Hydroponics: Gardening that won't get your hands dirty

by Tamara Browning

Norm Jensen easily tells a visitor how to make a great wilted-lettuce salad.

Jensen's recipe calls for fried bacon, sugar, vinegar, eggs, green onions and fresh leaf lettuce, which grows in his small indoor garden.

â€•We had wilted lettuce for Christmas," said Jensen, who lives in Springfield, Ill. The lettuce grows with the help of a Styrofoam base that floats in water that's fortified with three different kinds of liquid nutrients and circulated by an air bubbler. The lettuce basks in the glow of fluorescent grow bulbs.

HYDROPONICS - Hydroponics is gardening without getting your hands dirty. CNS Photo by Ted Schurter. NORM'S GARDEN - Norm Jensen's hydroponic garden is nearly all self-contained in two custom PVC frames. Jensen grows a variety of plants ranging from strawberries to lettuce. CNS Photo by Ted Schurter. Jensen grows indoor goodies such as lettuce, strawberries, tomatoes, orchids and catnip through hydroponics, the technique of growing plants without the use of soil. Some people call it "soil-less" gardening in that water supplies the mineral nutrition and hydration for the plants to grow.

The word "hydroponics" comes from the Greek words "hydro" (water) and "ponos" (work or water works), wrote Steve Berlow in the on article "Hydroponics 101" at www.maximumyield.com/article206.htm.

Hydroponics is at least as ancient as the pyramids, wrote Gary V. Deutschmann Sr. in the document "History of Hydroponics."

Hydroponics is big on the East and West coasts, said Chris Chrisman, owner of Kreation's Indoor Gardening Center in Springfield. "It just hasn't really hit hard here yet," said Chrisman.

Hydroponic gardening promotes greater control, less use of water and fertilizer, higher-quality produce, bigger yields, faster growth and less damage from insects, Berlow said.

Steve Brady, owner of hydroponic store Water Works Indoor Gardening in Springfield, agreed that hydroponics can provide quick results.

For example, a normal tomato in an outdoor garden grows in an average 16 weeks, Brady said. Indoors, tomatoes can grow in seven weeks, with proper conditions.Gardeners using hydroponics are in control in that they teach and guide plants, Brady said.

"We're telling it from when to grow, how to grow, how bushy to grow, the time it's going to grow," Brady said. "We're going to give it the exact food it wants. The exact food it needs."

Drawbacks concern cost of setup, and it requires a higher level of technical expertise to maintain and run the hydroponic system, Berlow said. He admitted, however, that technical expertise required can range from basic to extremely advanced.

Chrisman said that hydroponics can be easy.

"This is like ... operating a fish tank once you get everything up and running," he said.

"It's the initial setup that's costly. Like any other hobby, there's a starting point, which could be anywhere from just $35 to $40 ... then it's kind of a black hole. There is no ending point."

No matter that hydroponics' advantages outweigh its disadvantages, Chrisman has found that his father balks at the idea of indoor gardening in hydroponics.

"He's an outdoor gardener ... I couldn't change his mind," Chrisman said.

"(He said) 'I just plant them in the dirt, and God takes the rest of it'... How do you argue with him? You just don't."

But Chrisman would argue with anyone entering his store intent on growing plants or engaging in processes that are illegal. Growing marijuana using hydroponics, for example, is a no-no.

"I understand all the stipulations of indoor gardening. People (say), 'Oh, it must be pot.' Yes, you're going to have that problem," Chrisman said.

"I cannot sell anything to anybody that has anything to do with that. I can tell you right now if you come in and talk about it, you're getting kicked out."

Brady, who's educated in agronomy and biology, said his store focuses on education for children and senior citizens, who as they age may have to leave their homes and gardens for elder-care facilities.

"We're getting them started in indoor gardening for a nice, smooth transition," Brady said.

Retired from AIG American General and now owner of Norm's Custom Neon Clocks, Norm Jensen started hydroponics outdoors on a back porch last summer. He then brought the garden into his home's study, adding artificial light. He's a client of Kreation's Indoor Gardening Center and Water Works Indoor Gardening.

Brady said he's happy that he can make a career out of a hobby.

"It's just fun, and it's simple," Brady said. "It's water. That's it."

Copley News Service Getting started Choose a location where the garden will grow. Make sure there is good airflow.

Consider the number and size of plants used. Plants growing indoors usually need as much space to grow as they would outside.

Consider vertical space. Think about the mature height of the plant, which would include space requirements for hydroponic lights and ceiling.

Consider which lighting is needed. Lights used for indoor gardens are in two main categories - fluorescent and high pressure. Fluorescent works well for seedlings and plants not needing high levels of light. High-pressure lights offer more light production.

Consider additional equipment needed such as a fan to maximize ventilation and strengthen plant stems; reflector to reflect electric light back onto plants; and timer to regulate light cycle.

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