



Water

Demand builds for drought-resistant UI horticultural information

As spring beckons, the community horticulture program of the UI College of Agricultural and Life Sciences is flourishing. Sharply focused efforts in developing and managing low-input perennials, shrubs, and turfgrasses are emerging alongside other high-demand UI Extension programs for consumers and landscape industry professionals. Turfgrass variety trials for golf courses are under way, and an information-rich Web site and perennial demonstration trials are on the horizon.

The timing is perfect, says UI horticulturist Steve Love at Aberdeen. Idaho's population is growing briskly, and demand for horticultural information is swelling right along with it. "People are asking us how they can surround themselves with beautiful landscapes that don't take too much water and that work here," Love says.

Research support scientist Tom Salaiz and Jerome County Extension Educator JoAnn Robbins are comparing the management needs of traditional turfgrasses with those of newer, drought-resistant species. In the second of a four-year trial, Robbins has found that perennial rye and turf-type tall fescue are more tolerant of drought conditions than Kentucky bluegrass: they look good with less water and a little extra fertilizer.

"We're just coming through a fairly significant drought period—a cycle that we'll go into over and over and over again," says Love. "Every time we go into it in the future, we'll have less water, because both our municipal and our rural water demands are growing phenomenally. We at the university will need to get prepared for the crunch time, because there's no doubt that it will come."

Contact Love at slove@uidaho.edu.

Aquaculture, climate studies benefit from \$9 million National Science Foundation grant

Aquaculture and climate research are among the priorities in a \$9 million National Science Foundation grant awarded last summer to the statewide Experimental Program to Stimulate Competitive Research (EPSCoR).

Aquaculture research will explore fish physiology and genetics to advance understanding of how fish adapt to different environments through genetics.

Focused on water science, the EPSCoR grant will draw together researchers in the state's public universities to establish the

Idaho Experimental Watershed Network. The network will monitor streams in northern, southwestern, and southeastern Idaho. Work at the Idaho Water Center will aid statewide data analysis, exchange, and outreach. Students and teachers in Idaho's public schools will participate.

UI nanotechnology experts will investigate ways to employ new ultra-sensitive environmental sensors to track chemical or bacterial contaminants.

Contact Greg Bohach at gbohach@uidaho.edu.

DID YOU KNOW?

72

INCHES: The difference in average annual precipitation between wet and dry locales in Idaho.

*Source: Idaho Department of Water Resources

Idaho potato production may be on the cusp of change

It may be decades before drip irrigation is a conventional practice in Idaho potato fields, but UI Extension Specialist Bryan Hopkins thinks growers should start experimenting with it now.

In eastern Idaho studies, Hopkins is finding that drip irrigation boosts overall yields—and yields of U.S. No. 1 potatoes—by 10 percent while easing water use by 10 to 15 percent. "I think it's the future," he says. Drip irrigation applies water with 90 to 95 percent uniformity, allows rapid response to crops' changing water and fertilizer needs, and can reduce fungicide requirements.

Planting drip-irrigated potatoes relatively densely in beds rather than in 3-foot-wide rows also looks promising. Preliminary findings indicate that it increases tuber size by 6 percent, total yield by 4 percent, U.S. No. 1 yield by 12 percent, and per-acre profits by about \$300.

Contact Bryan Hopkins at bhopkins@uidaho.edu.

