



## Log-Grown Shiitake Mushrooms

### Misty Dawn Farm Shares the Magic



*Above: (L to R) Ingrid and Paul West, of Misty Dawn Farm in Dane County, Wisconsin, show shiitakes growing on logs harvested from their forested acres in Vernon County.*

Shiitakes and logs are two peas in a pod. When talking with Ingrid and Paul West, of Misty Dawn Farm in Stoughton, Wisconsin, you'll certainly learn why. The Wests lovingly care for their harvested logs that grow homegrown shiitake mushrooms. Willing to share the magic of growing the nutritious fungus, they beam with passion and knowledge. Log grown Shiitakes are a healthy diet staple, versatile, hearty, and rich in vitamins and minerals. With a rich meaty texture, they embody a pleasant, savory taste many can't get enough of.

The Wests purchased 50 acres of land in Vernon County over 20 years ago as a getaway space with the hope of creating more biodiversity, improving the watershed, offering water quality protection, and creating habitat and food for wildlife. With these goals in mind, the Wests signed up for the Wisconsin Department of Natural Resources, Managed Forest Law program, planning how to actively manage their forest to be regenerative. "We have 35 forested acres and 15 acres of pasture. We enrolled in the program and planted 9,000 trees on the property right after we bought it," explained Ingrid.

When Ingrid and Paul were scheduled to do their first planned forest thinning, they found out that many times, loggers leave the tops of trees behind because they hold little market value. "We knew we had a lot of red maple tops that were going to be a waste product," said Paul. The Wests didn't want to have much forest waste, so they started researching how they could use the wood and found out about the various benefits of growing shiitakes. "Our family farm grows shiitakes because we wanted to do something meaningful with our trees and growing mushrooms was a wonderful way to diversify our forest," added Ingrid.

The Wests knew that forest thinning could take a toll on their acres if not done properly. That's where the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS) offered Ingrid and Paul assistance. The landowners worked

with the Vernon County NRCS District Conservationist, Sam Skemp, to plan conservation practices to assist with their active forest management. Through the NRCS Environmental Quality Incentives Program (EQIP), the Wests installed 1,000 feet of forest trails and landings to better access their property, protect well-traveled areas, and select trees for harvest. They also worked with NRCS to install an 1,800-foot stone ford, a surfaced stream crossing to stabilize the stream while allowing for equipment to cross with minimal disturbance to the stream ecosystem. "Our land is at the headwaters of the Pine Watershed; by installing a ford, we were able to help protect the watershed downstream," said Ingrid. The Wests continue to conduct maintenance on all their conservation practices with technical assistance from NRCS. "The work the Wests continue to do to improve their woodland and protect the watershed is a great example of how landowners can benefit from multiple land uses through our EQIP program," added Skemp.

Once their property was successfully thinned, the Wests received a Sustainable Agriculture Research and Education Grant to grow shiitake mushrooms on different species of wood harvested from their forested acres. They collected growing rate data on different substrates including red maple, sugar maple, red oak, white oak, aspen, and hickory logs. This enabled them to find out which species and processes were best for growing shiitakes locally. "We did the research and really liked shiitakes; we wanted a premium product that was value-added. We're growing log grown shiitakes and it's an interesting niche market that restaurants and consumers want and like," said Ingrid. Paul notes that the product is not only the mushrooms they produce, but the value-added wood logs they use from their land to grow them.

Ingrid and Paul have 500 logs in production during the growing season, from March through November. "During the springtime, we have inoculation events where we have friends come



out and help us prepare the logs to grow mushrooms,” added Paul. Each log produces about a half pound of mushrooms during a fruiting and may fruit 1–3 times over the course of the season. The logs rest for approximately eight weeks between fruiting. “Our mushrooms are really nurtured and grown outside, not in indoor environments, which we believe ensures a robust, flavorful, high quality product,” explained Ingrid. The Wests sell their shiitakes to local restaurants, direct consumers, and through farmers markets. “These mushrooms are locally grown and harvested so they come to you farm to table, super fresh, affording the highest levels of vitamin D,” added Ingrid.

The Wests are also working to share education and information about conservation practices and growing shiitakes with others. “We contracted with our Amish neighbors to graze our pasture and they are also doing a sugarbush on the top of our ridge to get maple syrup; we’re always talking with them about the benefits of conservation,” said Ingrid. The Wests are also part of the Shiitake Growers Association, helping new shiitake mushroom growers by providing workshops and hosting field days on how to care for and fruit shiitake mushroom logs. The Wests also provide logs and growing kits to new growers. Ingrid also volunteers to sit on the Wisconsin NRCS State Technical Committee and the Forestry Sub-Committee, representing the Shiitake Growers Association. She is interested in education and sharing the great things NRCS can do to help forest landowners; especially since she and her husband are a success story themselves through the EQIP program. “Being able to share resources with others and help shape policies; it’s great to be able to give my perspective as a grower and we can do so much more together as a team,” added Ingrid.

The NRCS conservation practices installed were a huge success and the Wests look forward to implementing more conservation. “Sam Skemp, the NRCS District Conservationist in Vernon county has been working with us a lot; he’s been wonderful. We have talked with him about many possibilities and are looking forward to helping our land more in the future; we have goals for streambank protection and erosion



control because of our steep land elevations,” said Ingrid. “We’re also looking at doing some invasive species control and plantings to increase diversity through EQIP in the future.” Ingrid and Paul also want to further their timber stand improvement efforts. They want to continue to work on promoting diverse regeneration in their forest. “Ingrid and Paul have been great land stewards and are a pleasure to work with on their acreage,” added Skemp.

Conservation is one of Paul and Ingrid’s number one goals on their acreage. “Conservation is really important to me. I am a first generation American; my parents are from Germany where there are many long-time intensively managed forests. I did a lot of mushroom foraging with my grandfather and my father wanted to be a forester, so the love for conservation has been in my family for a long time,” said Ingrid. “When we bought the land, we wanted to live closer to the land and be part of it. It gives us an outlet and an opportunity to work with the land and conserve it,” said Ingrid. “It’s very rewarding to see the changes and it makes us feel like we are making a difference locally, and in the watershed,” added Paul.

“Our family lovingly cares for our mushroom logs; we are so proud of the mushrooms we produce and feel fortunate to share our passion, knowledge and magic of growing shiitakes with others,” said Ingrid. The Wests realize they wouldn’t be able to grow their wonderful shiitakes without taking care of their forested acres to produce healthy logs. “We’re really trying to improve our land, making it more sustainable and biodiverse; nurturing it to a point where it’s a more sustainable ecosystem with biodiversity of wildlife thriving,” said Ingrid. Ingrid and Paul will continue to nurture their land, their trees, and continue their love of growing shiitake mushrooms for customers to enjoy.



*Clockwise: Paul West walking their forest acres.*

*A large shiitake mushroom grows on an oak log harvested from the West’s forest.*

*An aspen log bearing shiitake mushrooms.*

*Ingrid views resting logs after fruiting.*

*The forested acreage in Vernon County with an access road.*

