

California Silvopasture Producer Case Study:
Silvopasture for native oak restoration in coastal California rangeland

Restoration Oaks Ranch

Producer:

Ed Seaman, Manager / Restoration Oaks Ranch;
Executive Director / Wild Farmlands Foundation;
General Manager / Santa Barbara Blueberries

Location:

Gaviota, Santa Barbara, County, CA



Restoration Oaks Ranch is a 955-acre property bordering U.S. Highway 101 just south of the town of Buellton, California. Purchased by the Jacks family in 2002, the ranch is predominantly grazed rangeland on rolling foothills of the Santa Ynez Mountains, with oak woodland making up one-third of the property.

Two-thirds of the property is leased to a year-round cow/calf operation currently grazing approximately 60 head of cattle. Cattle are rotated through the site such that they graze the fields with the most oak woodland cover during late spring and summer. The oaks provide shade for the cattle during these hot, dry months, as well as additional brush and poison oak to graze.

At the entrance of the property, closest to the highway, there are 12 acres in berry production that the family planted after acquiring the ranch. The majority is planted in blueberry bushes, with smaller parcels in blackberries and raspberries. The berries are sold directly to consumers at the onsite farm stand under the family's company name Santa Barbara Blueberries.

Motivation

Underpinning the ranch operation is the family's desire to advance the ecological restoration of the property. Their goals are to manage the land in a financially and ecologically sustainable way,

showcase the potential of regenerative agriculture methods to promote restoration, and share what they learn with other landowners and the broader public. Ed Seaman is leading these efforts on behalf of his family.

Ed Seaman came into management of his family's ranch and berry operation unexpectedly in mid-life when he lost his technology sector job in the 2008 financial crisis. He took this opportunity to transform the ranch from a hobby into a family business. Lacking significant independent financial resources to invest in the ranch or a connection to a larger institution, Seaman incorporated a diverse array of revenue streams to support the family's mission of ecological restoration.

These revenue streams include:

- The addition of a "U-Pick" offering to the existing blueberry business and roadside farm stand.
- Vacation rentals of onsite ranch lodging.
- The creation of a non-profit arm, the Wild Farmlands Foundation, that organizes educational tours and nature walks of the ranch and engages in regional advocacy.
- Beginnings of a vermicomposting business using waste inputs from local businesses, which will one day be sold as a product at the farm stand.



Ranch Manager Ed Seaman pictured with a coast live oak seedling planted the year prior.

In 2017, Seaman embarked on a formal carbon farm planning process for the ranch. The plan, produced in partnership with the Cachuma Resource Conservation District and a local consultancy, identified the potential for silvopasture as a practice that could address resource concerns and meet the producer's management goals for grazing.

This led to the creation of the Oak Grasslands Restoration Project at the ranch, through which Seaman intends to plant and care for 11 oak tree planting sites on the existing rangeland – which will involve establishing nearly 1,000 native oak trees in the central valley of the ranch.

The first site was planted in 2017, with 42 oaks at 20-foot spacing across the half acre area. Unexpected deterioration of the plastic posts used to install the electric fencing led to cattle damaging the seedlings. As a result, the site was replanted in 2021, which the Seaman family had to fund on their own. Overall, the project has mostly been self-funded with some state funding from the Healthy Soils Initiative (for compost application ranch-wide) and the NRCS, which provided funding for oak trees and native shrubs for the first restoration planting site.

Management

Given the remoteness of the planting sites, limited financial resources, and the desire to pilot a restoration method that could be replicated across the ranch over time, Seaman chose to plant the oaks using Land Life Company's Cocoons, which cost about \$20 per container at the time.

These biodegradable cartons help to protect the seedlings from wind and, most importantly, control the delivery of water to the oak seedlings in the increasingly dry Mediterranean climate. (Restoration Oaks Ranch receives an average annual rainfall of 17 inches per year.)

The seedlings are currently irrigated manually three times a year with an average of 10-15 gallons of water per seedling poured directly into the cocoons. The planting site is protected by electric fencing and weeds are managed mechanically with a string trimmer about once a year.

Seaman hopes that the managed oak tree plantings will extend the grass growing season, support the restoration of native grasses and significantly increase forage availability for cattle. Additionally, the rancher that Seaman currently leases to is enthusiastic about the prospect of additional shade for the cattle and sees the value of taking sections out of grazing in the short term to protect the young trees from cattle until they are established.



Oak seedling grows in a Land Life Company cocoon.

Seaman anticipates that he will be able to introduce cattle into the planting area in five years. Seaman also anticipates that the restoration plantings will allow his family to expand their agritourism offerings. They already have plans to install a wildlife watering trough and offer overnight wildlife and bird-watching retreats at the first planting site.

Species:

Current tree species include Coast Live Oak (*Quercus agrifolia*) and Valley Oak (*Quercus lobata*). The restoration efforts are focused predominantly on coast live oaks given that they grow twice as fast as valley oak and thus will need fewer years of protection and allow for grazing of cattle on a faster timetable.

Livestock currently are all angus cross cattle. Having experimented with implementing silvopasture for oak restoration, Seaman is now interested in integrating small animals with the blueberries, specifically animals that won't browse the leaves that blueberry plants retain year-round. He is currently considering short necked pigs and anticipates that such an effort would require a dedicated animal husbandry manager that is onsite two to three times a week.

To learn more about Restoration Oaks Ranch, visit: <https://restorationoaksranch.com>

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