

# Saving Energy: Extreme Season Extension with Greenhouses and High Tunnels

High in the mountains of Western Maryland, local fresh fruits are typically available for around six weeks during the summer. Unheated high tunnels have extended the growing season for some farmers. To take advantage of an even longer growing period, adding heat to the high tunnel can make it more productive and further extend the fresh fruit season. Adding heat typically requires the burning of fossil fuels, which is costly and adds carbon dioxide to the environment. Join us on Saturday, November 5<sup>th</sup> to see how two innovative farmers are using “extreme season extension” with little to no use of fossil fuels.

## Saturday, November 5<sup>th</sup>

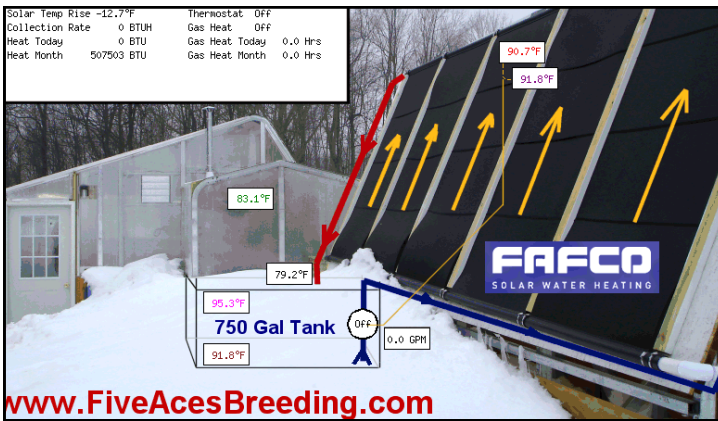
### 10:00 am

Ryan’s Glade Farm and Garden  
Allen and Kathy Lilly  
2207 King Wildesen Road  
Oakland, Maryland 21550

The Lillys have been producing fruit and vegetables for the Mt. Fresh Farmers Market in Oakland for over 10 years. They built their first high tunnel in 2006. After participating in a couple of Northeast SARE projects with the University of Maryland Extension in Garrett County, they decided to apply for a Northeast SARE Farmer Grant. They were successful with their 2009 proposal receiving funding for their project, entitled: “Economical Climate Controls for Maximum Production in High Tunnel Vertical Growing Systems”. The project combines the use of wind power, high tunnels and vertical growing systems to produce strawberries from May through November.



Lunch will be provided at Noon



### 1:00 pm

Five Aces Breeding LLC  
Dr. Harry Swartz  
4965 Gorman Road  
Oakland, MD 21550

Dr. Swartz retired from the University of Maryland after many years as a successful strawberry and raspberry plant breeder. He is continuing his life’s work on a small farm in Garrett County. One of Harry’s goals with his new farm is to use as little fossil fuels as possible. His breeding operation, however, requires plants to be productively growing throughout the winter months. In 2009, Harry partnered with UMD Extension on a Northeast SARE Partnership Grant to construct a greenhouse that would use as little fossil fuels as possible. The greenhouse was constructed with energy efficient materials such as insulated concrete forms, twin poly carbonate, and an insulated north wall. To heat the greenhouse, solar water heating panels, typically used to heat swimming pools, were installed to heat water in a 1,000 gallon water tank attached to the greenhouse. The hot water is then circulated throughout the greenhouse using radiators as heat exchangers. The entire system is controlled with a computer monitoring system which is connected to the internet and records information live on the web. View a layout of the system and current conditions and charts at <http://www.welsolver.com/WEL0004/>.

**To register for the event:**

Call the Garrett County Office of the University of Maryland Extension at 301-334-6960. The event is free including lunch but please register so that we can get a count for lunch. If you have any questions or need additional information or directions, please call.

