NO-TILL ORGANIC MARKET GARDEN

Producer Case Study

Finding Abundance in Nature

The Story of Ayn Duncan and Laus Deo Farm

Red River Parish, Louisiana



USDA United States Department of Agriculture
Natural Resources Conservation Service

NO-TILL OMG! Organically Managed Gardening

CAMPI Field of DREAMS

A Steward of Natural Systems

For Ayn Duncan, farming has never been about controlling nature.

It has always been about learning from it.

Located on a diverse 50-acre farm in Louisiana, Ayn's approach to agriculture reflects a deep appreciation for the interconnected relationships between soil, plants, animals, wildlife, and people. While her husband manages a conventional cattle and row crop operation, Ayn has pursued a different path—one rooted in observation, ecological stewardship, and regenerative agriculture.


Ayn shares the benefits of recently foraged wild mushrooms.

Long before joining the No-Till Organic Market Garden project, Ayn was exploring ways to work more closely with natural systems. Her farm included sheep, goats, pigs, pollinator habitat, blackberry bushes, and a growing interest in no-till organic production. Whether tending livestock, managing bees, or foraging wild mushrooms, she viewed the landscape as a living ecosystem rather than a collection of separate enterprises.

The No-Till Organic Market Garden project provided an opportunity to deepen that understanding. Through workshops, field days, soil testing, technical assistance, and peer-to-peer learning, Ayn gained new tools for building healthy soil while reducing disturbance and supporting biological diversity.

Rather than seeing conservation practices as a checklist of activities, she viewed them as part of a larger philosophy—working with nature instead of against it.

"The healthiest farms are often the ones that work with nature instead of trying to control it."
— Ayn Duncan

Learning Through Innovation

Farming as an Ecosystem

One of the defining characteristics of Laus Deo Farm was its diversity.

Rather than focusing on a single enterprise, Ayn explored ways that multiple systems could complement one another. Livestock, pollinators, orchard plantings, wildlife habitat, and food production all played a role in the farm's development.

Through participation in the project, she learned how regenerative practices could strengthen these relationships while improving long-term soil function.

Practices explored during the project included:

- No-till production
- Composting
- Mulching
- Soil health monitoring
- Pollinator habitat enhancement
- Orchard establishment
- Livestock integration
- Biological soil building

Ayn was particularly interested in practical, low-cost solutions that could be adapted to small-scale production systems. One example was a modified wagon and portable animal enclosure that allowed livestock to be moved strategically through production areas. The system reflected a broader philosophy of adapting infrastructure to support natural processes rather than relying solely on purchased inputs.

The project reinforced an important lesson:
Healthy soil is built through observation, patience, and stewardship.



Ayn’s no-till squash patch with rabbit tractor.

Key Findings

- Adopted no-till soil health practices
- Expanded knowledge of regenerative agriculture
- Integrated livestock into a diversified farming system
- Strengthened pollinator habitat through beekeeping
- Explored orchard development and perennial production
- Increased understanding of biological soil health
- Demonstrated adaptive management through on-farm experimentation
- Continued learning despite significant personal challenges

Building Healthy Soil

Learning from the Land

For Ayn, some of the most valuable lessons came from simply paying attention.

As she implemented regenerative practices and spent more time observing natural systems, she developed a deeper appreciation for the relationships that exist between soil organisms, plants, pollinators, livestock, and wildlife.

No-till management helped reduce disturbance while allowing biological processes to develop naturally. Compost and mulch contributed organic matter, improved moisture retention, and helped create favorable conditions for soil life.

Her interest in beekeeping provided another window into ecosystem health. Healthy pollinator populations are often indicators of healthy landscapes, and the presence of bees reinforced the importance of maintaining diverse habitats throughout the farm.

Even activities such as foraging Lion's Mane mushrooms reflected her commitment to understanding the ecological relationships present on the property. Rather than viewing the farm solely as a production system, she viewed it as a living landscape with lessons to offer.

Not every effort produced the desired outcome. Orchard plantings faced challenges, including damage from livestock. Yet these experiences became opportunities to learn, adapt, and refine management practices.

Like many successful stewards, Ayn understood that setbacks are often some of the best teachers.



Ayn an avid beekeeper shares her passion with the folks at DeLaTerre Permaculture Farm.

"Every season teaches something new if we're willing to pay attention."
— Ayn Duncan



Ayn with her pastured pigs at Laos Deo Farm.

Growing a Farm and a Community

Sharing Knowledge Through Example

Although Laus Deo Farm remained a relatively private operation, Ayn's participation contributed to the broader learning community that developed through the project.

Field days, workshops, and monthly meetings created opportunities for participants to exchange ideas, discuss challenges, and learn from one another's experiences.

Ayn's willingness to experiment with different approaches added valuable perspectives to those conversations. Her experience also demonstrated that regenerative agriculture can take many forms.

Some participants focused on commercial production. Others emphasized education, community development, or direct marketing.

Ayn focused on stewardship.

Her diversified approach showed that healthy soil practices can be integrated into farms of many sizes and management styles while supporting biodiversity, pollinator health, livestock production, and ecological resilience.

One of the most significant chapters of her story occurred during a period of serious health challenges. Despite extended hospitalization and interruptions to farm activities, Ayn remained committed to learning and participating whenever possible.

Her perseverance reflected the same resilience she sought to cultivate within the land itself.

"Diversity creates resilience—in the soil, on the farm, and in the people who steward it."
— Ayn Duncan

Looking Forward

Continuing the Journey

Today, the lessons learned through the No-Till Organic Market Garden project continue to shape Ayn's approach to farming and stewardship.

While health challenges limited her ability to fully pursue every opportunity she envisioned during the project, the knowledge gained remains an important foundation for future growth.

The project reinforced her belief that healthy soil is not created through shortcuts. It develops through careful observation, consistent stewardship, and a willingness to work with natural systems over time.

For Ayn, regenerative agriculture represents more than a collection of practices.

It represents a way of seeing the land.

A way of understanding that healthy ecosystems support healthy farms, healthy communities, and healthy futures.



Adapting her growing system to accommodate both health considerations and no-till principles, Ayn repurposed protein tubs into an easy-to-manage container garden.

Key Themes from Ayn Duncan's Journey

- Ecological Stewardship
- Soil Health
- Regenerative Agriculture
- Biodiversity
- Pollinator Conservation
- Livestock Integration
- Adaptive Management
- Climate Resilience
- Beginning Farmer Development
- Historically Underserved Producer

Key Lessons Learned

- Healthy soil develops through patience and stewardship.
- Diversity strengthens resilience across the farm.
- Observation is one of a farmer's most valuable tools.
- Working with nature often produces better long-term results.
- Every challenge provides an opportunity to learn and adapt.

Closing Reflection

Ayn Duncan's experience demonstrates that regenerative agriculture begins with a simple shift in perspective—from managing land as a resource to stewarding it as a living system. Through curiosity, observation, and a deep respect for nature, she embraced practices that strengthened both the land and her understanding of it. Her story reminds us that conservation is not only about improving soil health. It is also about cultivating resilience, honoring natural systems, and finding abundance in the relationships that sustain life.