IMPORTANT INVERTEBRATE AREAS

Important Invertebrate Areas in planning

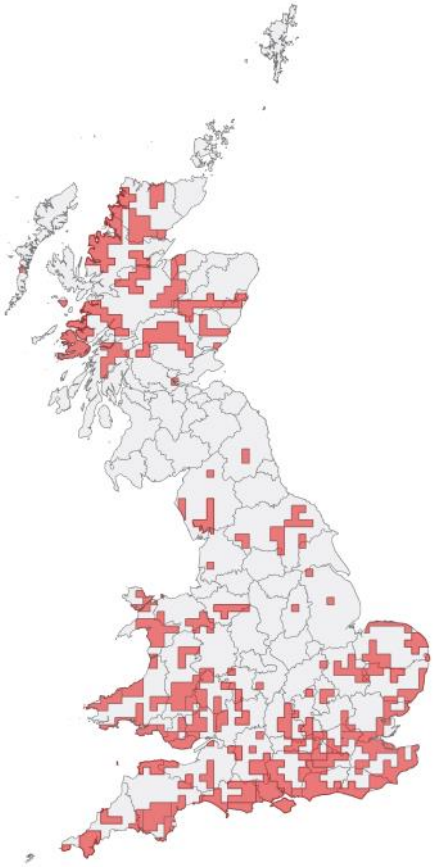
Left: Gregynog National Nature Reserve in the Montgomeryshire IIA © John Trefonen. Right: Scolt Head in the Norfolk Coast IIA © John Fielding Aerial Image

Important Invertebrate Areas (IIAs) are nationally or internationally significant places for invertebrates and their habitats. They are a vital tool to help conserve our most threatened species and assemblages of invertebrates, mapped using data from national and local recorders and developed in consultation with local experts. Although not a legal site designation, they can help to ensure that key sites for invertebrates are considered in local and national planning and land management decision making, to help restore sustainable populations of invertebrates. This can include informing site-specific planning decisions, but also strategic decisions about conservation priorities at the landscape scale.

How can IIAs help invertebrates in planning?

With thousands of species and different ecological requirements and ranges, considering invertebrates is a complex matter. IIAs take technical information and distil it into accessible and useful format to ensure that ecologists, planners, local authorities, statutory bodies, conservation organisations, land managers and other decision makers are able to better understand the importance of the landscape for invertebrates and make more informed decisions to support nature's recovery. Completed IIA maps and profiles will enable:

- Important wildlife sites to be flagged up at the earliest opportunity within planning processes, including in Environmental Impact Assessments;
- Better planning outcomes for invertebrates, by identifying when invertebrate surveys are needed to assess impacts and properly inform planning decisions;



Map of national IIA hectads (10km x 10km squares)

- Local Authorities to better recognise sites and habitats that are important for nationally rare and threatened invertebrates. This is particularly relevant for Local Authorities which don't have access to ecological expertise to support their planning teams;
- Local Environmental Records Centres to share a nationally prioritised series of maps showing key invertebrate interest, informative profiles and accompanying resources to support their data search outputs;
- Better identification of important sites for invertebrates, that can identify gaps in the national protected area network and contribute to each county's Local Wildlife Site (or equivalent) series;
- The very best sites for invertebrates to be excluded from Local Development Plans, ensuring that they are not put at risk of inappropriate land use changes or development. This will help Local Authorities to fulfil their biodiversity duty;
- Green and Blue Infrastructure plans to properly consider how they could support invertebrate populations by protecting, restoring or connecting habitat with targeted creation;
- Ecological consultants and professionals to more easily recognise key invertebrate sites, habitats and features, allowing for better impact assessments to be undertaken.

IIAs can help highlight where additional invertebrate expertise is required, but are not a replacement for expert survey and assessment. A complete network of fine-scale maps, supporting profiles and documents to help the use of IIAs to inform decision making will be produced and made available through the Buglife website. For more information and updates visit: https://www.buglife.org.uk/our-work/important-invertebrate-areas/

How were IIAs identified and mapped?

The network of IIAs was identified using a wealth of data - over 45 million records from 80 national expert recording schemes. Modern status reviews of invertebrate threat and rarity, alongside expert opinion, were used to identify a suite of IIA qualifying species. Nationally, a hectad (10km x 10km square) qualifies as part of an IIA if it:

- Supports a species that is Critically Endangered nationally, Endangered at the global or European level, or a range restricted endemic species. These are our rarest and most threatened species, meaning there is a special responsibility to act and conserve them.

or

- Supports a nationally important assemblage of rare or threatened species.

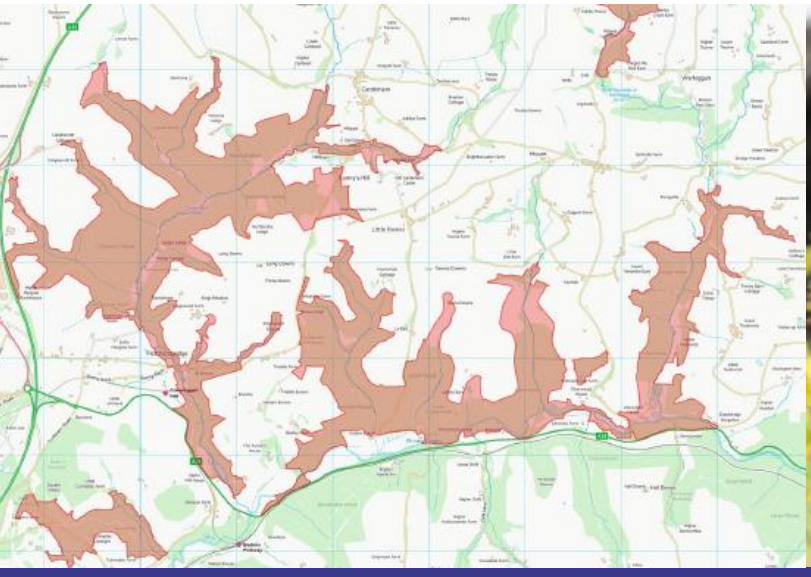
These hectads were then grouped into recognisable named IIA areas such as the New Forest, South Wales Valleys or Strathspey. Fine-scale mapping of these named IIA areas was then undertaken, to identify the networks of habitats and sites that support their key invertebrate interest. For large and complex IIAs, this used Local Environmental Records Centre data merged with the national data to create maps of qualifying species records that were scrutinised by local entomologists and naturalists.

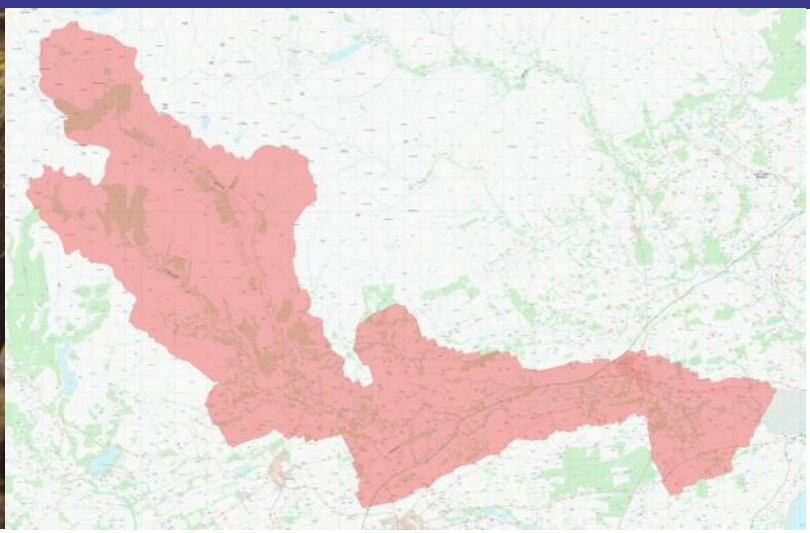
What do IIA maps and profiles show?

The IIA maps show the network of sites that support its qualifying species. This network is mapped based on the presence of verified post-1990 records of IIA qualifying species and the judgement of local experts to tease out the areas of habitat that support them.

The IIA maps do not show individual species records as the data comes from multiple sources and involve different

Left: Part of the fine-scale Mid Cornwall IIA network, north of the River Fowey. Right: The Nationally Rare Blue Ground Beetle (*Carabus intricatus*) - a qualifying species found in Fowey Valley woodlands.





Left: Critically Endangered Freshwater Pearl Mussel (*Margaritifera margaritifera*) © Sue Scott / Naturescot. Right: South Esk IIA, home to an important population of Freshwater Pearl Mussels.

permissions. To be best interpreted, they should be viewed alongside the relevant IIA profiles, which can be downloaded from the IIA webpage. These profiles describe the important habitats and features supporting invertebrates within each IIA. They also identify some key species to consider and assemblages of invertebrates in that area associated with specific habitat features. The information on threats and opportunities within the profile can be used to inform management decisions for habitats within the mapped IIA area.

The IIA programme is ambitious and takes time, meaning that some IIAs have yet to be fine-scale mapped, while others have been fine-scale mapped but don't yet have a supporting profile. Please bear with us while we undertake this significant task and keep checking the IIA webmap for updates to the network of fine-scale maps and accompanying profiles.

Further invertebrate considerations

- Areas outside of the fine-scale IIA map network can still be valuable for invertebrates. Habitats identified in ecological appraisals as having the potential to support important invertebrate populations should always be subject to appropriate invertebrate survey and assessment.
- All planning applications should undertake the appropriate data searches with Local Environmental Records Centres. IIA profiles can help to identify important habitat types, but it is essential that, where required, appropriate invertebrate surveys and assessments are always undertaken. These should be undertaken by a competent expert, using appropriate survey techniques and must cover the relevant survey window.
- IIA profiles identify important habitat that can inform locally relevant habitat creation, management or restoration plans so that they properly target the invertebrate assemblages of interest. Targeting habitat improvements and creation within or adjacent to fine-scale IIA areas can improve connectivity across the landscape, allowing invertebrate populations to expand and create resilient populations.

Author: Jamie Robins

Date: March 2024

Version number: 1

Nationally Rare Sedge Jumper (*Attulus caricis*) © Mark Gurney (CC BY-NC-SA 2.0)