

NPWS Data Resource Catalogue form entry guidelines

Edwin Wymer, Naomi Kingston

18/12/2012

Version 0.7



An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

Contents

1.	Introduction	3
2.	The Resource Catalogue: a brief overview	3
3.	The proposed resource discovery approach	4
4.	Accessing the PDF Resource Catalogue overview form	4
5.	Using the PDF Resource Catalogue form	5
6.	Guidance for adding content to the Resource Catalogue form	6
6.1.	Form Page 1: The Respondent and Project details page	6
6.2.	Form Page 2 and 3: Resource details	8
7.	Conclusion	13

NPWS Resource Catalogue: Resource discovery guidelines

1. Introduction

This document describes the purpose and usage of the Resource Catalogue form that accompanies this document. Summary guidelines are supplied on how to fill in the form. All future NPWS projects will require a copy of the form to be filled in as part of the project product delivery procedure.

NPWS Research Branch staff manage a wide range of research projects which collect, collate and analyse data from multiple sources. These projects range in scale from country-wide surveys, which gather a variety of survey data leading to one or more publications, down to projects that are represented by single report documents that analyse existing data or even projects represented by as yet unanalysed datasets.

The resources produced by these projects include published and unpublished reports, spatial datasets, Excel files and databases (to name but a few). Compiling a catalogue which describes these resources, alongside standardising the data structures and formats will allow us to better store and manage the data, making its dissemination and reuse more efficient.

We hope that the Resource Catalogue will allow us to develop and maintain a comprehensive list of data resources held by NPWS.

2. The Resource Catalogue: a brief overview

The purposes of developing a NPWS Resource Catalogue are fourfold. Two short term goals of the Catalogue are:

- # to build a definitive list of projects and resources held by NPWS along with details of the associated content
- # to generate the metadata elements for NPWS spatial dataset information required for compliance with the EU INSPIRE directive on spatial dataset and spatial dataset series. Metadata requirements for ISO 19115, Dublin Core and Darwin Core are also considered.

Two longer term goals are:

- # to produce a flexible information system that will allow the querying and retrieval of information held in the Resource Catalogue.
- # to build and manage a centralised, accessible Project and Resource Repository holding all of the available project and resource artifacts identified in the Resource Catalogue. The Resource Catalogue will play a key role in defining the structure and scope of the repository.

The proposed Resource Catalogue uses a two-tier model of Projects (including surveys) which can have multiple associated Resources as illustrated below in Figure 1. There may be a case for extending this model in the future to facilitate the use of Project Portfolios or collection of projects with similar goals. Such a structure can be put in place at a later stage.

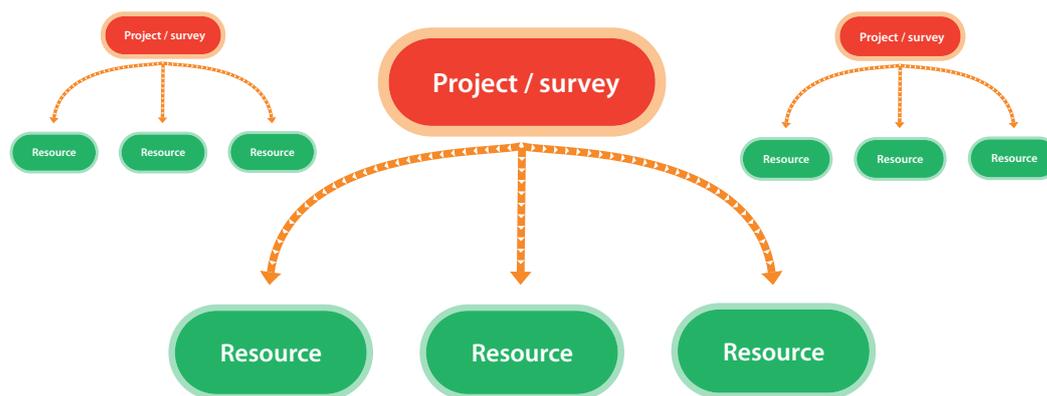


Figure 1. Projects may have a single or multiple associated Resources

3. The proposed resource discovery approach

The associated form: *ResourceCatalogueForm_external_enabled.pdf* allows you to fill in details of the projects and surveys that you have undertaken. In addition, if you have other resources supplied by third parties but which you access for your work then please supply details of these too. Also consider if a particular project or resource is dependent upon other projects or resources. If they are then please include details of these projects also. The form allows you to add details for an individual project and save the content with a meaningful name for that project (decided by you) and then transfer it by email to NPWS Scientific Unit. So for each project or survey you should complete one instance of the form.

4. Accessing the PDF Resource Catalogue overview form

The form *ResourceCatalogueForm_external_enabled.pdf* is an Acrobat dynamic form. This means that you, the user, can add sections to the form by clicking on buttons on the form. In the case of the Resource Catalogue form you will be entering details for a single project in each instance of the form. Each project will have one or more associated Resources. When you receive the form only a single Resource section will be shown on the form. Adding new sections is simple and will be described below.

Ideally you should set up a new file directory and name this: `\resource_catalogue` using Windows Explorer. This will allow you to keep copies of all completed forms in one place. You will have received the PDF form as an email attachment (or you can download the form from the NPWS website) so you should start by copying the form to the new directory. You can do this by dragging the PDF file attachment to the `..\resource_catalogue` directory in Windows Explorer.

You now need to make this new PDF file read-only (see below) so that when you add data to the form and try to save it you will be prompted to save it with another name (including the project name).

To set up the PDF form as a read-only document:

- 4.1. Navigate in Windows Explorer to the `\resource_catalogue` directory and select the PDF form.
- 4.2. Use the right mouse button to bring up a pop-up context menu on your screen.
- 4.3. Select Properties from the menu. A new Properties window will appear. On the General tab select the Read-only tick-box and click OK. This ensures that this instance of the form is read-only.

It is assumed that your PC or laptop has a copy of Adobe Acrobat Reader installed already. You will require Acrobat Reader version 8.0 or later to allow you to use the dynamic PDF form. With earlier versions of Acrobat Reader the form will not open or will open with errors. We recommend that you use the latest version of Acrobat Reader (currently version 11.0), which is freely available at the Adobe website.

Opening the PDF form:

- 4.4. To open the form double-click on the PDF file name in Windows Explorer. Acrobat Reader will launch and will open on Page 1. The content of the form is described below.

When you are satisfied with the content of the form you can save the form along with the contents. You will be forced to save the content by providing a new unique name for the completed form as remember you have set the read-only attribute of the form file. Ideally prefix the form file name by your name followed by the project name. For example:

K_Gaynor_Coastal_Monitoring_Project_2004-2006.pdf

To save the PDF form:

- 4.5. Select the File menu option and choose the Save As option from the list. A Save As dialogue box will appear.
- 4.6. Enter the file name into the File name field and press the Save button to close the dialogue box. Select File > Exit to exit from Acrobat Reader or you can continue editing the contents of the form.

If you are working on a large project with multiple resources it is no harm to save the form after adding the first resource and you can intermittently save the file contents using Ctrl-S.

5. Using the PDF Resource Catalogue form

The PDF form has a number of features that will be described in this section. The form allows you to add data in fields. Typically when you open the form the fields will be highlighted in blue.

The PDF form has four pages when you first open it. The form consists of 4 main areas:

- # a **Respondent** section at the top of page 1 where you can add basic author details (see Figure 2).
- # a **Project details** section on page 1 where you name a project and provide initial details about the project.
- # a **Resource details** section on page 2 and 3 where you can add details about a resource associated with the current project. Some of the larger text fields in this section have the ability to grow or shrink depending upon the amount of text entered. This resizing will occur when you move focus outside the field. This allows a resource section to expand over multiple pages. All of the text in these fields is then printable.
- # an **Office-only** section to be filled in by NPWS on the last page.

At the bottom of the Resource details section (see Figure 3) there is a button to the right, labelled *Add new resource*. When clicked, this will add an additional Resource details section (two new pages). Each time this button is pressed an additional Resource details section is added and additional pages will be added to the form as necessary. As of version 2.6.0 of the form a delete button (*Delete current resource*) has been added to the top of the Resource details section to allow the deletion of the associated resource section. Note that you cannot Undo this deletion if you ignore the associated warning that displays when you press the button. You will be forced to re-enter the data.

At the top of Page 1 of the form (see Figure 2) there are two buttons. The leftmost button labelled *Submit by Email* permits you to automatically e-mail the form (or form contents) to the NPWS Data Manager. You are prompted by a window that allows you to indicate your email client. If you choose the default Desktop Email Client option (recommended) then your desktop email client will be opened automatically and the data content of the form is automatically added as an attachment.

Figure 2. Sample form: Page 1

Figure 3: Sample form: Page 3

When you view the email you will see that the email recipient is automatically filled in with Data Manager's email address and a file attachment is included. This attachment file is named *ResourceCatalogueForm_external_enabled_data.xml* if you have not saved the form, otherwise the PDF name is included in the name with “_data” appended to the prefix and “_xml” as the suffix. This file is an XML data file (eXtensible Markup Language) and it contains the text that you have entered in your form. Once the email has been created you can simply click the Send button in your email application.

You can also select the rightmost button on the form named *Print Form* to print a copy of your form for your files. Note though, if the text in a field exceeds the size of the field box view then the contents for that field will be truncated at print time.

WARNING! There is no Autosave facility in an Acrobat form. If you close a form without saving the contents then any data that you have entered will be lost.

The next section provides an overview of the expected content to be added to the form.

6. Guidance for adding content to the Resource Catalogue form

This section of the document describes the proposed data content of the form for the NPWS Resource Catalogue. To give you an insight into what a completed form might look like two sample forms have been completed and should accompany this document. These are called:

- *Sample_form_1_Limestone_pavement_2009.pdf* and
- *Sample_form_2_indicative_habitat_mapping_2009.pdf*

The sample forms are a good starting point for clarifying the type of content expected in each of the fields. You can view field descriptions directly on the form by hovering over a form field and reading the associated tool-tip.

6.1. Form Page 1: The Respondent and Project details page

There are two sections on this page and details are provided separately below.

6.1.1 Respondent section

This section of page 1 allows you to provide your contact details.

6.1.2 Project details section

This is a key section of the form. Not all projects will be clearly demarcated or they may have evolved or even merged over time. Projects do not have to be related to a survey. You may encounter cases where there is only a single resource and here you should generate a suitable project name for the resource if it does not have an association with any other resources or projects.

The individual field contents in the Project Details section are explained in table 1 below.

Table 1. Details of the expected contents of the Project details section fields

Data field	Description
Project name	Provide a project or survey name. Surveys are considered to be a type of project. Where applicable, provide the name of the project used in an associated contract document along with the Contract Reference ID.
Project ID [Office use only]	Assigned and supplied by NPWS, the Project identifier is a 11-character string consisting of a 4-digit Project Type identifier, an underscore and then a unique 6-character Unique Project abbreviation. A project version code is not required. Example: 0502_WDSV04 .
Project Description	Provide a brief description of the project here. A statement regarding the overall geographic extent of the project would be useful. Provide project purpose and scope details below.
Project status	Select a value from the following: <ul style="list-style-type: none"> Planned Work-in-progress (use this category if associated resources are likely to change in the future) Complete
Project manager	The person responsible for managing the overall project.
Project duration – from / to	Where the project is complete provide the start and end dates. If the project is ongoing or starting in the future provide a start date. There is a dropdown calendar to help you select the date. Where a start date or end date are unclear but the year is known then use a vague date expressed in the following format: From: 01/01/<year> To: 31/12/<year> Use this format elsewhere in the form for vague dates.
Is this project phased?	Select Yes <input checked="" type="checkbox"/> if the project duration is split into more than one phase, for example by year or by geographical area.
Purpose / Scope	Provide concise details of the project purpose and scope. Describe the purpose for which the project was initiated and also provide a statement on the scope of the study.

6.2. Form Page 2 and 3: Resource details

The second and third page of the form template allow you to provide a description of product resources arising from the project. Supply these at as atomized a level as possible. Likely resources will include:

- Paper documents
- Paper maps
- Digital documents: Project reports in Word/PDF format.
- Publications
- GIS files
- Spreadsheets
- Access databases
- Other databases
- External documents
- Website URLs
- Photographic archives
- Digital video files
- Audio files

Supply separate Resource details for each individual item or group of items. The individual field contents in this section are explained in table 2. Key fields required for INSPIRE compliance have a navy blue label and field text on the form.

Table 2. Descriptions of the contents of the form Resource section fields (in field order)

Data field	Description
Resource name	A unique identifying name for the resource. For digital resources supply a short description of the resource along with the file name placed in brackets, if appropriate. Resources can also be a paper document, a map or a pack of photographic images. It will make sense to group files in some instances such as shape files which relate to a set of associated files. If there are multiple associated files then omit the listing of the file names here. Refer to them in the next field: Description / Abstract or in the Lineage field for spatial resources.
Description / Abstract	Provide a brief description of resource.
Taxonomic standards	Any taxonomic references/standards used.
Habitat/community classification systems used	Any habitat classification schemes used. Habitat classification: Habitats Directive Habitats, Heritage Council Habitats (Levels 1 to 3), NPWS Habitats. Use the information button i associated with this field to automatically populate the field with the Habitats Directive Habitats classification version details: <i>Annex 1 (Natural habitat types of community interest whose conservation requires the designation of Special Areas of Conservation) of Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora (EU Habitats Directive). The version of Interpretation Manual used was: European Commission (2007). Interpretation Manual of European Union Habitats. EUR 27. July 2007.</i>
Top copy holder	Person or organization currently holding top copy. The default value is 'NPWS' for NPWS resources.
Top copy manager	Person or organization currently managing top copy. The default value is 'NPWS' for NPWS resources.
Data owner	If you are the owner of the resource or data associated with the resource add your name here. Otherwise if you know the likely data owner then please add the owners name here. This will be confirmed later.
NPWS Usage Rights	Provide information about rights held in and over the resource, including who may access resource as well as security or privacy issues. Typically a Rights element will contain a rights management statement for the resource, or reference a service providing such information. Rights information often encompasses Intellectual Property Rights (IPR), Copyright, and various Property Rights.

Data field	Description
Created by	The name of the individual or organisation responsible for making the content of the resource.
Suitable for dissemination in its current format?	Is the resource suitable for dissemination in its current format? This relates to resources owned by NPWS.
Public Access Limitation	Confidentiality, legal, policy or other limitations on public access to the dataset. Select a value from the drop-down list. If a resource is non-sensitive then select: <i>No limitations on public access.</i>
Metadata Contact	<p>Generally for NPWS-owned datasets the following information will apply:</p> <p>Individual's name: NPWS Data Manager Organisation's name: Scientific Unit, National Parks and Wildlife Service Organisation's address: Department of the Arts, Heritage and the Gaeltacht, 7 Ely Place, Dublin 2 Contact's position: Biodiversity Data manager Email address: datadelivery@ahg.gov.ie</p> <p>To save effort you can click the information button i associated with this field to automatically populate the field with the information above.</p>
Metadata date	Date of metadata creation. Use the drop-down calendar to select a date.
Fitness for use / limitations	<p>Identify known limitations of a dataset (e.g. compilation issues, age, collation methods). Consider intended, unwise and improper use. Also highlight known uncertainties and errors within the dataset. An example, "not to be used for navigation".</p> <p>The intended content for this data field should consider the following perspectives:</p> <ul style="list-style-type: none"> • a project-specific statement, identifying and listing known or potential limitations on use provided by the resource or metadata author. This should be the key focus when initially formulating text for this form field. • a conditional NPWS Fitness for use acceptance statement that provides a general statement on the responsibility for usage of the data. • Refinements to the statement, supplied by the NPWS Project Co-ordinator or the NPWS Data Manager where further use limitations are identified. <p>The standard text supplied for NPWS-owned resources is presented below:</p> <p><i>Data are provided on an "as is", "as available" basis. NPWS does not guarantee the accuracy, timeliness, completeness, performance or fitness for a particular purpose of the data. NPWS data are not legal definitions of the current actuality with regard to conservation regulations or their geographic extent.</i></p> <p><i>NPWS do not guarantee that the digital data are free of minor errors that may materially affect performance. NPWS do not guarantee that the digital data will be suitable for use with any GIS or any other computer software. It is the users' responsibility to ensure that the data are fit for any intended use.</i></p> <p><i>NPWS have no responsibility for determining the fitness of the data for their intended use.</i></p> <p><i>Data are provided on the understanding that users will not use the information to the detriment of individual species or habitats, biodiversity or the environment in general.</i></p> <p>To save effort you can click the information button i associated with this field on the form to automatically populate the field with the information above. This statement is prepended to any existing text in the Fitness for use / limitations field.</p>

Data field	Description
Conditions on access and use	<p>Supply a list of conditions which apply to the use of the information resource after access is granted. Use restrictions (e.g. Copyright, internal use only, Confidentiality). Where no conditions apply the default is None.</p> <p>The standard text supplied for NPWS-owned resources is presented below:</p> <p><i>This data is strictly the copyright of The Department of the Arts, Heritage and the Gaeltacht. They are offered to interested individuals or organisations for private use on their own computer systems. They should not be passed on to third parties, either directly or as part of an application. They should not be sold, in whole or in part, nor should they form part of any application or development being sold. Anyone who wishes to incorporate this data into an added-value application should first contact The Department of the Arts, Heritage and the Gaeltacht to request permission and negotiate terms, if applicable. The content of this data is provisional in that it is a record of our current data holdings. The Department of the Arts, Heritage and the Gaeltacht will accept no liability for any loss or damage suffered by those using this data for any purpose.</i></p> <p>To save effort you can click the information button i associated with this field to automatically populate the field with the information above.</p>
Field survey	Sources used in creating the dataset - Is it based on field survey ?
Inventory	Sources used in creating the dataset - Is it based on inventory data?
Derived from remote sensing	Sources used in creating the dataset - Is it derived from remotely sensed data (orthos, satellite)?
Derived from overlaying GIS layers	Sources used in creating the dataset - Is it derived from overlaying GIS layers?
Spatial precision /resolution	Data precision and accuracy: Spatial precision/resolution. High - up to 10m; Medium - 10-100m; Low - over 100m.
Thematic accuracy	Data precision and accuracy: Thematic accuracy (have values been assigned consistently?)
Logical consistency	Data precision and accuracy: Logical consistency of resource data (are there obvious errors in the dataset, inappropriate values/gaps/sliver polygons/overlapping polygons/obvious mapping errors). Choose from High (a high degree of logical consistency), Medium (some non-critical errors in resource data) or Low (multiple errors leading to inconsistent data). In general low logical consistency should trigger a review of data quality.
Spatial positional	Data precision and accuracy: Spatial positional (closeness of measured values to real values). Choose from High (consistent with real values), Medium (some minor divergence from real values) or Low (poor correspondence with real values).
Habitat condition / conservation value	Does the dataset contain information about habitat condition or conservation value?
Spatial Resolution	Accuracy or precision of spatial data (digital mapping). Expressed as scale (representative fraction) raster cell size, DPI, etc., or range OR a ground sample distance.
For Recorder?	Suitable for entry into Recorder database. This should be selected for any datasets containing species records.
Date entered to Recorder	Use date of completion.
For Turboveg?	Suitable for entry into Vegetation database. This should be selected for any datasets containing vegetation or plant community level data.
Date entered to Turboveg	Use date of completion.

Data field	Description
For digitising	Does the resource contain data (species/relevé/environmental) or maps (habitat/boundary) that require digitisation.
Date digitized	Date digitisation completed.
Species count	Number of species recorded in dataset.
Record count	If appropriate for a resource provide a count of occurrence records. A count may need to be qualified by species or the type of count (e.g. polygons). It may be best to use the Resource Description/Abstract field when a lengthy or expanded explanation is required.
Alternative References	Other references that describe the resource. For example, a citation for a report.
Resource Type	NPWS will use a lookup list to supply the 3 resource types identified by INSPIRE: <ul style="list-style-type: none"> • dataset for spatial datasets; • series for spatial dataset series; • service for spatial data services. This applies to spatial datasets only. A wider list of resource formats is supplied using the Format field described below.
Resource Format	The physical or digital manifestation of the resource. Select the format of the resource from a list of resource types that you can access from a drop-down list. If you are describing another format not found in the list then please make a note of the format in the Description field.
Resource Location – URL addresses	Where possible, a URL should be supplied for all internal and external resources. External users of the form may leave this field blank.
Repository location/file name(s)	A server/directory/file name for the resource location. There may be more than 1 location but if you know where the top copy version is held then supply this. If the resource is held on a local PC, server or disk, or is submitted attached to an e-mail then please indicate by prefixing the path with 'Local: '. For external sources you can submit web page URLs. There may be instances where listing a set of files may not be suitable such as where a resource relates to multiple files associated with a dataset, e.g. a MySQL database. Please indicate that the resource relates to a set of physical files and supply a location for the set rather than listing them individually.
Date of Creation	Date of resource creation. Mandatory if a date of publication or date of revision not used. The value will have to be converted to Gregorian calendar, with dates expressed in accordance with ISO 8601 for metadata sharing. In the absence of an exact date use a vague date (see Project duration).
Date of last revision	The most recent date of last revision of the resource if the resource has been revised. In the absence of an exact date use a vague date (see Project duration). Note that some applications such as MS Access will update the file modification date timestamp even when no changes are made to the data. Ideally set the read-only attribute flag for such files after revisions have been made.
Date of Publication	Date the resource was published if known. In the absence of an exact date use a vague date (see Project duration).

Data field	Description
Temporal extent	<p>The time period covered by the content of the resource. NPWS will hold the two Temporal extent field values in Date fields (excluding timestamp).</p> <p>Note that the date field validation has been disabled for these two fields to permit dates earlier than the year 1900 to be added to the form. As a result of this care must be taken to ensure that the values entered comply with the format: DD/MM/YYYY, for example 27/09/2011.</p>
Lineage	<p>Please use the following headings as guidelines:</p> <ul style="list-style-type: none"> • Legal validity • Process steps: • Lineage statement 1 • Filename: • Fields • Look-up tables • Lineage statement 2 etc. <p>Supply the history of a dataset, and the life cycle from collection and acquisition through compilation and derivation to its current form [from ISO19101].</p>
NPWS Site code(s)	<p>List one or more NPWS Site codes for NPWS sites known to be contained within a survey area or relevant to a project. Leading zeros should be retained in site codes. Individual site codes should be separated by a comma and a space. Example: 009991, 009992.</p>
Geographic area	<p>Select an area from a list of areas such as county, province and country. The form provides you with a provisional list that allows you to select one or more values and these are added with a comma separating each one. You can also add more local areas such as a townland if that is appropriate for the resource. Make sure to separate values by commas.</p> <p>⚠ Do not mistake the area selector field for the Geographic Area field. Press the <i>Append area</i> button to add the area.</p>
Geographic bounding box	<p>Using one of the three Geographical Coordinate Systems described below define one or more geographic bounding boxes as Grid coordinates. Select the appropriate coordinate system from the drop-down list before adding the coordinates. Keep the coordinate system consistent with that used in the shape file. For standard compliance the values will be converted to Latitude/Longitude when necessary.</p> <ol style="list-style-type: none"> 1. Irish National Grid. The Irish grid reference system is a system of geographic grid references commonly used in Ireland (both Northern Ireland and the Republic of Ireland). The Irish grid overlaps the British grid. While OSI and OSNI intend to supply map information in the older Irish National Grid format into the future, the Irish Institution of Surveyors has recommended that ITM be adopted as soon as possible as the preferred official coordinate system for Ireland. 2. Irish Transverse Mercator (ITM). This is the geographic coordinate system for Ireland. It was implemented jointly by the Ordnance Survey Ireland (OSI) and the Ordnance Survey of Northern Ireland (OSNI) in 2001. The name is derived from the Transverse Mercator projection it uses and the fact that it is optimized for the island of Ireland. An ITM coordinate is generally given as a pair of six-digit numbers (excluding any digits behind a decimal point which may be used in very precise surveying). An ITM coordinate can have three digits behind the decimal point which gives a fix for a location with millimetre accuracy. ITM is a GPS-compatible mapping system that takes advantage of the accuracy of GPS whilst minimising mapping distortions. 3. Latitude / Longitude. Supply the extent of the resource in decimal degrees, with a precision of at least two decimals. Minimum and Maximum Easting values should be expressed as negative values.

Data field	Description
Responsible party/ Responsible role	At a minimum: Name of responsible organisation and e-mail address. In many cases this will default to details for NPWS. A standard content format will be applied in these cases. The INSPIRE list of responsible roles are implemented using a drop-down list. Select a value from the list. You can add multiple responsible parties with differing roles.
Topic category	Select from a list of INSPIRE Topic categories. These are a list of categories presented in the INSPIRE documentation. The default value is Biota.
Keyword	NPWS extends a subset of the GEMET keyword dictionary. Select one or more keywords for each resource.
Other keywords	Additional keywords may be added here to augment the provided keyword set. Separate new keywords with a comma.

Adding data to the Resource Catalogue form - issues to be aware of

Please note that copying and pasting text from a Microsoft Word document to fields in the form can lead to the addition of spurious characters within the form text. Do not copy and paste bulleted text into forms as the bullets may use a font family that is unavailable in the target system in NPWS. This can lead to errors when attempting to open the form. These problem characters can include paragraph breaks that are not visible in the source Word document or in the form and are only identified in the XML text exported from the form. Ideally such text should be copied to an empty document in a plain-text editor such as Notepad, cleaned of any odd characters, and then copied to the form.

7. Conclusion

Not all fields will be relevant to every project, so please don't feel they all have to be completed if they are not relevant to the resource or project. If you are at all uncertain about what should be filled in please contact the NPWS Data Manager (datadelivery@ahg.gov.ie).

This document is frequently updated, so please send in feedback.

NPWS reserve the right to change the information submitted on this form, particularly in relation to data standards and quality, following an internal review of the data.

✎ End of document ✎