

# Conservation SHOWCASE



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## NRCS

Natural Resources  
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## Seasonal High Tunnel Gives Organic Grower Year-Round Production Capacity

ROSEBURG, Ore.— Thanks to a newly installed seasonal high tunnel, Jim Leet has extended the growing season on his organic farm from three months to year round.

Jim operates Linnea Marie Farms located within the Umpqua River Watershed in Roseburg, Oregon. Here, he grows a variety of organic fruits and vegetables. The severe winter climate, however,

makes it impossible for Jim to grow his produce in the field year-round without protection. That's why in 2012, Jim acquired a 2,496 square foot seasonal high tunnel through voluntary participation in the USDA Natural Resources Conservation Service (NRCS) Seasonal High Tunnel Initiative.

Seasonal high tunnels, also known as hoop houses, are inexpensive green-house like structures that extend the growing season, increase production, and improve crop quality by providing cover for plants. They are made from a plastic or metal pipe frame covered by thin, durable sheeting that protects crops from damaging conditions, such as frost or high winds, while raising the surrounding air temperature between 5 to 20 degrees. The sides of a high tunnel may be cranked up or down to regulate airflow and temperature, thereby extending the growing season up to seven months for warm-temperature crops and up to 12 months for those requiring cooler-temperatures.

Above: Jim Leet



**Crops thrive in the Leet high tunnel**

The NRCS Seasonal High Tunnel Initiative provides technical and financial assistance to farmers like Jim to purchase and install seasonal high tunnels. While the initiative limits the size of the high tunnel to 2,178 square feet, landowners interested in installing a larger structure may participate by paying the difference in price.

Unlike greenhouses, seasonal high tunnels do not require electricity, relying instead on natural sunlight to increase the temperature within

the enclosure to create favorable conditions for heat-loving vegetable and specialty crops. They provide an energy-efficient way to extend the growing season, avoid pesticide use, reduce runoff, and limit the leaching of nitrogen.

The steel ribs, or bows, of Jim’s high tunnel, or “La Hoopla” as he’s nicknamed the structure, are covered with 5.2-ounce clear greenhouse film, which is made from strong copolymer resin. The woven film with UV additives offers 92-percent light transmission to nourish Jim’s current year plantings of cucumbers, onions, beans, nasturtiums, 40 varieties of sweet and hot peppers, and 26 varieties of tomatoes.

Inside the high tunnel, a thick, black plastic landscape fabric covers the ground to block weeds and retain moisture. Panels of fencing are lashed to metal posts in long rows to provide vertical support for the plants.

Production benefits of high tunnels are passed on to the consumer. “[The] product does not



**Leet has planted 40 varieties of sweet and hot peppers, in addition to a number of additional vegetables in the high tunnel he’s nicknamed “La Hoopla.”**



**Seasonal high tunnels provide an energy efficient way to extend the growing season and avoid pesticide use.**

need to travel very far in order to get to market, and the consumers don't need to go as far to get really fresh fruits and vegetables," Suzy Liebenberg, NRCS Soil Conservationist for Douglas County, explained.

As president of the Umpqua Valley Farmers Market for four years, Jim is known for introducing innovative and fun activities to build loyalty and camaraderie among vendors and the public. His most recent undertaking was the contest to name his high tunnel. While he received a number of clever entries, "La Hoopla" proved the clear winner.

At the end of this year's farmers' market season, Jim plans to build raised beds, in addition to installing another high tunnel on his property.

"I already have the name for my next hoop house. The second place winner in this year's naming contest was 'SEVET,' which stands for 'Season Extending Vegetable Tunnel,'" Jim said. "That's perfect."



**Raspberry vines**