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Mistletoe Survey – help needed for final analysis

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It has been over a decade since the BSBI and Plantlife Mistletoe Survey of 1994-6. Despite producing an overview report 'Kissing Goodbye to Mistletoe?' (Briggs 1999) I have not, yet, produced a more rigorous analysis or made the data available to BRCs or County Recorders. This short note is intended to explain the situation and request help, from about January onwards, to check some records on the ground. The intention is to produce a full report for *Watsonia*.

This situation has arisen largely because of the time needed to sort out the many inconsistencies in the data. Most of these require a return to the paper records (representing some 12000 sightings) followed up by site visits to check uncertainties. Having recently become self-employed I might now be able to make the time to address this – and intend to try to do so over the winter of 07/08.

Without beating around the bush, the main issues are differences between the BSBI-gathered and the Plantlife-gathered (mostly non-botanist) data. Not only were differing forms and questions asked but there were apparent differences in the quality of the data gathered and in data entry onto computer. Data quality issues show up most often in host preference, place-name and grid-references information, with many questionable/challenging entries in the public-gathered data. For example these data suggest many more mistletoe-oaks than the BSBI member data. This probably reflects poor winter tree identification by non-botanists – but cannot be dismissed as such without some proper ground-truthing. There are many other host identification queries. Also many grid-references are clearly incorrect – but most cannot be corrected without site visits.

Database structures and consistency also vary – the BSBI tetrad information was input to an Access database but the rest was entered onto an Excel spreadsheet. This allowed freeform input with much variation in place-name, county and grid-reference formats and spellings. For the 1999 Report it was possible to use a 'rough and ready' combination of the data sets to plot distribution and host trends, but a fuller, more scientific analysis requires more thorough cleaning and combination of the data. A formal comparison of the two data types may also yield some interesting results.

I should perhaps stress here that I am not being critical of the volunteers who collected the data, or those who entered them (there would be no data at all without them!). I am merely reflecting on the difficulties in detailed analysis that arise from such surveys – difficulties that probably occur in most public-participation data-gathering projects.

Comparison with the BSBI-run 1970s mistletoe survey was a key driver for the 1990s project, largely with the intention of assessing population change, if any. This is

another area that needs further analysis, building on the discussion of the difficulties of this comparison begun by Tim Rich in 2000 (Rich 2000).

The immediate plan is to review all the data entries against the paper records during the autumn, with a view to producing a master-list of all the remaining inconsistencies by about Christmas. I'd like to send this to the relevant (and willing) County Recorders or other volunteers, with a view to solving all the problems (allowing for change since 1997!) before mistletoe vanishes under the host canopy again in the spring. What better way can there be to spend your days from January to March? Expressions of interest or help can be sent direct to jonathanbriggs@mistletoe.org.uk.

References

Briggs, Jonathan (1999) *Kissing Goodbye to Mistletoe?* A Joint Report from Plantlife and BSBI

Rich, T.C.G., 2000, A reanalysis of the Mistletoe (*Viscum album* L.:Loranthaceae) survey data from the 1970s and 1990s, *Watsonia* 23, 338-339