# Adding lists of plant species for grid squares using iRecord

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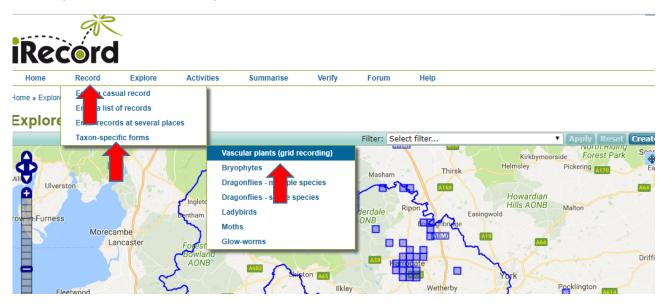
*iRecord* is an online recording system for biological recorders designed and maintained by the Biological Records Centre at the Centre for Ecology and Hydrology. Although originally designed for the submission of single (*ad hoc*) wildlife sightings, it is increasingly being used as a way of submitting, managing and sharing records, and now contains over 5 million records across all taxonomic groups (including c. 700,000 for plants). Until recently, it was very laborious to enter long lists of species for sites or grid squares. However, recently two new features have been added that allow recorders to do this more efficiently using the desk-top or smartphone versions.

## First you need to register

To use iRecord you first need to register for an account. You do this by clicking the 'Create new account' button on the main iRecord homepage (<u>https://www.brc.ac.uk/irecord/</u>).

## Adding a list of species for a grid-square using a PC

Once you have created a new account and logged into iRecord you can access the vascular plant record card under the 'Record' button on the main menu. Select the 'Vascular plants (grid recording)' under 'Taxon-specific forms' indicated by the red arrows below.



#### iRecord grid square recording v1.0

This brings up a plant record page (below) where you can enter details for the grid-square you intend to add records for. These include date, recorder name, number of recorders, location name, grid reference for the 1km or 2km square, vice county, time spent recording and any other information you want to capture about the square/recording event (under 'Notes'). Your grid square is also highlighted on the map adjacent – this defaults to Google Maps but you can switch to satellite mode or Ordnance Survey using the '+' symbol on the top right of the map display (indicated by the yellow arrow on the screenshot below).

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The species list is then entered by selecting the 'Plant records' tab at the top of the form (indicated by the red arrow on the screenshot above). Species are then added to this form (below) along with any additional record-level information such as native status, stage (flowering, fruiting, etc.), finer grid reference where appropriate (the default is the grid square), and any comments. Note that photos can also be added from the photo library at this stage using the 'Add images' tab (indicated by the blue arrow below).

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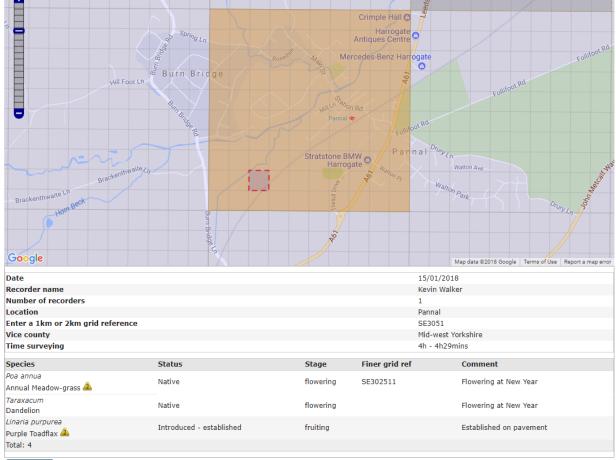
Further fields are available by clicking on the '+' at the righthand end each row (indicated by the yellow arrow above). This opens a number of optional fields, currently including abundance (DAFOR), Determiner, Altitude, GPS precision and whether the record is sensitive or not (see screenshot below).

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The remainder of the species for the square are then added in the same way. Once all the species have been entered the entire list for the square can be reviewed and submitted using the adjacent 'Review and submit' tab at the top of the form (indicated by the red arrow on the screenshot above).

### iRecord grid square recording v1.0

The layout of the 'Review and submit' page is shown below. This present a map of the grid square with the location of any finer level grid references highlighted as well as the list of species with record details underneath. Note that the information for the square or species list can continue to be edited at this stage by returning to the 'Plant records' or 'Grid square' tabs. Once you are happy with the information click the 'Submit' button at the bottom of the form (indicated by the red arrow). The records should now be available to view or edit under the 'My records' tab under 'Explore' on the main iRecord menu.



Submit



### Adding lists of species for a grid square in the field using the smartphone app

The second way to add lists of species for a grid square using *iRecord* is to download the iRecord app onto your smartphone (versions for both iOS and android are available). To do this search for iRecord on the app store. Once installed you will need to make sure that you have linked to your iRecord account (or registered a new one if needed), that you have logged in and that you have enabled your phone to use 'your location'. To use the grid-square mode you will also need to set the default for recording to either monad or tetrad under 'Settings > App > Grid Square Unit' (indicated by the red arrow on the screenshot below).

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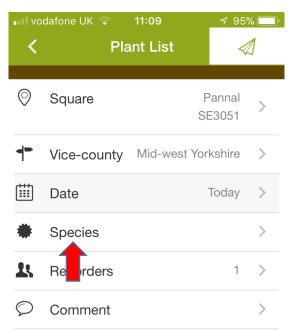
To enter a list of species quickly for a grid squares you first have to enter the details for the grid-square that you are recording in. This is done by selecting the overlapping square symbol found on the top banner of the iRecord screen (indicated by the yellow arrow on the screenshot below).



This then brings up the 'Lists' page. If this is your first grid square list the page will be blank. You then create your first list by pressing the '+ Create' button in the centre of the screen indicated by the red arrow on the screenshot below. Note that you can turn on the 'Grid Alert' tab (indicated by the yellow arrow below) which will automatically tell you when you leave a grid square.



This takes you to the 'Plant List' page (below) into which the details of the grid square are enterred. Details include the 'square' grid reference, locality name, vice-county, date (default to today's date), number of recorders and any comments about the square. Note that the recorder name defaults to the iRecord user registered via the app but this can be changed and additional recorders added by clicking on 'Recorders' and editing the relevant fields.



Once the Plant List details have been completed species are then added to the list by clicking on the 'Species' tab (indicated by the red arrow on the screenshot above). This directs you to the 'Species' page (screenshot below). Species are added by pressing the '+ Add' button in the centre of the screen or the '+' button on the top right (indicated by the red and yellow arrows on the screenshot below).



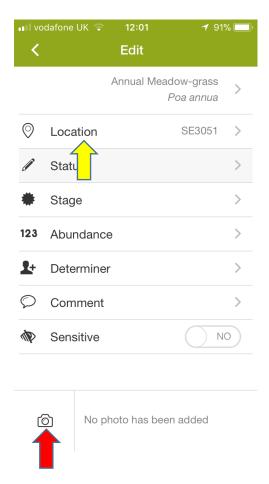
Species names are then typed into the search box. These provide a number of options as you type the first few letters of the name (*Poa* brings up *Poa* species as shown in the screenshot below).

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One a species has been entered the full list of species for the square is given as shown below.

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The record-level details of each species can then be edited by clicking on the relevant species in list. This brings up the record-level 'Edit' page and allows information to be added (see screenshot below).



Fields that can be added include a more precise grid reference if needed, native status, stage (fruiting, flowering, etc.), abundance, determiner, comments, and whether the record should be marked as sensitive or not. Photos can also be added by clicking on the photo symbol at the bottom of the page (indicated by the red arrow). Note that the default grid reference for each species is the grid square. To add a more precise grid reference you need to select the 'Location' (indicated by the yellow arrow in the screenshot above). This brings up a grid reference search box and a map of the grid square (screenshot below).



A more precise grid reference is added in three ways: first, you can simply type the grid reference in the box at the top of the screen. Second, by tapping onto the location on the screen the grid reference is automatically selected and filled in in the box at the top of the screen. Finally, you can use the phone's GPS to select your current location by tapping the inverted 'teardrop' symbol (indicated by the red arrow on the screen above). Once you have done this the display will highlight the finer grid reference on the map (indicated by the red arrow on the screenshot below). Note that the edge of the grid square is highlighted as well.



Once all the records have been entered for the square return to the main 'Plant list' page for the square (screenshot below). This shows the details of the square including the number of species that have been recorded (in this case just 2 – indicated by the red arrow). If you have finished recording the square then you can submit the records by pressing the 'paper aeroplane' symbol in the top right of the screen (indicated by the yellow arrow on the screenshot below).

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The records will then by automatically sent to the main iRecord data warehouse and will be available to view or edit under 'My records' once you have logged back in. Note that the records can then only be edited using the PC version of iRecord and not via the smartphone app, although they can still be viewed unless they have been deleted from the phone.