



Coles Environmental Management 2012

As part of our on-going programme of environmental and waste management, we are continuously improving our processes and methods across all production sites and disciplines.

This progress may be summarised as:

- **Water Management**
- **Recycled Green Waste Compost**
- **Rotational Green Cropping**
- **Compost Tea**
- **Integrated Pest Management**
- **Compost and Peat-free Alternatives**
- **Packaging and Waste Recycling**

Water Management

Reservoir at Largest Production Site

With cost-effective irrigation and water recycling in mind, in 2006 Coles Nurseries have invested £90K in a 10-million gallon lagoon at our main container and field-grown tree unit at Gaddesby, Leicestershire.

The 6-metre deep lagoon ensures this area is self-sufficient in water without drawing on the precious and costly mains supply. The savings made paid for the investment in its' first three years.

Over 50,000 cubic metres of heavy clay were moved, creating a new plateau alongside the existing beds, covering a surface area of over 1.4 hectares.

Phragmites australis (common reed) was planted around the lagoon edge to enhance the biodiversity of the site, with the gentle slopes allowing the establishment of diverse flora including sweet flag, flowering rushes and water plantain.

The new Container Tree Unit has drip line irrigation, ensuring each large specimen tree is watered individually – with any run-off flowing right back into the reservoir.

Rainwater Harvesting

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At our main container shrub production site where the option of digging a lagoon was not an option, we harvest rainwater off greenhouses which is collected in water storage tanks and reused in the irrigation of over 1 million container shrubs and trees for the site.

Recycled Green Waste Compost

Previously replenishing land with farmyard manure sourced locally, Coles are now working in partnership with two local communities, conducting trials on Green Waste compost as a soil conditioner and structure improver.

This reduces dependence on chemical fertilisers and recycled compost increases natural resistance to a range of pests and diseases previously countered by chemical methods. Produced to BS1 PAS 100 standards, results are being monitored and developed for future trials.

At all sites, we compost 100% of our own green waster for 2-3 years before spreading on open-ground.

Rotational Green Cropping

Phacelia tanacetifolia is planted on rested production land wherever appropriate. The versatile plant flowers across land fertilized with composted green waste.

We have used it to enrich and condition the soil ahead of planting. It is quick to grow and flower and limits the loss of vital nutrients within the soil structure. The plant is one of the best honey-producing flowers for bees and hoverflies, increasing the insect activity and biodiversity.

Compost Tea

Widely used in the Netherlands, Coles now infuse the stock brew from commercially-available concentrate in sufficient volume to apply on a regular basis to container crops. Results are impressive in terms of plant growth, pest and disease resistance, winter hardiness of certain crops and a reduction of applied chemical pesticides and nutrients.

The use of Wormcast is now being rolled out across both of the main shrub production glasshouses at Syston and Spalding. It contains huge numbers of beneficial micro-organisms – friendly bacteria, fungi etc. – that deliver enhanced plant growth and health.



Integrated Pest Management (IPM)

The company has introduced an IPM programme within the two propagation glasshouses and four growing-on areas. The basic premise is to "set a good bug to catch a bad bug" – reducing reliance on chemicals. This has now been extended to the main shrub production areas at Syston and Spalding.

Compost and Peat-free Alternatives

The company liaises with their suppliers to ensure all materials used in the production of nursery stock are as environmentally-sustainable as possible.

The company works with compost suppliers who will:

- *not extract, or knowingly purchase, peat from Sites of Special Scientific Interest (SSSI) (England and Wales), Areas of Special Scientific Interest (ASSI) (Northern Ireland), Special Areas of Conservation (SAC)(Republic of Ireland) or Sites of Scientific Interest (SSI) (Scotland).*
- *ensure peat production sites are managed in a way which minimises any potential damage to the surrounding countryside and facilitates rehabilitation of the site after extraction has ceased.*
- *leave a minimum of 0.5 metres of peat to facilitate rehabilitation.*
- *establish appropriate after-use arrangements in consultation with interested parties.*
- *meet agreed targets of peat reduction wherever possible at the request of customers and in response to market drivers.*
- *engage in pro-active product development to develop the background knowledge and use of all new materials.*
- *work closely with the peat suppliers in their liaison with English Nature, the RSPB and others, complying strictly with their own Environmental Codes of Practice with regard to peat operations.*

Our compost is 30% peat-free (wood-fibre). Our own propagated plants are potted initially into peat-free compost up to P9 containers.

Recycled Packaging and Waste Recycling

All black containers are made of 100% re-processed Co-Polymer PP. These are sorted and reused on site wherever possible.

We also recycle 70% of our wood, steel, rubble, card and paper. This has reduced the volume sent to landfill by 60% over the last five years.

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ENVIRONMENTAL POLICY STATEMENT

James Coles and Sons (Nurseries) Ltd is committed to reducing the impact of its' activities on the environment through Continuous Improvement.

Accountability:

Ultimate responsibility for the implementation of the environmental policy rests with the Estates Manager who is accountable to the Board of Directors. He will receive all necessary training to enable him to fulfil his role.

Compliance:

We will comply with all relevant environmental legislation and have registered with the BiffPack Scheme ensuring that our recovery and recycling obligations are achieved. The Estates Manager will be responsible for reviewing legislative requirements on an ongoing basis, remaining aware of current standards and reporting to the Board at least twice a year.

Resource Consumption:

We will work with our suppliers to steadily reduce the environmental impacts of the sourcing and manufacturing of our raw materials (e.g. peat and paper). We will only buy from suppliers who demonstrate good environmental performance. We will minimise the use of harmful substances, substituting less hazardous alternatives wherever possible.

Pollution and Waste Management:

We will minimise waste and will re-cycle or re-use materials wherever possible (See *Compliance* above). All waste disposal will be handled by licensed contractors, in accordance with all relevant legislation. Where hazardous materials are used we will improve materials handling and pollution control working to the goal of no damage to the environment.

Energy:

We are committed to reducing the amount of energy we use, year on year. We will also review alternative energy sources.

Water:

We are committed to reducing the amount of water we use, year on year. We will actively review all aspects of water use on site, in consultation with Severn Trent Water Ltd and the Environment Agency, to identify



opportunities for us to save water and to recycle. We will also determine and implement best practice in pollution control to protect local watercourses.

Transport:

All company vehicles will be selected and maintained to minimise emissions and reduce their environmental impact. We will maximise delivery efficiency and investigate the viability of load-sharing.

Land Use:

Where buildings and structures are necessary, we will site all facilities so as to minimise their impact on the local environment. To establish best practice and ensure open and positive relations, consultation will take place with the local communities surrounding our land.

Implementation and Reporting:

We will set targets in all areas listed above to ensure effective implementation of the policy and year on year improvement. These targets will be reviewed annually and progress reported to the Board. Progress reports will also be made available to interested parties, on request.

Training:

We will raise the awareness of our workforce of all environmental issues of concern. All employees will receive the necessary training to allow them to play their part in implementing all aspects of this policy.

Version 7: 1 December 2010

A handwritten signature in black ink, appearing to read 'J R Coles', written over a light grey background.

James R Coles
MANAGING DIRECTOR