



Watch Out For Your Water Supply

From drought to water shortages, most greenhouse growers across the country will face water issues at some point or another. Prepare now to save time and money later.

by AMY VICKERS

SOONER or later, most greenhouse growers will have to cope with water shortages as a result of drought or other deficit conditions. This summer, drought is projected to continue in the Pacific Northwest and affect some other areas of the United States. Drought is cyclical and periodic water shortages may be inevitable. But if you think ahead and prepare for water shortages, you may be able to drought-proof your business – and possibly even boost your sales and profile in the community. Consider these short-term and long-term steps to boost water efficiency at your greenhouse.

Practice thrifty irrigation to save water and money.

There are many ways to reduce irrigation water use in greenhouses. Saving water can also save money by lowering water bills, reducing energy costs for pumping, downsizing water storage requirements and lowering chemical needs. Here are the basic components of a water-smart greenhouse:

- 4 Group plants for watering by hydro-zones (e.g., low-, moderate- and high-watering needs).

- 4 Use drip or micro-spray instead of spray irrigation whenever possible.

- 4 Check soil moisture before watering.

- 4 Limit irrigation time. Know when to stop watering based on soil moisture and plant water needs, and regularly reset controllers as moisture and plant conditions change. Consider a weather- or ET-based controller for automatic daily and weekly irrigation run adjustments.

- 4 Be aware that manual irrigation sometimes saves more water than automatic

irrigation systems. Sophisticated irrigation systems can be highly efficient, but the reality is that they require regular monitoring and adjustment to maintain optimal performance.

- 4 Equip all hoses with automatic shut-off nozzles.

- 4 Water in the early morning or early evening to avoid high evaporative losses during the hottest part of the day.

- 4 Fix leaks quickly.

- 4 Regularly remind staff that water use and costs are monitored.

- 4 Take advantage of capillary matting, mobile shading and other less common water efficiency actions if they are right for your greenhouse.

Promote native plants – with free publicity.

Native plants are being endorsed on several fronts, and not just because they can save water. Many water utilities, as well as the U.S. Fish and Wildlife Service and other state and federal agencies and organizations, encourage indigenous landscapes. Concern about invasive plants, as well as the additional fertilizers and chemicals needed to maintain non-natives, are some of the factors driving interest in native vegetation. Taking advantage of public education campaigns that promote native and drought-tolerant, water-thrifty plants, shrubs, flowers, grasses and trees can help keep your customers and business in tune with local water limits and other concerns.

“Customers respect and may spend more” when they know the nursery has an environmental edge, claims Anna Thurston, a Tacoma, Wash.-based water conservation specialist and landscape resource efficiency consultant. Thurston helped launch a successful public edu-

cation program for Tacoma Public Utilities to reduce outdoor water use. Residents there quickly accepted more than 10,000 posters and 5,000 books about western Washington native plants.

Thurston says timing is key to engaging the public to take action following a public education campaign. “Distribution of the posters and books coincided with Native Plant Appreciation Week (1st week of May throughout Washington state), which was supported in a proclamation signed by the governor and many city mayors (Tacoma’s included),” she notes.

Plan in advance to take advantage of these type of upcoming events: stock your greenhouses with a good selection of native plants; offer to participate in public events such as demonstration projects and sample giveaways; and place advertisements timed to native plant-related events and public education campaigns. Demonstrate you are a water-wise operation to increase public credibility.

Cooperating with local officials and respected experts, such as university researchers, during a drought by participating in water conservation education campaigns “gave us a voice we didn’t have before,” reports Steve Newman, Extension greenhouse crops specialist at Colorado State University.

Newman, who has helped Colorado growers cope with a major drought over the last three to five years, also urges them to demonstrate to the public that they are doing their part to save water. Installing water-efficient irrigation systems and promoting water-thrifty plant products to consumers are highly visible steps, along with installing a drought-tolerant or xeriscape demonstration garden for customers to experience.

“Show them how they can have an attractive landscape during a drought or water shortage,” Newman says. Tagging plants by their water needs is also an easy and visible way to help customers make wise plant purchases during drought, he adds.

Take advantage of housing and or-

ganic product trends.

"Lot sizes are getting smaller, so turf areas will also get smaller," observes Newman. "Promotion of plant choices such as herbaceous perennials and drought-tolerant annuals are good, low-maintenance alternatives for consumers, along with limited turf areas for play."

There is also growing consumer interest in all things organic, from food to cotton clothing to landscapes. "The benefits of organic landscape approaches are gained primarily by the customer, rather than the nursery or landscape provider," Thurston says. She adds this can be a strong "selling tool" for growers to use with customers who are interested in creating landscapes that are healthy and safe environments for pets and people, migrating birds and other landscape features. **GG**

About the author: Amy Vickers, author of the award-winning "Handbook of Water Use and Conservation: Homes, Landscapes, Businesses, Industries, Farms" (WaterPlow Press), is a water conservation specialist and engineer with Amy Vickers & Associates, Inc. in Amherst, Mass. She can be reached via www.waterplowpress.com.