

Conservation *Showcase*

'Go-all-the-way' attitude pays

When Mike Van Horn left home to attend Washington State University as a young man, he told his father, "I don't know what I want to be, but I know I don't want to be a farmer."

Four years later, when Van Horn returned with a degree in agriculture, he had changed his mind. A farmer is exactly what he wanted to be. Van Horn was knee-deep in agriculture, whether it was working for warehouses, packers, growers and shippers, or owning his own orchard.

In 1991, Van Horn became the owner and operator of a 160-acre orchard in Zillah, Wash. His orchard is just the way he likes it — diversified. It's home to 10 different varieties of apples, two varieties of pears and four varieties of cherries. What he finds most rewarding is being outside and taking a hands-on approach to working with his crops.

One of the most challenging aspects of being an orchardist, he says, is "keeping up with the newest trends in growing."

There's been an evolution in trellises, changes in tree density and great strides in mechanization, he says, but Van Horn welcomes these changes with open arms and is always looking to improve the efficiency of his farm while maintaining the quality of his product.

Through local and state contacts, Van Horn has been exposed to many different innovations, which he thoroughly discusses with his foreman, Hector Torres, before implementing. "This is the apple capital of the world; the researchers and growers here are second-to-none," says Van Horn.

The changes in technology and production methods are never-ending, and Van Horn doesn't take his business lightly. He throws himself into it with the gusto and ambition of any shrewd businessman. That's why, when presented with the challenge of creating and administering a highly intensive Integrated Pest Management Plan (IPM), he didn't tread lightly. Instead of slowly assimilating IPM on his farm and testing a few areas at a time, Van Horn, in partnership with the Natural Resources Conservation Service (NRCS), took a bold move and made the decision to completely eliminate organophosphate insecticides, or OPs, from his farm this year.

Through its Environmental Quality Incentives Program (EQIP), NRCS provides both technical and financial assistance to growers who want to implement IPM systems, which often include providing pest controls that reduce or eliminate the need for OPs. Martin Rodriguez, an NRCS civil engineering technician, who is working with Van Horn on implementing his EQIP plan, is impressed with Van Horn's drive and willingness to improve his current operations. "He went above and beyond the requirements of the IPM program. He diligently researched everything and was in constant contact with NRCS to inform us of his plans to meet all program requirements," says Rodriguez.



Owner Mike Van Horn (left) and orchard manager Hector Torres have successfully implemented an Integrated Pest Management System with the help of the NRCS.

Conservation Showcase (continued)



As part of his IPM, Mike Van Horn has placed an owl nesting box near his orchard to control crop destroying rodents.

“If we were going to go for it, we were going to go all the way,” says Van Horn. “It wouldn’t be fair to try it out in small areas at a time.”

Integrated Pest Management is a method used to identify, understand and effectively manage pest populations and infestations within a farm.

On Mike Van Horn’s Zillah, Wash., farm, a complex system is in place, in which he integrates the use of owl boxes, kestrel boxes, codling moth traps and complete mating disruption.

In working with the NRCS, Van Horn learns as much as he can about IPM programs, and how to spot undesirable insects and predators of those insects. He found that when he completely eliminated OPs, and utilized things like “soft” sprays, mating disruption and insect growth regulators, or IGRs, an entirely new crop of helpful insects emerged – from lacewings, to lady bird and stethorus beetles.

Because of these beneficial species, Van Horn found there wasn’t a need to spray for aphids this year. The population of lacewings completely controlled the aphid population.

Van Horn admits a lot more time and effort must be put into IPM in order to see results. But to him, it’s worth the effort. It gives him the valuable, hands-on experience around the farm.

“You spend more time out on the farm, checking traps and making observations...To me that’s one of the most rewarding aspects of this program.” –Mike Van Horn

But the rewards aren’t just limited to reconnecting with his farm. Van Horn has also seen dramatic financial incentives from the reduction of spraying alone. He’s also been able to substantially lower his overall costs by carefully monitoring his traps and only spraying when necessary. Monetary benefits aside, Van Horn also appreciates the fact that his farm is a little more “green,” and likes the idea that he’s allowing the natural inhabitants of the land do the work for him. Van Horn doesn’t expect to slow down any time soon. He wants to continue along the path that NRCS has helped lay out for him. He’s working on planting buffer crops that will attract beneficial pollinators, and he’s implementing Irrigation Water Management, or IWM, as well.

With funding provided by the NRCS, Van Horn has recently installed soil moisture monitors throughout his farm, with sensors set one and two feet deep. This allows him to take a reading of the soil’s moisture content, download the information on his computer and make informed decisions precisely on when to irrigate. “Anything you can do to make water go further is a huge plus,” says Van Horn, who is on a junior water district in Washington.

When implementing conservation measures, Van Horn urges others to “go into it with an open mind, and it can work for you. If you embrace the concept, and the systems that we used, it will work. I know it will work.”

He’s seen firsthand that utilizing his farm’s natural resources, conserving water, limiting spraying, and relying on the newly present beneficial species has definitely paid off in a huge way—not only for his pocketbook — but also for the land.



Orchardist Mike Van Horn (left) and NRCS Civil Engineering Technician Martin Rodriguez examine leaves on an apple tree for signs of beneficial predator insects.