

SWIG Awards 2013

The SWIG Awards 2013 are free to enter. Follow the steps outlined below:

- 1) Complete the contact details below.
- 2) Tick the category which is most appropriate for your submission.
- 3) Submit your application form with your A4 project overview.

Contact name: Christine Howard			
Job title: Director			
Organisation name: Howard Nurseries Ltd			
Type of business: Plant Nursery			
Address: Bury Road, Wortham, Diss, Norfolk,			
Postcode: IP22 1PX			
Telephone: 01379 898529		Mobile:	
Email: sales@howardnurseries.co.uk			
Project start date: Tuesday 24 th September 2013		Project end date: 31 st October 2013	
Project name: Container area water improvement			
Please tick which category are you applying for (one entry form for each submission):			
Domestic building (new build)	<input type="checkbox"/>	Domestic building (retrofit)	<input type="checkbox"/>
Non-domestic building (new build)	<input type="checkbox"/>	Non-domestic building (retrofit)	<input type="checkbox"/>
Communication	<input type="checkbox"/>	Product	<input type="checkbox"/>
Open space and agriculture	<input checked="" type="checkbox"/>	International projects	<input type="checkbox"/>
Not sure which category suits you product? Tick here and we will identify a sector.			<input type="checkbox"/>
Where did you hear about the SWIG Awards? Email			

Email to: info@sustainablewater.org.uk

Receipt of your entry will be acknowledged

Deadline for entries: 30 September 2013

Howard Nurseries is the leading producer of field grown herbaceous perennials in the UK with over 60 hectares of cropping in East Anglia and have a history of over 40 years production. It is a nursery that is based on traditional values and is one of the main sources of Import Substitution for herbaceous crops in the UK. They have over the years maintained a large volume of field grown herbaceous crops which is unique in this modern time. Through customer demand they have developed a container grown crop range and this now is an important part of the business strategy. The container division continues to expand and being a crop with a restricted root area it places high water demands on the business. Container grown crops require irrigating every day and will not survive beyond 24 hours without water.

The nursery currently uses a combination of mains water, recycled water and abstracted ground water for irrigation duties of the container beds, glasshouse, tunnels and limited field crops. The nursery uses at present an average annual volume of 38,000m³. This is primarily from ground water with a small amount of recycled water collected from the tunnel and glasshouse roofs.

The ground water is very hard and contains ferric iron which upon reaching the crop oxidises and leaves a brown foliage stain.

Coupled to this the company has a programme of modest expansion of the container grown crops which have made heavy demands on the ground water abstractions in the summer months. This was brought home in the spring and early summer of 2012 when they were restricted in ground water use at a time when the crop demands were at their highest. As the catchment in which they are is currently designated over abstracted there is little opportunity for additional ground water licensing.

The limited use of recycled water over the last few years has shown considerable benefits both in reduced foliage staining and in the increased range of ericaceous crops the nursery has been able to grow. In the spring of 2012 it was also a valuable water source that enabled them to continue irrigation at a time when ground water reserves were being limited. It has been therefore a natural progression to expand the storage of winter rainfall for summer irrigation use.

The reservoir is designed to hold the recycled water from all the existing beds, glasshouse and tunnels and accommodates the planned expansion over the next five years. The percentage of rainfall collected has been calculated at 70% from the beds and 30% of recycled irrigation water. The buildings collection has been calculated at 65% of rainfall collection with glasshouse and tunnels at 70%.

The existing infrastructure has been designed to collect the maximum volume of rain and recycled water and all the nursery area is directed into an existing reservoir. The pumping equipment from this reservoir includes a screen filtration system and chlorine dioxide water treatment to control any plant pathogens that may be present in the recycled water. A second reservoir will be installed in October 2013 which will ensure that there is no overflow into a nearby stream in the winter months and the maximum volume will be captured. A simple siphon will be installed to balance the water level between the two reservoirs. The collection of this water will ensure adequate stored volume for container grown crops demands, thus making the container area sufficient for irrigation.