California Silvopasture Producer Case Study:

Coastal California pasture-raised meat operation experimenting with silvopasture



Producers: Guner and Heidi Tautrim, Owners/Operators, Gaviota Givings

Location: Gaviota, Santa Barbara County, CA

Gaviota Givings is a pasture-raised meat operation on the Gaviota Coast north of Goleta, California, owned and operated by husband-and-wife duo Guner and Heidi Tautrim. Established in 2016, Gaviota Givings is part of the 300-acre Orella Ranch that has been in their family since 1866.

The main revenue sources are currently pastured pigs, chicken, and cattle. The meat products are stored in the on-site freezer and sold entirely direct to consumers via their web store, pop-up venues, and word-of-mouth marketing. Products include a variety of pork products – ground pork, sausages, ribs, belly, shanks, and hocks – as well as whole/quartered chicken, and beef products available seasonally from the ranch's cow/calf operation.



Kunekune pigs graze under a Monterey Cypress overlooking the Pacific Ocean.



Guner and Heidi Tautrim in front of their farm store.

Motivation

The Tautrims began raising pigs and chicken for their personal consumption. Shortly after, they expanded to raise meat for friends, eventually growing to the scale of a business and confronting the many barriers to small scale finished meat production in the region. The predominant production barriers are the long distance to the nearest USDA certified slaughterhouse and slaughterhouse pricing that limits the Tautrims to conventional cuts of meat.

After experiencing firsthand the challenges of raising animals year-round in a drying Mediterranean environment, the Tautrims began experimenting with silvopasture as a means of providing dry season nutrition to their animals and transitioning the annual rangeland to native perennial pasture.

Over a five-year period, they have worked to identify the most drought-tolerant tree species -- trees that can thrive on their land and that also provide the best possible

forage to their animals during the long dry season. The region has an average annual rainfall of 16 inches, which increasingly is delivered in only a handful of rain events a year, underlining a growing need to increase the water retention capacity of their soils and deploy deep-rooted perennials to limit erosion from the hilly property.

Their main criteria for tree species selection have been (1) high nutrient density in leaves, and (2) extreme drought tolerance, with the goal of establishing trees that are hardy enough to thrive unirrigated after three years on drip irrigation.

The Tautrims see the addition of trees as a way to support and slowly increase the ranch's meat production while adding fruit crops and sources of timber to further diversify the ranch's revenue streams. Their goal is to expand their two-acre drought-tested experimental silvopasture plots to a larger 13-acre portion of the ranch in the near future, an expansion that hinges on identifying external funding opportunities.

Management

The management of Gaviota Givings' silvopasture mirrors the experimental and diversified nature of the pasture-raised meat operation. The two acres of silvopasture include single-species experimental plots planted along various contours close to the main residence, which allows for daily observation. Animals are rotationally grazed using a variety of methods based on tree age and size of planting areas. The Tautrims rely on mulch and manual weeding to manage weeds at the base of trees and between tightly planted rows of trees. They hope to identify a successful, low maintenance groundcover or shrub to eliminate this labor demand.

Given the highly experimental nature of their silvopasture efforts, the Tautrims have come to rely on a few different methods of feeding their animals from the trees and the pasture growing amongst the trees:



The Tautrims also have two 50-broiler chicken tractors that they use to browse the rows between trees, moving the tractors every 1-2 days. Cattle graze pasture that has Monterey cypress (*Hesperocyparis macrocarpa*) planted along the contour. The cypress was chosen for its function as a windbreak and for its high quality timber, which Guner will use in his woodworking business. Working with contract graziers, the Tautriums also graze sheep to help combat invasive weeds in an effort to restore a diversity of perennial grasses and native species.



A windbreak of Monterey Cypress planted along the contour of a southernly slope that gets heavy winds off the Pacific Ocean.

Animal species:

Kunekune pigs (10): Kunekunes have a short snout that is great for browsing in an orchard given that they have less impact on trees. Their thick fat layer makes them more difficult to process at the slaughterhouse and they produce fewer conventional cuts.

Berkshire x Red Wattle pigs (8): Bred on site, the Berkshire-Red Wattle cross has the traditional long pig snout and yields more conventional cuts of meat.

Broiler chickens (100)

Cattle and sheep, grazed intermittently by other ranchers/shepherds



Tree species:

- Black Locust (*Robinia pseudoacacia*)
- Carob (*Ceratonia siliqua*)
- Jumbay / River Tamarind (Leucaena leucocephala)
- Honey Locust (*Gleditsia triacanthos*)
- Loquat (*Eriobotrya japonica*)
- Honey Mesquite (*Prosopis glandulosa*)
- Monterey Cypress (Hesperocyparis macrocarpa)
- Mulberry (*Morus alba*) varieties: Pakistani, Russian, white, and others
- White Sapote (*Casimiroa edulis*)

<< Guner Tautrim stands in front of a row of White Sapote.

SUMMARY: Integrating edible perennials in a pasture-raised meat operation

Integrating a diversity of tree species into a small-scale meat operation in the context of a drying climate has presented the Tautrims with unique challenges that are driving their cautious, highly experimental and small-scale approach to implementing silvopasture. Challenges in establishing and maintaining their experimental silvopasture systems have included:

- Protecting small trees from animals
- Managing water limitations
- Establishing water infrastructure for new tree plantings
- Procuring drought tolerant tree species in larger quantities for expansion of silvopasture system
- Lack of local examples of silvopasture and minimal technical assistance specific to mediterranean silvopasture
- Cost associated with establishment
- Long horizon for marketable yields, especially in a dryland environment where plant growth can be slow

The Tautrims have seen and/or anticipate the following benefits from the integration of perennials:

- Shade and shelter for animals
- Windbreak for other plants, especially young trees
- Dry season nutrition from tree fodder and fruit
- Increased soil fertility and drought resilience
- Erosion control, especially where perennials are planted along contours of hilly pasture

They also anticipate that their experimentation with silvopasture will help diversify their revenue streams. In particular, they are hopeful about the potential for selling value-added products from fruit tree crops when the trees mature.

To learn more about Gaviota Givings visit: https://www.gaviotagivings.com/

Publication made possible by a grant number #20-DG-11132540-019 from the U.S. Department of Agriculture (USDA), Forest Service, National Agroforestry Center, under the authority of the Cooperative Forestry Assistance Act of 1978. In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.) To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD).USDA is an equal opportunity provider, employer, and lender.