Environmental Policy for Nursery Stock Production

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INTRODUCTION

The significance of the so-called "green movement" should not be underestimated. Apart from the importance and significance of public attitudes to green issues, a well implemented and thought-out environmental policy can make economic sense in the propagation department and throughout the rest of the nursery.

THE ENVIRONMENTAL POLICY—WRITTEN STATEMENT

There is no doubting the importance of a written statement of company environmental policy. It provides the framework within which implementation of the various issues takes place. It is also the focus of the inevitable changes and amendments to the policy which will occur over time as a result of implementation, experience, and new legislation.

Formulating the Written Statement. An example of Notcutts Nurseries' environmental policy statement is shown in the following section. This deals with the issues as follows:

A) An introduction or general section describing the company, emphasising its significance as a positive force for environmental improvement, and making a written commitment to safeguard, as far as practicable and appropriate, the local, national, and global environment.

B) A section covering general organisation and responsibilities including, if appropriate, a line management structure.

C) A section covering the following aspects of the policy:

1) A description of the methods of communication used to transmit the environmental policy throughout the company.

2) Other aspects of company environmental policy, such as reducing pollution, aims for energy conservation, etc.

D) A section covering specific departmental procedures to deal with the various points raised in section C as appropriate.

NOTCUTTS NURSERIES, WOODBRIDGE—ENVIRONMENTAL POLICY

As an example, our current policy is set out as follows: (The text has been omitted or reduced in some sections because it is very specific to our requirements.)

General Procedures. *The management will ensure that they and their staff are* made aware of environmental issues which might be influenced by nursery activities. This information will be transmitted by the following procedures:

- Discussion
- Memos and notices
- Training

The environmental issues involved are:

1) Recycling
2) Pollution

3) Wildlife issues
4) Conservation
5) Energy conservation

Specific Departmental Procedures—Field Department.

1) *Recycling*. Opportunities for recycling in this relatively low input section are rather limited, but use will be made of procedures existing in other departments, such as plastic recycling for waste plastic root wrapping bags, etc. Where possible, bamboo canes used for staking will be reused for subsequent crops, e.g., whips staked with recycled standard tree canes. Bud clips are always to be recycled numerous times.

2) *Wildlife and Conservation*.

Cropping Plan. Areas unsuitable for cropping will be planted with appropriate trees and shrubs, normally native, to create wildlife havens throughout the nursery areas. The field department will follow a cropping policy which ensures the land is rested between crops. Crops will be rotated to avoid a build up of pests, diseases, and weeds. Cutting, etc. will be timed to avoid unnecessary damage to ground nesting birds.

General Cultural Operations. These will be timed as far as possible to avoid damage to wildlife. Hedge trimming will be timed so that it does not coincide with the bird nesting period. Fencing will be erected for rabbits, hares, and deer to reduce the need for shooting. Timing of cultural operations, etc. will be designed to reduce soil erosion and surface water run-off.

Pollution Control—Pesticides. The use of pesticides will be restricted as far as possible and only used according to the recommendations of a suitable consultancy service, such as ADAS. Where possible an integrated pest-management (IPM) policy will be adopted. Due attention will be paid to danger to bees.

Specific Departmental Procedures—Container Department.

1) Recycling.

- All recyclable plastic will be separated, collected, and packaged as appropriate for collection.
- All recoverable compost from unsold stock, etc. will be knocked out of the container and saved. After suitable processing it will be added to new compost.
- Rainfall from glasshouse roofs, sheds, and polythene tunnels is piped into water storage reservoirs. Run-off water from growing beds is similarly collected in storage reservoirs by means of underground drains, concrete ducts, or ditches.

2) Pollution Control. The same conditions for pesticide use as set out for the field department will apply. Crops grown under protection are suitable for an IPM programme, and this will be used on all appropriate occasions. The use of slow-release fertilisers with controlled-release characteristics ensures nutrient run-off is minimal. The storage of run-off water in company reservoirs further reduces nutrient levels.

3) Wildlife and Conservation. The same general policy as set out with the field department will apply. The firm has a commitment to reducing peat usage as far as practicable. Trials to investigate locally produced materials are on-going.

4) Energy Conservation. The use of artificial heat in growing structures will be maintained at a minimal level on all occasions.

Specific Departmental Procedures—Liner Department. The same general conditions apply as for the container department.

Maintenance Department. Recycling procedures for waste plastic are as for other departments. Waste oil is to be collected under contract for re-processing by others.

Transport Department. Recycling of suitable materials will be as previously noted. Company cars will on all possible occasions be powered by diesel engines. Routes and loads will be planned to reduce the need for travel as far as practicable. Biodegradable packing materials will be used on all possible applications. Plants will be sent out in returnable containers/pallet boxes where feasible and possible.

Propagation Department. The same general conditions apply as for the container and liner departments. Artificial heat will only be applied at levels which current research and development has indicated is necessary to achieve acceptable results.

ENERGY USE STRATEGIES FOR PROPAGATION DEPARTMENTS

Undoubtedly one of the biggest energy consumers on the nursery is the provision of heat for propagation, either in the air or as bottom heat. The requirement for this heat may be reduced or eliminated by:

A) Using polythene systems for propagation rather than fog or mist. If mist is used enclose the system in polythene. With polythene systems accurate management of shading is important because continuous heavy shading may result in an additional need for bottom heat.

B) Propagate at times of the year when free sun heat is readily available. With cuttings this may often be easily achieved. Grafting is traditionally carried out in the winter. The requirement for bottom heat at this time is obvious but a number of species can be propagated equally or more successfully in the summer or autumn and thus substantially reduce heat inputs. The following genera are among those which may be considered for such treatment: *Abies, Alnus, Arbutus, Carpinus, Cedrus, Cornus, Fagus, Juniperus, Liquidambar, Liriodendron, Magnolia, Quercus,* and *Rosa*.

C) Use low-energy systems for propagation. The difficulty here will be to decide whether the system is sufficiently efficient to consider its use in the modern situation. There must be a question mark over systems such as the use of bell-jars, but the sun tunnel system applied to certain groups of plants has a great deal to commend it and is among the most energy-efficient systems available to the propagator.