

# Collaboration Helps Restore Watershed and Fish Habitat at Gunsalus Vineyard



With multiple research, teaching and consulting careers behind them, Glen and Pamela Gunsalus set out to plant a small hillside vineyard located west of Graton in Sonoma County with the goal of being sustainable.

“We both started with careers in science and have had several career changes. Glen earned his PhD in physics and then transitioned to biomedical research working at Hershey Medical Center and then at Rockefeller University for 25+ years. Prior to getting an MBA and becoming a consultant in strategic planning for leading medical centers, I worked in research focusing on virology at Princeton University and then on reproductive endocrinology at Worcester Foundation for Experimental Biology. With our backgrounds, we wanted to understand as much as we could about viticulture before we started,” Pamela said. “We spent a year learning about the area and talking to area growers, wineries and consultants to determine the appropriate rootstocks and grape varieties for our vineyard.”

The couple purchased 21 acres in 1990 on Upp Road in West County and moved to the property in 2000. Their vineyard lies within three AVAs (Russian River Valley, Green Valley of Russian River Valley and Sonoma Coast) and is divided into one-acre blocks planted with four Pinot Noir Dijon clones.

Green Valley Creek borders the property,

so there have been several opportunities to work with local groups for wildlife habitat and creek enhancements. An early project supported by Trout Unlimited and Fish and Game involved bank restoration and Coho salmon habitat improvements. The Russian River Coho Salmon Breeding Program took salmon from their stretch of the creek to stock the Warm Springs breeding program and each year releases fingerlings and monitors their outcomes.

A recent project to repair many years of erosion to an ephemeral stream along one side of their vineyard which empties into the Green Valley Creek was a collaborative effort with the support of Gold Ridge Resource Conservation District, Sonoma County Fish and Wildlife Commission, USDA/ NRCs, and a local environmental engineer and a construction firm. “Fill was brought in and compacted, rocks were positioned to channel the stream, and to provide habitat for wildlife and erosion control, and we planted more than 100 native trees, shrubs and ferns along the banks,” Glen said.

“Collaboration with area natural conservation and environmental groups is essential for enabling us to be better stewards of the land. For example, making needed improvements to minimize sediment from erosion flowing into the creek, since our property drains about 15 acres coming off Mt. Pisgah,” Glen said. “In a typical year we average 45 inches of rain – only 20 in 2013/14 – but after ground saturation (10-12 inches) the rest is runoff.”

The Gunsalus’ farming approach is to be economically and environmentally sustainable using best management and least invasive practices. They perform most vineyard tasks by hand – pruning, canopy management, as well as, control of soil erosion, weeds, gophers and other pests.

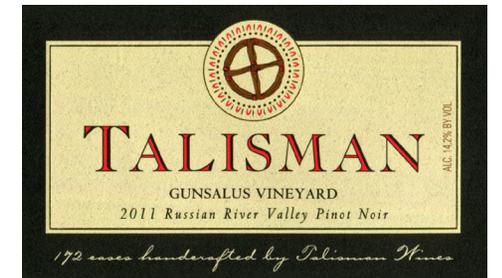
“Our first priority is healthy vines and preserving the land. We work with consultants for integrated pest management, soil analysis and aerial imaging, which identifies vine vigor

across the vineyard,” Glen added. “Our spray program to control vine fungal infections, such as, powdery mildew and botrytis, uses new/emerging soft materials.”

Over the years they have removed non-native/invasive plants, such as Himalayan blackberries and Vinca, and maintain good habitat for beneficial insects by encouraging the growth of native flowers, such as Queen Anne’s Lace, and planting shrubs (e.g., Rosemary) to attract bees and beneficials. The couple adhere to a no-till practice to reduce erosion and encourages the growth of natural vegetation.

The vineyard is Fish Friendly Farming Certified which addresses important watershed and ecology issues, however, currently does not meet several other sustainability concerns, such as, air quality, labor and community relations, and economics. Pamela and Glen believe these issues are important for their vineyard’s sustainability.

“We did an initial vineyard sustainability assessment in 2003 using the California Code of Sustainable Winegrowing and are in the process of an update. We plan to become certified in 2015 under provisions of the revised Code being advocated by the Sonoma County Winegrowers. This Code covers 16 categories and asks 138 self-assessment questions to determine our current status and how we plan ongoing improvements,” Glen said. “We’ve done a lot of work to restore fish and wildlife habitat and soil health, and we know that continuing to farm sustainably will protect and preserve our ecosystem for the long term.”



*Talisman's other vineyard partners on SCW's "Sustainability Honor Roll" — Wildcat Mountain and Spring Hill*

## Sonoma County Winegrowers 1st Annual Sustainability Report

JANUARY 2015

A comprehensive report on Sonoma County Winegrower's commitment and path towards making Sonoma County the nation's first 100% sustainable winegrowing region by 2019.

