
The identification of local Important Plant Areas (IPAs) in County Waterford 2008

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What are Important Plant Areas?

The identification of Important Plant Areas (IPAs) is a global initiative promoted by Plantlife International. *IPAs are natural or semi-natural sites exhibiting exceptional botanical richness and/or supporting an outstanding assemblage of rare, threatened and/or endemic plant species and/or vegetation of high botanical value.* They provide the framework for the implementation of Target 5 of the Convention on Biological Diversity's Global Strategy for Plant Conservation - protection of 50% of the world's most important areas for plant diversity assured by 2010. IPAs are not legal site designations but are a framework for identifying and highlighting the very best sites for plants and fungi, which can be used to support conservation actions and initiatives. The selection of sites follows international and regional guidelines to ensure consistency and is based on three criteria: threatened species, species richness/diversity and threatened habitats.

Plantlife are currently promoting the selection of IPAs within Britain and to date around 150 IPAs have been identified across England, Wales, Scotland and Northern Ireland. The National Strategy for Plant Conservation in Ireland (target 5 - protection of the most important areas for plant diversity assured) states that methodology and criteria for recognising Important Areas for Plant Diversity (IAPDs) in the Republic of Ireland will be developed and used to identify these areas by 2010.

Plantlife do not promote the development of IPAs below the regional level. We have independently adapted the international/regional methodology for use at a local level. This is not intended to interfere with methodology that may be developed to identify Important Areas for Plant Diversity (IAPDs) within the Republic of Ireland, nor will there necessarily be overlap between IAPDs in Ireland and local IPA sites. Here, advantage has been taken of an existing framework to create a standardised method of identifying important areas for plants that can be promoted at the local authority level.

Within County Waterford, Important Plant Areas have been interpreted as areas that represent important refuges for native plants within the county. Using methodology developed by the authors, they fall into three types:

1. Areas that support species threatened with extinction from the county
2. Areas that support a diverse and interesting flora (plant 'hotspots')
3. Areas of high quality natural or semi-natural habitat based on numbers of plant indicator species present.

Why identify local IPAs?

The IPAs identified represent the most important areas for plants within County Waterford in 2008. An interactive map showing the IPAs is publically available through the National Biodiversity Data Centres web services at [], making this information accessible to as wide an audience as possible. They have been identified primarily to assist those working at local levels who have responsibility for conservation and planning.

At what level have local IPAs been recognised?

In County Waterford IPAs have been highlighted at the tetrad level (2x2 km²). This corresponds with the common collection unit promoted by the Botanical Society of the British Isles (BSBI). This method is not intended to identify individual sites but rather to more broadly highlight areas that are important for plants.

How have they been selected in County Waterford?

IPAs in County Waterford have been selected by the BSBI Vice county recorder (Paul Green) using methodology that has been developed to ensure that their selection is an objective process based on available data rather than a personal or politically influenced decision. The methodology was strictly designed to ensure only the selection of areas of extreme importance for plants within the county. The National Biodiversity Data Centre has assisted with development of the methodology and with data manipulation and display (need a mechanism for external review). It is recommended that, where possible, the IPA's be reviewed on a 5 yearly basis.

Methodology used in County Waterford

This method used is based on a County Rare Plant Register (CRPR) and lists of axiophytes for County Waterford.

Axiophytes are 'worthy plants' - the 40% or so of species that arouse interest and praise from botanists when they are seen. They are indicators of habitat that is considered important for conservation, such as ancient woodlands, clear water and species-rich meadows. They are **not** the same as rare plants: species that have only ever been recorded in one or two sites in a county are often just chance occurrences, and have little ecological (or statistical) significance [BSBI 2007].

*All criteria refer to existing populations. This will vary depending on recording effort. In Waterford it is a population known from 2000 onwards.

1. Tetrads that support threatened species.

IPAs include tetrads that contain:

- (a) any legally protected species (Flora Protection Order)
- (b) ≥ 3 species that are listed in the National Red Data Book (1988)
- (c) ≥ 5 species that are listed as nationally scarce (revised Curtis & Neff 2005)
- (d) > 10 species that are locally rare, scarce or in decline (as stated in the County Rare Plant Register 2008).

2. Tetrads that are rich in 'worthy' or interesting plants (axiophytes)

IPAs include tetrads that contain:

- tetrads with 60+ axiophytes.

3. Tetrads that are rich in species indicative of good quality habitat

IPAs include:

- For the 10 most important habitat types within the county, two tetrads containing a high number of axiophyte species for that habitat type. The 10 habitat types and the two most important tetrads within each have been chosen by the vice county recorder.

Habitats selected for Waterford

1. Salt marsh
2. Coastal dry heath
3. Sand dune (includes sand and shingle bar)
4. Species rich fen
5. Upland blanket bog
6. Alluvial wet woodland
7. Oak woodland
8. Coastal grassland
9. Steep rocky broad-leaved valleys with a river
10. Lakes, loughs, ponds and reservoirs

What are the advantages of this methodology?

The primary advantages of this methodology are its objectiveness, its reliance on publically available data held independently by the National Biodiversity Data Centre, and the external review of local IPA's selected (to be formalised). The selection of each tetrad is based on either the presence of a single legally protected species (Flora Protection Order), or on a list of clearly defined species of importance that were present from 2000 onwards. This facilitates the assessment of development impacts within individual tetrads, and also allows changes to be easily monitored within IPAs in County Waterford into the future.

How do local IPAs differ from designated sites such as SACs or NHAs?

Designated sites such as Special Areas of Conservation (SACs) or Natural Heritage Areas (NHAs) are most often chosen to protect those species or habitats that are listed on the EU Habitats Directive or the Wildlife Order and are extremely threatened at European or national levels. Defining local IPAs is not intended to conflict with this network, or to suggest extra sites for designation, but rather to provide an extra level of information for use primarily at the local authority level. They are not designated areas and simply provide information that local authorities can readily access if they wish to protect the plant richness within their jurisdiction.

There will be some overlap between local IPAs and designated sites and this is essential if the IPA sites are to be of value as a standalone information layer for use at the local level. The primary difference between local IPAs and a national designated site network is that a designated network is not intended to indicate local plant hotspots or areas that contain locally rare, scarce or declining species. It will also not assist local authorities in protecting important sites within the range of

natural habitats that occur within their jurisdiction, should they wish to do so. Providing easy access on the location of local IPAs and the data on which their selection was based will, at the least, make it clear to local authorities within which areas full environmental impact assessments are necessary.

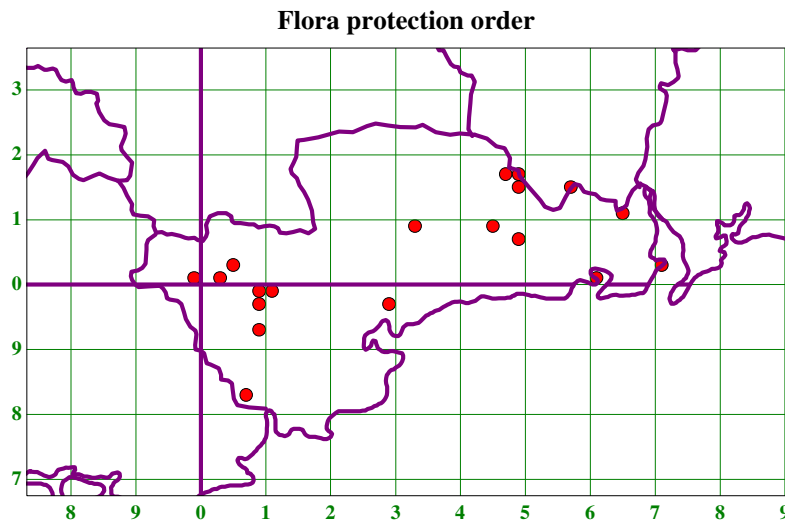
Will defining local IPAs interfere with national plant conservation strategy?

Defining local IPAs is not intended to interfere with plant conservation strategy at national levels, which may be designed to protect nationally threatened species/vegetation types or exceptionally botanically rich sites. The purpose of defining local IPAs is to provide an extra level of information for use below the national level. It is recognised that in an ideal world the process should be hierarchical so that local IPAs fit under designated sites and those that may be defined as a result of national plant conservation strategies.

Where are the IPAs in County Waterford?

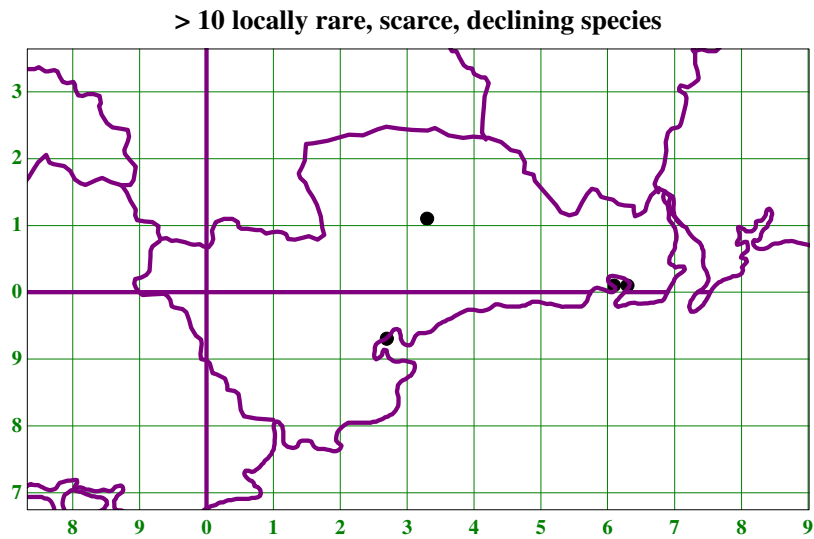
1. Tetrads that support threatened species

(a) tetrads that contain any legally protected species (Flora Protection Order)



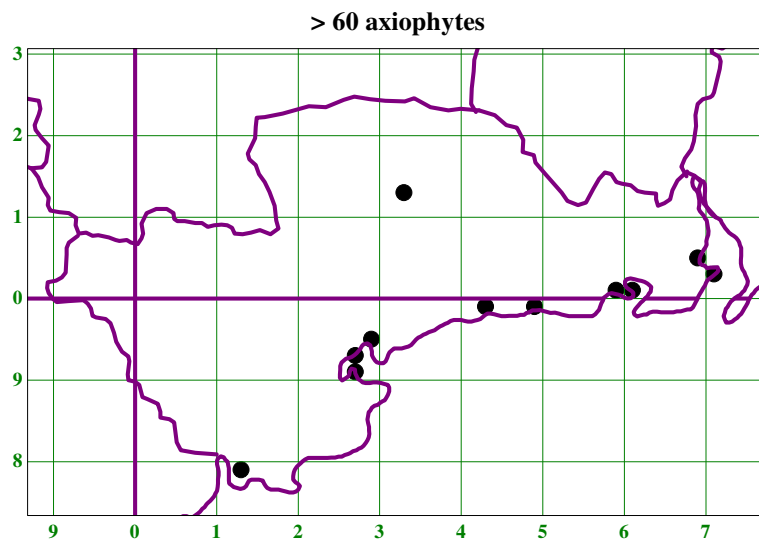
County Waterford does not contain any tetrads that have ≥ 3 species that are listed in the National Red Data Book (1988); or any tetrads that have ≥ 5 species that are listed as nationally scarce (revised Curtis & Neff 2005).

(d) tetrads with > 10 species that are locally rare, scarce or in decline (CRPR)



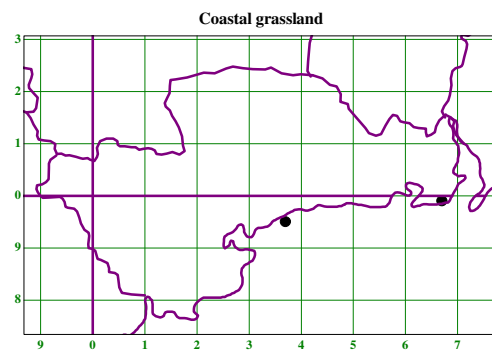
2. Tetrads that are rich in 'worthy' or interesting plants – 'Waterford hotspots'

- tetrads with 60+ axiophytes.

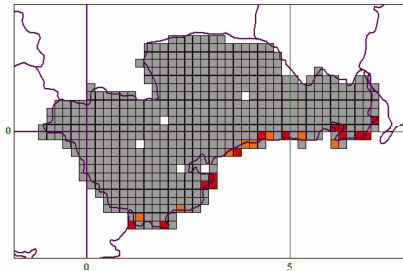


3. Tetrads that are rich in species indicative of good quality habitat

Two tetrads have been chosen per habitat type (left), to represent two sites of importance. Maps on the right indicate axiophyte numbers per tetrad for the habitat type (data from 2000 onwards).

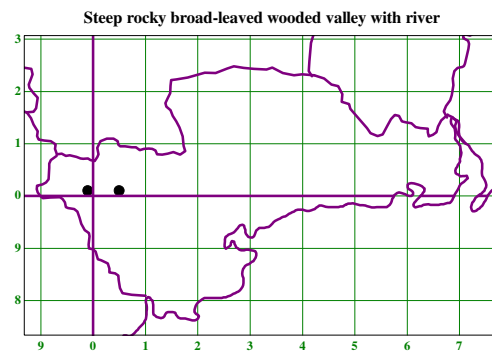


Axiophyte species per tetrad
Coastal grassland

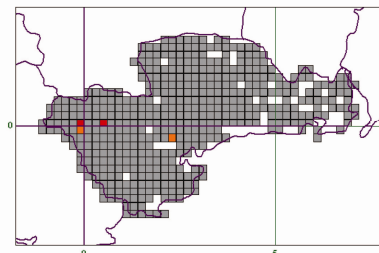


Number of axiophyte species
■ 15-16
■ 17+

Map produced by the National Biodiversity Centre (April 2008) using BSBI data for Co. Waterford from 2000 onwards.

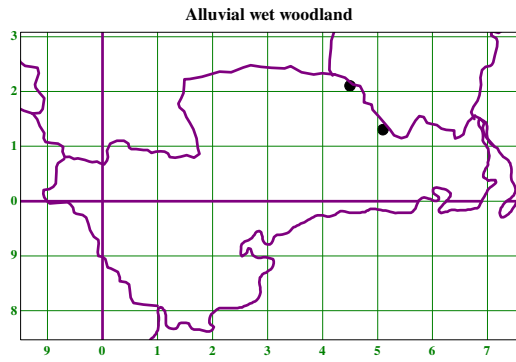


Axiophyte species per tetrad
Steep rocky broad leaved wooded
valley with river

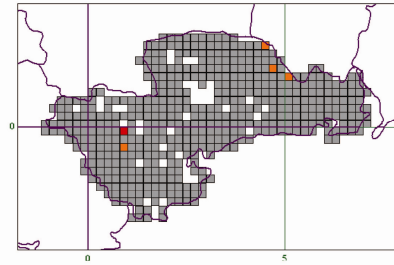


Number of axiophyte species
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Map produced by the National Biodiversity Centre (April 2008) using BSBI data for Co. Waterford from 2000 onwards.

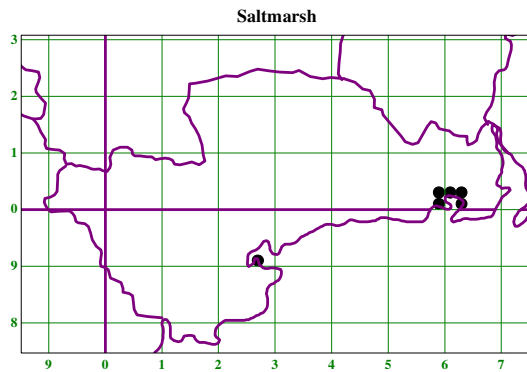


Axiophyte species per tetrad Alluvial wet woodland

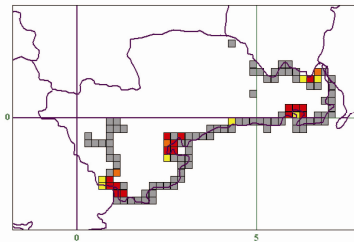


Number of axiophyte species
 13-14
 15+

Map produced by the National Biodiversity Centre (April 2008) using BSI date for Co. Waterford from 2000 onwards.

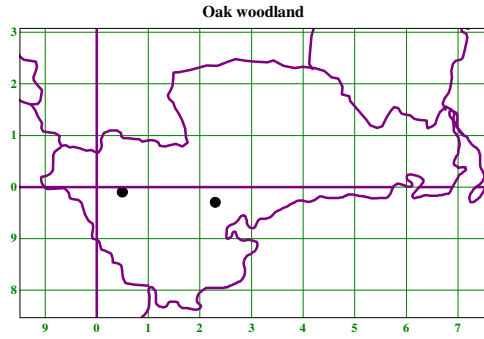


Axiophyte species per tetrad Salt marsh

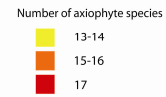
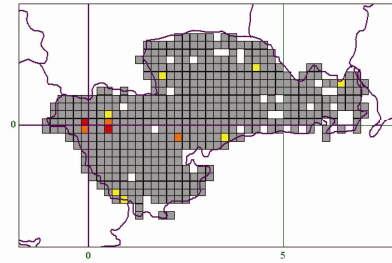


Number of axiophyte species
 13-14
 15-16
 17+

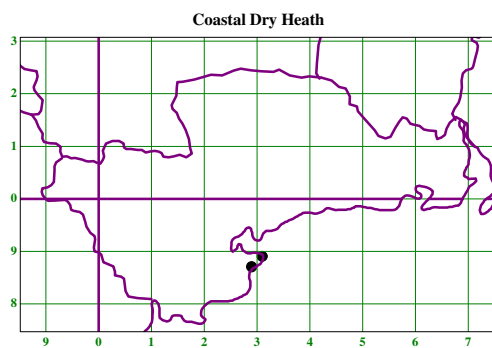
Map produced by the National Biodiversity Centre (April 2008) using BSI date for Co. Waterford from 2000 onwards.



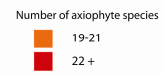
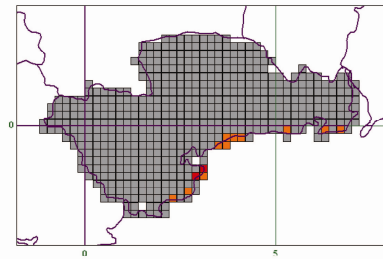
Axiophyte species per tetrad
Oak woodland



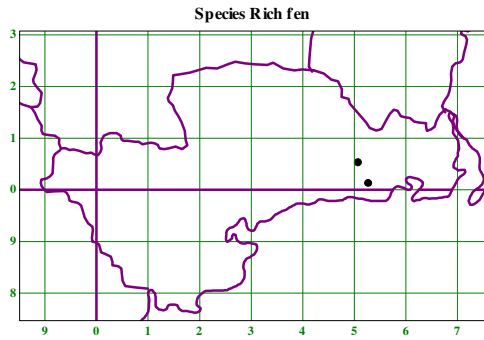
Map produced by the National Biodiversity Centre (April 2008) using BSBI data for Co.Waterford from 2000 onwards.



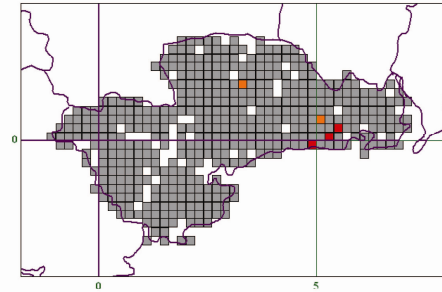
Axiophyte species per tetrad
Coastal dry heath



Map produced by the National Biodiversity Centre (April 2008) using BSBI data for Co.Waterford from 2000 onwards.

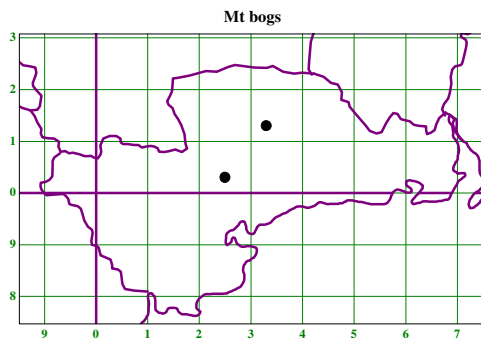


Axiophyte species per tetrad
Species rich fen

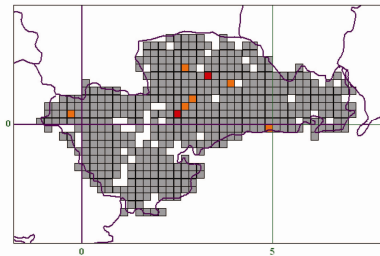


Number of axiophyte species
■ 22-24
■ 25 +

Map produced by the National Biodiversity Centre (April 2008) using BSBI data for Co. Waterford from 2000 onwards.

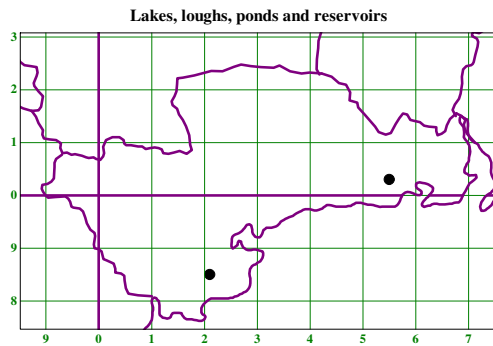


Axiophyte species per tetrad
Upland blanket bog

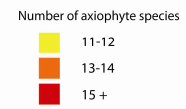
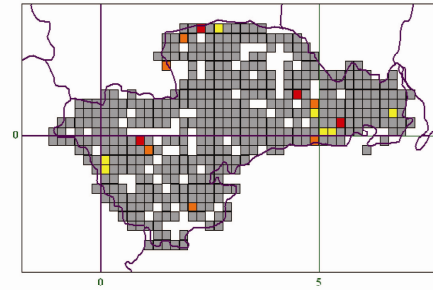


Number of axiophyte species
■ 25-28
■ 29 +

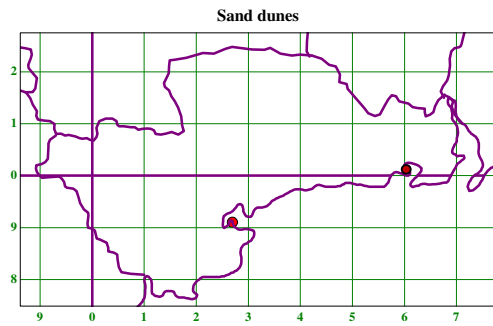
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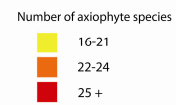
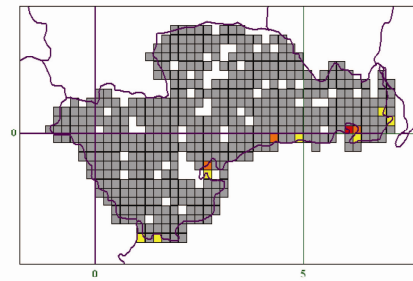
Axiophyte species per tetrad Lake, loughs, ponds and reservoirs



Map produced by the National Biodiversity Centre (April 2008) using BSBI data for Co. Waterford from 2000 onwards.



Axiophyte species per tetrad Sand dune

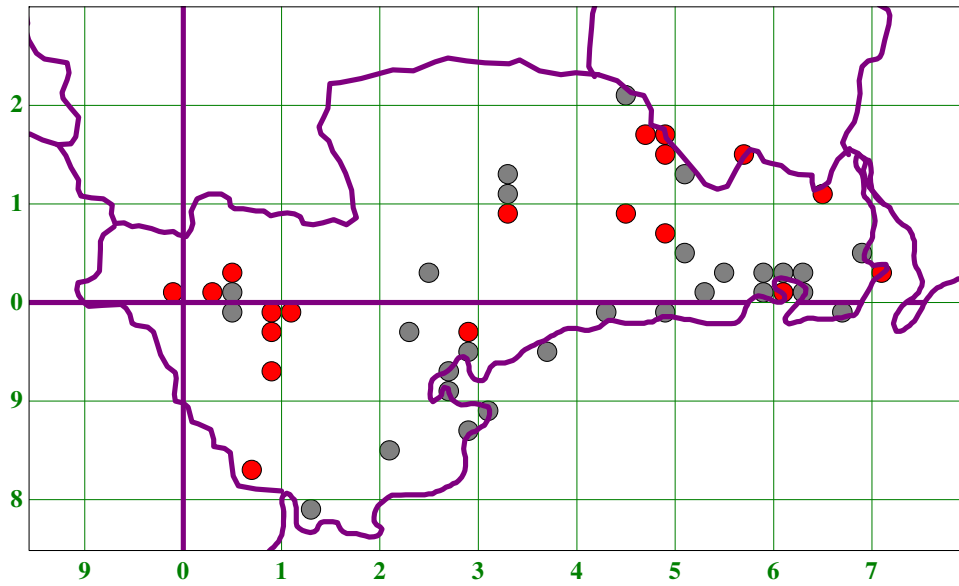


Map produced by the National Biodiversity Centre (April 2008) using BSBI data for Co. Waterford from 2000 onwards.

Combined map indicating Important Areas for Plants in County Waterford

Total of 48 tetrads

IPAs



- Red indicates a tetrad that has been designated because it contains a Flora Protection Order species.

END.