

Giving advice about plants and planting for garden wildlife: Issues and recommendations

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Context

There are various issues and shortcomings in the way advice is given about which plants to grow to benefit wildlife. This paper aims to concisely set out some of the issues and some recommendations for improving the advice and its sources.

The issues

Plants can be vital in determining the presence or absence, and populations, of many wildlife species.

This relationship is often species-specific, as in when an animal has evolved to feed on a particular plant. For example, many butterfly and moth larvae, gall-forming insects and leaf-miners are obligate feeders on one or a limited suite of plant species.

The relationship can also be more general, such as when a wildlife species requires the structure offered by various plants, eg as cover or nesting site.

The volume or extent of a plant species can also play an important role in determining whether an area is ecologically suitable for wildlife.

Of course, a key and contentious issue is the debate about whether native plants are better than non-native plants for wildlife in gardens.

Knowing that plants influence wildlife so profoundly, wildlife gardeners are keen for advice of what they should grow and why.

Many 'authorities' offer such advice. Sometimes it is published accompanied by supportive text; sometimes it is just a simple plant list; often it is based on a premise (eg 'plants for pollinators'). Some plant growers and sellers also offer advice in the form of plants labelled as being good for certain wildlife.

Recommendations carry risks. By implication, the reader might imagine that plants not 'on the list' or 'not labelled' are poor for wildlife (although some texts are clear to caveat that this is not the case). 'Lists' also often appear inconsistent with each other, suggesting different ranges of plants. This can easily be explained by factors such as:

- Different aims of the 'lists' (eg some focus on particular taxa such as the larger pollinators, some are biased towards native plants etc);
- Few authors/companies set out for their recommendations to be exhaustive – their lists are offered as suggestions;
- Publishing limitations (eg space available in a printed book);
- The different levels of experience and research of different authors;



- And the paucity of robust scientific studies.

The lack of scientific data is unsurprising given how many different types of plant are available to UK gardeners (the RHS PlantFinder lists 70,000 different plants and cultivars on sale in the UK) and the time that would be required to test them in different climates and soils. Important studies (such as those of BUGS, Sussex University and Plants for Bugs) are starting to plug the gap, but there is a long way to go.

Recommendations are also complicated by the fact that a plant that is observed to be ‘good’ for wildlife in one location or at one point in time may not be replicated somewhere else or at another time. This might be due to environmental factors in different geographical locations (eg soil, climate and weather, aspect), or by proximity to different plant species, or physical variations within one plant species.

The problem of inconsistent lists, however, is compounded by few of them giving clear indications of the source of their advice. The suspicion is that much of it is based on ‘received wisdom’, or on personal observation which has inevitable limitations, or in the case of plant labelling by the driver being marketing rather than scientific accuracy.

In spite of these problems, wildlife gardeners will continue to want and seek advice. There is enough ecological information already available to give advice meaningful enough to help them make a positive difference for garden wildlife, whilst accepting that there is still much scope to improve that advice.

Recommendations for improving the transparency of advice about plants for wildlife

- It should always include information on where the advice is sourced. Such clarity would help readers decide on its relative reliability and value.
- It should always aim to be as clear as possible as to what wildlife it is directed towards. For example, is it for pollinators? Or is it actually for adult butterflies, bumblebees and honeybees rather than hoverflies, pollen beetles and other less showy pollinators?
- It should always seek to explain whether it seeks to be definitive or is just a limited set of suggestions.
- It should seek where possible to set out the geographical and environmental parameters of the advice.

Recommendations for improving the data on which advice about plants for wildlife is based

There are three key areas from which valid data can be derived to help improve the standard of advice that is given:

- Rigorous scientific study, whether by academics or by amateur scientists. The Plants & Planting Group will seek to identify and publicise key topics for study and methods by which amateur scientists can conduct experiments that will be seen as reputable.

- Citizen Science projects, which collate mass data about wildlife preferences for garden planting. The Plants & Planting Group has already trialled two studies with Which! magazine, and there is a good precedent with Butterfly Conservation's nectar plant survey.
- Collating the wealth of casual observations made by competent wildlife gardeners and naturalists, which collectively would be more powerful than observations by single observers. The Plants & Planting Group will trial this approach.

This paper was reviewed by the Wildlife Gardening Forum's Trustee board