Modeling just a drop in the bucket

Orchards get some high-tech help conserving water

By DARREN HANDSCHUH
The Daily Courier

Domenic Rampone can appreciate just how important water is to the Okanagan.

The South Kelowna orchardist has 13 acres of fruit and vegetables and is one of the leaders in water conservation in the industry.

"I don't think everybody recognizes how valuable water is," he said.

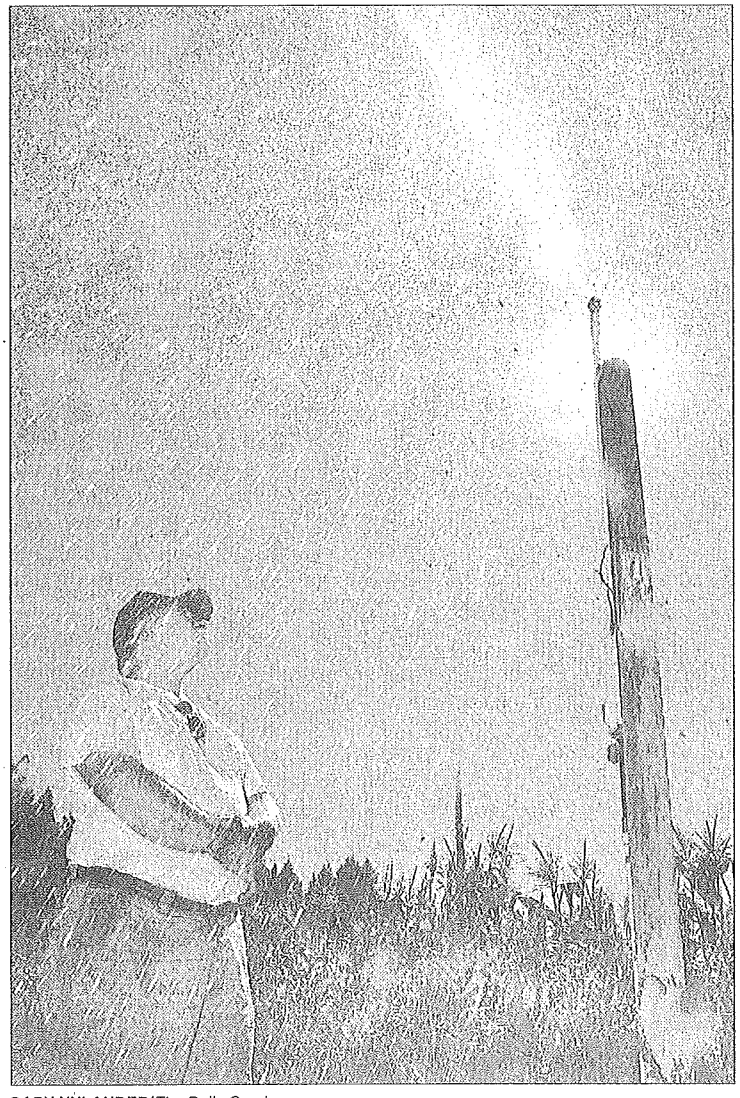
Rampone said there are numerous ways to use less water and still get a good crop. From watering methods to even how a crop is planted can affect the amount of water used to nurture the plants.

Mulching helps reduce the amount of water used, and a drip irrigation system is substantially easier on the water supply.

"Drip irrigation uses 50 per cent less water (than sprinkler systems)," he said. "You can use less water and get the same bang for you buck."

Rampone said innovative ways to save water is not limited to orchards and a little research can turn up many ways home owners can have a green yard with less water.

Rampone is a strong supporter of a computer model developed to determine the amount of water resources required for agricultural land in the Okanagan now and in the future. The program also helps identify, develop and protect long-term agricultural water supplies.



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Domenic Rampone inspects high-efficient watering heads at his Balldock Road farm on Tuesday.

Nelson Jatel, water stewardship director with the Okanagan Basin Water Board, said the program is critical in managing the Valley's agricultural water supply.

"It allows the agricultural industry to better regulate their water," he said, adding agriculture accounts for 55 per cent of the water used in the Valley.

But the goal is not necessarily to reduce the water used, but to maximize it.

Jatel said the water used is "working water," meaning it grows food, provides jobs and allows for local products to be grown.

The computer model takes in numerous variables from type of soil to the crop being grown and provides a picture of the industry's water needs.

In 2005, the Canadian Water Resources Association conference held in the Okanagan identified the need to develop a water supply-and-demand model to determine how much water was available for use in the Valley, what is being used and how much water was left to allocate.

The province partnered with Agriculture and Agri-Food Canada to develop the AWDM before the start of the Okanagan Water Basin Water supply-and-demand study. The intent was to have a tool that could determine agriculture's requirements and provide this information to the larger study and other users in the Okanagan.

Since completion of the AWDM for the Okanagan, the model has been expanded for use in the Nicola, Similkameen, Bonaparte and Salmon River watersheds.

Land-use data is being collected in the Kettle Valley and Metro Vancouver to expand the use of the model in these regions.