



## Complete Guide to Small Scale Spraying

I have only just encountered this very useful full colour A5 sized 60 page booklet from the British Crop Production Council (BCPC) which is certainly worthy of reference in the forestry sector, and well worth the investment of a tenner.

Although it was published back in 2009 replacing the earlier knapsack spraying guide, the information on best spraying practice is timeless and remains very relevant despite the many recent legislative changes introduced from Brussels.

In many ways it condenses the information available in the soon to be replaced Defra Pesticide Code of Practice - and in a very retrievable and understandable format.

Throughout the book, items of particular note are highlighted in green, while precautionary comments are highlighted in pink.

The booklet is presented in nine chapters:

### 1. Sprayer types (6 pages)

Includes lever and compression sprayers, mist-blowers, spinning disc applicators, pedestrian wheeled and ATV sprayers demonstrating how they work and hints on how to use them efficiently. However spot guns and weedwipers are noticeable by their absence.

### 2. Nozzles, lances and filtration (6 pages)

This is a useful section, illustrating the differences between deflector (anvil) nozzles - the ones most widely used in forestry, hollow & solid cone nozzles and flat fan including evenspray nozzles. The latter are particularly useful for spraying transplants stems for hylobius control. Charts are provided relating to the various spray qualities (very fine to coarse) and their uses, plus one outlining the most popular nozzle codes. Unfortunately only the AN series of deflector nozzles were included, with no mention of the similar Dft nozzles. It would have been useful to have added two columns providing information on spray quality at 1, 2 & 3 bars.

### 3. Preparing for spraying (4 pages)

While the practical advice in this section remains valid, the legislation which underscores it is no longer accurate in that UK legislation has now been largely replaced by EC rules. So the Food & Environment Protection Act (FEPA) and associated Control of Pesticide Regulations (COPR) have been replaced by the Plant Protection Product Regulations (PPPR). One of the more obvious repercussions of this has been the abolishing of grandfather spraying rights, the removal of the Statutory Box on the label, and in addition the replacement of the EC hazard symbols with the global Hazard system.

However, there is a very useful chart outlin-

ing PPE advice for situations not covered on the product label which is very much valid.

### 4. Calibration (5 pages)

The heavy reliance of the industry on the use of glyphosate which permits application as a standard dilution rate (normally 20ml/litre water) has meant that calibration skills in the industry are often severely tested when using a product such as Kerb or Laser which have a rate per ha recommendation only. Although the calibration system advocated in these pages will produce a highly accurate result, many will struggle to follow the procedure to a successful conclusion. It could be argued therefore that a simpler system more suited to the vagaries of the typical forest situation could be more appropriate for our industry.

### 5. Spraying practice (9 pages)

The first few pages provide a reminder of best practice in terms of suitable windspeed supplemented by a cautionary artists impression of seven hazards for the amenity operator to be aware of. Also included is a helpful checklist for procedures to be followed when mixing and filling then knapsack, and a section on the rules regulating reduced volume spraying - although currently no forestry product volume rates are likely to be affected by these rules.

For those who do not have access to a standard format for recording spraying operations, the chapter concludes with a simple but adequate chart which may be photocopied and retained as required by law.

### 6. After spraying & disposal (2 pages)

Guidance is provided over sprayer maintenance, plus details of daily and annual cleaning of the sprayer, together with procedures for disposing of unwanted concentrates and surplus diluted pesticides. Dealing with that half sprayer load of glyphosate when the rainfall forecast proves inaccurate, is not specifically addressed, although warnings against storing diluted product in the knapsack are correctly highlighted, leaving the only practical legal option to continue spraying despite the rain. This solution would not, of course be a problem if applying a soil residual herbicide such as Kerb.

### 7. Fault finding & equipment choice (1 page)

A helpful chart highlighting the likely causes of sprayer failure.

Blocked nozzles are a regular hazard if filling procedures fail to prevent small particles entering the tank, with blocked filters also noted. Blocked filters are often associated with the use of suspension concentrate, wetttable powder

and soluble granule pesticide formulations, so it would have been helpful if guidance on filter cleaning during the working day had been provided as part of the previous sprayer maintenance section.

### 8. Emergency procedures (1 page)

This section notes that operators should be trained in emergency procedures and have immediate access to emergency action plans, which should include appropriate environmental and medical contact phone numbers - as well as knowledge of the location of the nearest medical centres if any required ambulance service is not likely to be a timely or practicable option.

The importance of having the product Safety Data Sheet (MSDS) is stressed on several occasions, as this document is likely to be the best source of information to answer questions posed by the practitioner on the other end of the telephone line.

### 9. References (1 page)

A number of other £10 BCPC publications are listed, including "Using Pesticides", "Field Scale Spraying", "Safety Equipment Handbook" and "Spreading Fertilisers and Applying Slug Pellets" which have also kindly been provided by BCPC for review. All of these are useful for those wanting more detailed information - but "Small Scale Spraying" does provide most of the basic information required by the forestry spray operator.

A number of HSE documents are also listed, together with the standard government guidance, the Defra (or Scottish Executive version of) 2006 "Code of Practice for Using Plant Protection Products". This has been fully revised and is about to become available online. It will be the subject of a future FTN review once published.

So, a useful glove compartment sized booklet which, although some of the regulatory information has now become dated, is nevertheless, an inexpensive aid memoire for the spray operator with all of the advisory guidance continuing to be relevant to current best practice. Available from [www.bcpc.org/shop/Small-Scale-Spraying.html](http://www.bcpc.org/shop/Small-Scale-Spraying.html)

## Roundup ProBio

The popular forestry herbicide Roundup ProBio has been renamed as Roundup ProActive and will be found in distributors stores as soon as ProBio stocks are sold.

This is purely a name change - the forestry recommendations remain identical.

### MEMBER SERVICES PESTICIDES HELPLINE



If you haven't used the service to date, be assured it is a free service operated by Confor's crop protection adviser Colin Palmer on behalf of Confor members. Colin can be contacted 8am to 8pm Mondays to Fridays on 01531 633500 (leave a message if necessary) or by email to: [forestry@branchline.demon.co.uk](mailto:forestry@branchline.demon.co.uk)