

NBN Distribution Maps Made Easy.

Introduction

Below I describe a method you can use to get a live NBN map on your website in one line of HTML. This is an order of magnitude simpler than trying to use the web services directly.

Web Services

NBN Web Services are a set of functions that allow a website developer to request information and maps from the NBN Gateway to use in their own website. To use them you need to be able to write in a programming language, such as Java, PHP or ASP, and be clear about how the functions work. You can read all about this at

<http://data.nbn.org.uk/library/webservices/wsIndex.jsp>

NBN Web Services provide a lot of power and flexibility but, if all you want is a simple distribution map for a species, then BRC can take the effort out of it almost completely. We can provide an intermediate web page which you request, with a parameter indicating the species you want to map, and then you include this in your web page. That is it.

IFrames

How do you include one web page in another? The answer is to use the HTML tag <iframe>. This creates a box, with a width and height that you can specify, in which is displayed another web page, specified by the src attribute. It's just like inserting a picture with the tag.

An example might look like the following

```
<iframe width="400" height="300" src="http://www.bbc.co.uk"></iframe>
```

The page that we have created at BRC for displaying maps has the URL <http://www.brc.ac.uk/schemes/NBNWidget/tvkGridmap.aspx>.

Taxon Version Keys

And how do you specify which species you want in the map? We add what is called a query string to the URL which includes the taxon version key (TVK) of the species.

To find the TVK of a species, go to the NBN Gateway (<http://data.nbn.org.uk/>) and search for the species of interest. Assuming the search finds what you are looking for, click on the link to grid map of the distribution. You will see in your browser a URL ending something like `.../gridMap.jsp?srchSpKey=NHMSYS0000875473`. The taxon version key is the bit at the end, NHMSYS0000875473 in this example.

So, the one line of HTML required to insert an NBN map into a web page ends up looking something like the following:

```
<iframe width="400" height="600"
src="http://www.brc.ac.uk/schemes/NBNWidget/tvkGridmap.aspx?tvk=NHMSY
S0000875473"></iframe>
```

And that would be one line if the page was not so narrow. All you need to do is modify the TVK to that of the species you want to display.

Getting Stylish

If you have spent a lot of time making your website beautiful you may well be offended to have the resultant map appear with different fonts and colours from the rest of your site. If you have used cascading style sheets (CSS) to style your site, however, it is just a matter of extending the query string to specify your style sheet and we will apply it to the map and surrounding text.

Simply replace “*yourdomain*” and “*yourstyles*” in the line below with the path and file name to your style sheet.

```
<iframe width="400" height="600"
src="http://www.brc.ac.uk/schemes/NBNWidget/tvkGridmap.aspx?tvk=NHMSY
S0000875473&css=http://yourdomain/yourstyles.css"></iframe>
```

Customising the Map

By specifying more parameters in the query string we can exploit more of the options offered by the NBN Web Services. It is possible to change the map size, zoom in on a vice county, select a particular data set and more. The full list of parameters supported is shown in the table below.

Parameter name	Value	Description
tvk	Obtainable from the NBN website	The taxon version key of the species for which you want the map. You must provide this
ds	Obtainable from the NBN website	A comma-separated list of the dataset keys of the datasets you want shown on the map. If not specified all available datasets are shown.
res	Either 100m, 1km or 2km	The size of the squares to show on the map. If not specified the resolution is 10km. Remember not all datasets can be viewed at higher resolutions.
w	A number up to 800	The width, in pixels, of the map. If not specified the width is 350.
h	A number up to 800	The height, in pixels, of the map. If not specified the height is 350.
gd	Either 10km, 100km or 10km_100km	Specifies a grid to overlay the map. If omitted, no grid is shown.
bg	Either os or vc. Note that these values are in upper case	Specifies a background of either an Ordnance Survey map or Vice County boundaries. If omitted, no background is shown.

vc	The numeric ID of the vice county, Obtainable from the NBN website	Zooms the map in to a particular vice county if specified.
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Note that values are case sensitive and that there should be no spaces anywhere in the query string.

How do I get a dataset key?

Go to the NBN Gateway (<http://data.nbn.org.uk/>) and follow the links to Explore Datasets. Navigate the hierarchy to reach the dataset of interest and you will see in your browser a URL ending something like

.../taxonDataset.jsp?dsKey=GA000367. The dataset key is the bit at the end, GA000367 in this example.

How do I get a vice county ID?

Download the table from

<http://data.nbn.org.uk/library/webservices/wsVCDownload.tab>

Customising the output

If you have tried this out you will have found that you get more than just a map for your money. You get a title, a link to NBN terms and conditions, the map, a link to an interactive map on the NBN website, a list of datasets and the powered by NBN logo. It may be that you won't want to see all of those things as they are presented so they can be turned off. Be aware that, if you do turn off some of these items, you should ensure that the information is elsewhere on your site so that you are abiding by the NBN rules. Just add the following parameters to your query string.

Parameter name	Value	Description
title	sci, com or 0	Enables either the scientific name or the common name as a title or disables it. If omitted, the scientific name appears.
terms	0 or 1	Disables or enables the link to terms and conditions. Enabled by default.
link	0 or 1	Disables or enables the link to the interactive map. Enabled by default.
ref	0 or 1	Disables or enables the list of datasets. Enabled by default.
logo	0 or 1	Disables or enables the NBN Gateway logo. Enabled by default.
maponly	0 or 1	maponly=1 is equivalent to setting all the preceding parameters to 0 and leaves only the map.
css	The full path to a CSS file.	And lets not forget this previously mentioned parameter. Currently the following standard tags are used in the output. <h3>, <p>, , <a>, ,

Conclusion

I hope this is useful to you and has been easy to understand. These are live maps, regenerated each time the web page is viewed, so they always contain the most up to date information available from the NBN Gateway.

If you would like to discuss any aspect of your website with BRC, contact Jim Bacon by email, jame2@ceh.ac.uk, or telephone 01491 692540.