Last year on April 20, 2021, White Buffalo Land Trust became the stewards of Jalama Canyon Ranch, a diverse 1,000-acre landscape 10 miles from the coastal shores of Central California. White Buffalo Land Trust (WBLT) is a non-profit organization located in Santa Barbara County with a mission to practice, promote and develop systems of regenerative agriculture. Their team is dedicated to increasing the ecological function of the landscape through agricultural practices and growing the ecological literacy of our community through research, monitoring, education and training.

During the transition to the new management plan, WBLT looked through the lens of each of the five ecological sites represented across the property to identify agricultural practices and enterprises that could support the health of each site. Over the last year, they’ve collected baseline measurements to track the relationships between their practices and desired ecological outcomes. With the addition of new team members Ann Close, Director of Research and Education, and Aarushi Jhatro, Ecology and GIS Manager, they’ve set forth a path to implement the monitoring strategy in service of the multiple stakeholders identified in the initial planning process. This monitoring strategy, discovery process and plan were supported in part by a generous grant from the Gaviota Coast Conservancy, Gaviota Agricultural Project Fund.

WBLT identified three core stakeholder groups for their ecological monitoring: 1. Data to help improve their management and decision-making. 2. Data for certifications, verifications, and ecosystem service payments to organizations. 3. Data collected in partnership with students, researchers, and institutions.

Positive animal impact that can be measured and verified is central to our approach to regenerating land at Jalama Canyon Ranch. To do that, we have partnered with Northern California-based, Richards Grassfed Beef. Our innovative pilot partnership brings livestock onto our land during the grass growing season which feeds the animals and stimulates our ecology. The animals are removed at the

Our Regenerative Agriculture pilot project seeks to measure and understand the results of applying worm castings (vermicast) instead of synthetic or organic fertilizer to our berry crops. The SOIL (Saving Organics Investing in Land) Worm Farm Project was primarily funded in 2019 by the Gaviota Coast Conservancy. In my pre-project discussions with Doug Kern, Executive Director, and other members of the GCC, we talked about how this project could be ground-breaking in Santa Barbara County. The reward could be great for the community, but would also have risks.
The original objectives were:
1. To measure and understand the "before and after" results of applying worm castings (vermicast) instead of synthetic or organic fertilizer to our berry crops.
2. To study and gain a greater understanding of the nutrient and pathogen loads, and the biology of the vermiculture system, and the soil when vermicast is applied consistently.
3. To increase the regional knowledge of on-farm food waste diversion programs and soil health for the agricultural community.
4. To educate local regulatory agencies, identify policy barriers, and engage policymakers in on-farm food waste reduction and healthy soil practices using worms and vermicast-inoculated soil amendments.

The project was challenging and fun. Our project team gained, and continues to gain, new knowledge. We didn’t kill any berry plants in the process - a key factor in determining success as a farmer! Scientifically, our vermicast is excellent - low to no pathogen loads and dense nutrient loads.

We hosted 4 field days starting in May 2021, events attended by farmers and ranchers, climate collaborators and policymakers in on-farm food waste diversion programs and soil health for the agricultural community.

We are no longer using synthetic or organic fertilizers at all, although I reserve the right to use them again if the plants start to look sad. I don’t expect this. We have transitioned away from fertilizers quickly and with no mortality, something antagonists and farmers in the big ag world told me was not possible three years ago. Now we want to scale, either by teaching or selling castings and verm-inoculated soil amendments, to those not inclined to "worm husbandry".

Soil biology is, and has always been, nature’s way of keeping soils fertile and regenerating, no matter the climate. To understand how living vermicast works on soil, you must learn about the interactions between the microbiology, soil nutrients and plants. Whether you are a farmer, a rancher, a gardener, an environmentalist or just an inspiration for growers, makers, and wine lovers to use this craft as a tool to restore our ecosystem.

To learn more about the work at Jalama Canyon Ranch, and the upcoming Hollis Management Intensive course, please follow them on Instagram and visit their website: www.whitesbuffalolandtrust.org
A Path to Improving Marginalized Land with Coffee

BY GRIFFIN HALL

Two years ago, Jay Ruskey and Frinj Coffee Inc. partnered with the GCC to plant roughly 850 Geisha coffee trees and 150 companion plants at Good Land Organics. Today, we are eagerly awaiting their first Spring 2023 crop harvest. While coffee growing is relatively new to this area, its impact is ushering in a new era of sustainable, high-value agriculture.

The plot selected was a former sloped avocado grove, that had been minimally maintained for several years.

We deeply value our community connections in sustainable agriculture. We invited our friends from White Buffalo Land Trust in 2020 to assist in developing an orchard layout that minimizes erosion and conserves water. We decided upon a modified keyline pattern design, in which rows of trees are oriented slightly off-contour to maximize water infiltration to the land and minimize run-off.

We selected Coffea arabica var. Geisha due to its ability to break price records, year after year. Numerous countries now host Geisha auctions, with this year’s record price being over $6000/lb (up from $3500/lb in 2021). This variety is highly sought after due to its delicate floral notes and ultra-smooth body. It is Frinj Coffee’s principal variety, and drinking a cup will change your entire perception of coffee.

Coffee plants tolerate a wide variety of growing environments, but is damaged by heavy winds. Wind has been, and will continue to be, a challenge to orchard establishment on the Gaviota Coast. To mitigate this, we heavily employ several species of wind-break trees to create a buffered micro-climate. This not only protects the coffee trees, but also provides additional revenue streams to farmers through increased fruit diversity. Amongst the coffee trees, we planted dozens of Inga, Prosopis, Casuarina, and Loquat trees.

No farming comes without challenges. This plot’s biggest challenge has been the steep “toe” slope at the bottom of the plot. During the heavy pulse of rain in January 2021 (when 8 inches fell in 48 hours) experienced a small slide that disrupted 10 plants. Amazingly, only two of those plants perished.

To rebuild and fortify, we planted more Prosopis alba (Chilean mesquite) trees around this toe, to naturally stabilize the land with its vigorous tap root. Leguminous trees also offer a multitude of benefits to the land, including vigorous root growth and adding measurable amounts of natural fertilization (due to root-associated symbiotic associations with Nitrogen-fixing Rhizobia bacteria).

Griffin Hall is Director of Operations for Good Land Organics. His mission is to steward FRINJ's land, trees, and ranch team. www.frinjcoffee.com