

Extension Supports Economic Diversification

COOPERATIVE EXTENSION

 University of
Kentucky
College of Agriculture,
Food and Environment



Extension Prepares Growers for New Opportunities in High Tunnel Production

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It starts with us

Vegetable production in Kentucky increased to \$35 million dollars in 2017. As Kentucky farms compete in an ever-changing marketplace, farmers need assistance in developing infrastructure as they diversify their operations. County Extension agents and specialists work closely with Natural Resources Conservation Service (NRCS), County Agriculture Investment Program (CAIP), and the Governor's Office of Agriculture Policy to identify and access resources for producers.

Environmental Quality Incentive Program (EQIP) is a cost share opportunity through NRCS for construction of high tunnels. These unheated structures, sometimes referred to as hoop houses, allow horticulture operations to extend the growing season, create additional marketing opportunities, improve yields and product quality, and increase profitability. High tunnels generally cost less to build, operate, and maintain than greenhouses. County Extension professionals inform producers about funding opportunities, review grant applications, and educate growers about challenges of growing in a different environment. Since the inception of the program in Kentucky in 2012, over 900 high tunnels have been constructed using EQIP and/or CAIP funding.

The UK Horticulture Research Farm (South Farm) in Lexington has been a destination for commercial horticulture producers to visit and learn. South Farm houses over a half-dozen research and extension high tunnel structures including moveable and stationary tunnels across a range of prices. Producers can apply the research collected in these tunnels to make informed decisions for their unique farming operation.

Many growers who have recently acquired high tunnels needed to adapt from growing in open field. Learning to make the most out of extending the growing season is especially challenging. Growers have reported their struggles with either planting too early and observing frost damage on plants or planting

too late and missing the higher prices often received from being early in the season. Extension has recently created a high tunnel planting date calendar specific for the three regions across Kentucky. This resource gives minimum and optimal air temperatures for approximately 10 crop families. It also provides direct seeding, transplanting, and harvesting dates for those crops.

Extension specialists assist county agents with local programs addressing construction, production, soil management, and disease and insect control for high tunnels. As a result of the program series in **Metcalfe, Barren, and Monroe Counties**, 24 high tunnel producers now use water timers for drip irrigation, apply fertilizer through the drip irrigation lines, sow cover crops in low traffic areas to reduce weed growth, and use raised beds to improve crop performance and accessibility. Nine **Owsley County** farmers who completed Extension programs on crop diversification and high tunnel production reported doubling their profits. While EQIP and Extension provided resources to increase vegetable production and profitability, the indirect benefit is a stronger local food system and economy.



Participants at a field day in Metcalfe county walk through a producer's high tunnel and discuss management practices.