Recorder	abundance	associated spp	Notes
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A template is available on-line and we have a number of spreadsheets to help with data entry that can be emailed.

### 5.3 Records on paper

We very much hope all records can be submitted by one of the methods above, because it saves the need for a volunteer to enter the data into a computer. If you do not have internet access or a computer we will accept records on paper. Preferably use the tick list and where you have a grid reference and other information for a species, add this on the back.

## 6 Updating the Dorset Rare Plant Register

For several years now we have maintained a list of sites for the DRPR species which have not been visited for some time and confirmation of their presence is desirable. To this have been added a few species which are of interest or which may be declining and ought to be in the register. The DRPR search list is now available as a spreadsheet with columns for entering the data when revisiting.

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<sup>3</sup> A vascular plant red list for England, Stroth, P.A., 2014, BSBI

As a permanent record, please complete a RPR form, as described above, and transcribe the data to the spreadsheet. The first set of columns contains the current data from the DRPR. The next set of columns, highlighted in a different colour, should be completed with the new information. It is important to record the fact that you did not find the target species. Examples of up-dating entries are shown below:

grid ref	location	location (2)	date searched	Recorder	Abundance	Ass'd spp	notes, voucher
SY6975 7202	Broadcroft Quarry	loP	29-Jun-09	Other, AN	2 plants	bare ground	
SY7516 8701	Warmwell Heath		30-Apr-09	Other, AN, Friend, A	3 plants	<i>C.vul, J.squ.</i>	beside path Searched for 30 mins within 100m of gr.
not found			3-Jul-09	Other, AN			

When a species has been refound or been proved to have gone, the row is removed from the DRPR search list. Sites which have been searched but the species not re-found are still in the list, with a date and name of the searcher. You could add some 'associated' species growing on the patch where you think the plant might have been recorded. Ultimately we will probably have to conclude the species has been lost and remove the row, but the rules for doing that have not been decided. Please send in records as soon as possible so that the master list can be updated and re-issued to lower the risk of duplicating effort.

If you are not comfortable using the spreadsheet, please send us the completed RPR forms.

## 7 Pressing and Herbarium specimens

Vouchers are invaluable if the identity of a record is in doubt or there are changes in the taxonomic treatment of the group. Space is at a premium in herbaria and you should use common sense in deciding whether to collect a specimen for permanent retention. Collecting a specimen for expert determination is often worthwhile and it is quite probable that only the critical portion is required or a selection of good photographs.

As a general rule, you should only consider picking a specimen if there are at least ten plants in the population. It is very rare for roots to be needed for identification and it is illegal to uproot plants without the land owner's permission.

Unless the specimen can be given to the determiner within days of picking, the plant should be pressed. How a plant should be treated en route to the determiner depends on what it is. The BSBI year book has the names and addresses of referees and some notes on these matters, or you can ask the vice-county recorder. When providing a fresh specimen for determination, keep it in a plastic bag in a cool, dark place, such as a fridge.

Pressing a plant is straight forward. If you do not have a press, a board with a heavy book works perfectly well. Large sheets of blotting paper are best, but newspaper works so long as it is not shiny. Arrange the plant to best advantage on a sheet and place another sheet on top (or several thicknesses if using thin newsprint). Lay out another plant, put on another sheet and so on to build up a stack, put the board and weight on top and leave in a warm, dry place. Drying can be speeded up by inserting a sheet of corrugated cardboard every few specimens. Replace the paper at daily intervals until the plant feels reasonably dry (two to three changes are usually enough), after which they can be left indefinitely. Remember to attach a label to every specimen with its identity, collection date and site information. Nappy liners between the plant and the blotting paper can minimise problems with the specimen sticking to the paper and are often essential for pressing aquatic species successfully.

If you are building up your own herbarium, you will probably wish to mount each specimen for permanent storage. If sending to a referee or another herbarium, specimens are best left unmounted. Instead, put each one into a used envelope or a paper folder (not into a plastic bag) to retain any parts that may become detached during transit.

Mounting the specimen entails fixing it to a sheet of stiff paper or card. There are numerous ways of doing this. The least obtrusive is by small dabs of PVA, but gummed paper strips are also popular. Do not use sellotape as the adhesive soon fails. Write the details (see basic requirements in section 2) in the bottom corner, left or right. Ordinary materials are satisfactory for a personal herbarium, but to be sure of long-term survival, acid-free paper and adhesive must be used and information written with archive quality ink. There are many books and websites available with detailed advice.

## **Useful links and contacts:**

### **DERC**

Dorset History Centre, Bridport Road, Dorchester, DT1 1RP

e-mail: [enquiries@derc.org.uk](mailto:enquiries@derc.org.uk) Website: [www.derc.org.uk](http://www.derc.org.uk) phone: 01305 225081

The following documents available from the DERC website. Follow the links through Species >Sending in your records>Resources:

Site recording form (flora tick list, Word document)

Recording in Excel (Excel spreadsheet)

Rare Plant Recording form (Word document)

DRPR search list

If you don't have access on-line, please contact the DERC office.

### **Living Record**

Web site: <http://www.livingrecord.net>

### **Dorset vice-county recorder**

R.M.Walls, 10 Old Brickfields, Broadmayne, DT2 8UY.

e-mail: [robin@rmwalls.plus.com](mailto:robin@rmwalls.plus.com)