NO-TILL ORGANIC MARKET GARDEN

Producer Case Study

Rooted in Place: Growing Soil, Food, and Community

The Story of Iriel Edwards, Caleb McKenzie, and Dancing Radicle Farm

Rapides Parish, Louisiana



USDA United States Department of Agriculture
Natural Resources Conservation Service

NO-TILL OMG! Organically Managed Gardening

CAMPTI Field of DREAMS

Producer Profile

Bringing Knowledge Home

For Iriel Edwards, agriculture has always been about more than producing food. It is a way to care for the land, strengthen communities, and help create a more resilient future.

Originally from Louisiana, Iriel pursued agricultural studies at Cornell University, where she gained a strong foundation in sustainable agriculture, ecological farming systems, and food system development. While her education opened doors to opportunities across the country, she felt called to return home and apply what she had learned to the communities and landscapes that shaped her.

That journey eventually led her to establish Dancing Radicle Farm in Boyce, Louisiana. Alongside her partner, Caleb McKenzie, who operated Ken's Gourmet Mushrooms, Iriel began building a diversified agricultural enterprise rooted in ecological stewardship, local food production, and community engagement. Together, they explored ways small-scale farming businesses could complement one another while contributing to a stronger local food economy.

Like many beginning farmers, Iriel quickly discovered that translating agricultural knowledge into a functioning farm required persistence, adaptability, and continual learning. Building infrastructure, improving soil health, developing markets, and managing the realities of farm life presented ongoing challenges.

Participation in the NRCS Conservation Innovation Grant No-Till Organic Market Garden Project provided an opportunity to deepen her practical experience while connecting with a network of farmers, educators, and conservation professionals committed to regenerative agriculture.

For Iriel, regenerative agriculture offered a framework that aligned with her values. Rather than focusing solely on production, it emphasized stewardship, soil health, biodiversity, and long-term resilience.

"Agriculture gave me an opportunity to come home, build something meaningful, and contribute to the future of my community."

Learning Through Innovation

Adapting Through Observation

Like many beginning farmers, Iriel's first season brought unexpected challenges.



She began with a quarter-acre production area using no-till principles, mowing existing vegetation low, applying heavy mulch, and planting directly into the prepared area. Although the system showed promise, hidden soil limitations quickly emerged.

A heavily compacted section of the field created significant drainage problems. During periods of heavy rainfall, standing water and flooding affected crop production and revealed the importance of understanding site-specific conditions.

Rather than abandoning the effort, Iriel used the experience as an opportunity to learn.

She began incorporating cover crops, adding larger quantities of organic matter, and modifying the production area with slightly raised beds created by carefully layering soil over existing mulch. These adjustments helped improve drainage while continuing to build soil structure.

Participation in project workshops, educational webinars, soil health trainings, and peer-to-peer learning opportunities reinforced the value of observation and adaptive management.

The project encouraged farmers to evaluate outcomes, make adjustments, and develop systems tailored to their unique environments rather than relying on one-size-fits-all solutions.

For Iriel, one of the most valuable lessons was learning that regenerative agriculture is a continual process of observation, experimentation, and improvement.

Key Findings

- Converted a compacted quarter-acre site into a productive no-till market garden
- Implemented permanent beds, heavy mulch applications, and cover crops
- Improved drainage and reduced flooding impacts through adaptive management
- Increased understanding of soil health monitoring and regenerative practices
- Strengthened confidence through workshops, field days, and peer learning
- Developed practical experience applying ecological principles in real-world conditions



"Sometimes it makes me feel like a grass farmer."

Building Healthy Soil

Feeding the Soil First

At Dancing Radicle Farm, soil health became the foundation for every management decision. Following the initial challenges with compaction and flooding, Iriel focused on steadily increasing organic matter through mulching, cover cropping, and reduced soil disturbance.

Year after year, layers of hay, grass clippings, and plant residues were added to the production area. Rather than viewing mulch as a simple weed suppression tool, she began to see it as a primary mechanism for rebuilding soil function.

As organic matter accumulated, visible changes began to occur. The soil became easier to work. Water moved through the profile more effectively. Earthworms and other signs of biological activity became more common. Areas that once struggled with compaction showed signs of improved structure and resilience.

Reflecting on the experience, Iriel joked that maintaining healthy soil sometimes made her feel more like a grass farmer than a vegetable grower. Project records documented improvements in several important soil health indicators, including soil structure, biological activity, drainage, water infiltration, and water-holding capacity. Compaction was reported as significantly improved, while crop performance and yields also increased.

The benefits extended beyond the soil itself. Improved weed suppression reduced labor requirements. Better infiltration helped manage heavy rainfall events. Increased biological activity supported nutrient cycling and long-term soil productivity.

In plain terms, healthier soil created a more resilient production system capable of supporting both crops and conservation goals.

Growing a Farm and a Community

Agriculture as a Community Practice

For Iriel, the purpose of farming extends beyond the farm gate.

While producing healthy food remains a central goal, she believes agriculture must also strengthen relationships between people, land, and community.

Throughout her participation in the project, she emphasized the importance of local food systems and the role small farms play in building resilience.

She regularly participated in local markets and direct-to-consumer sales opportunities that connected community members with fresh, locally grown food. These relationships helped strengthen awareness of local agriculture while creating opportunities for consumers to support regional producers.

Equally important was the opportunity to learn from other farmers.

Through workshops, field days, conferences, and project activities, participants shared experiences, successes, and challenges. This farmer-to-farmer learning environment allowed beginning producers to gain practical insights while building valuable professional relationships.

The collaborative spirit of the project reflected a principle that became increasingly important to Iriel's vision for agriculture.

That perspective also shaped the development of Dancing Radicle Farm and the complementary enterprises operated on the property. Caleb McKenzie's Ken's Gourmet Mushrooms demonstrated how diversified agricultural businesses can work together to increase local food production while creating new opportunities for beginning farmers.

Together, these efforts helped illustrate how resilient local food systems are built through cooperation, shared knowledge, and community investment.

"Community has to be a part of agriculture."



Iriel Edwards led the Jubilee Justice crew of volunteers at Lincoln Prep. She helped get the fertility program started with biochar and vermicompost and then no-till drilled a diverse cover crop mix.

Looking Forward

Continuing the Work

As Dancing Radicle Farm continues to evolve, Iriel remains focused on strengthening both ecological and community resilience.

Future goals include expanding regenerative management practices, improving production efficiency, increasing educational opportunities, and continuing to contribute to Louisiana's growing network of regenerative producers.

Her long-term vision reflects a belief that healthy communities depend upon healthy ecosystems, strong local food systems, and farmers who are willing to invest in both.

The lessons learned through the No-Till Organic Market Garden Project will continue informing management decisions as the farm develops and adapts to future opportunities and challenges.

Key Themes from Iriel's Journey

- Beginning Farmer Development
- Soil Health Stewardship
- Regenerative Agriculture
- Women in Agriculture
- Agricultural Education
- Community Resilience
- Local Food Systems
- Farmer-to-Farmer Learning

Key Lessons Learned

- Healthy soil is built gradually through consistent management.
- Observation and adaptation are essential parts of farming.
- Organic matter is one of the most valuable tools available to farmers.
- Community support strengthens agricultural resilience.
- Beginning farmers benefit greatly from mentorship and peer learning.

Closing Reflection

The story of Iriel Edwards demonstrates the powerful connection between people, place, and stewardship. Through her commitment to regenerative agriculture, soil health, and community-based food systems, she has helped demonstrate how conservation practices can support both productive farms and resilient communities. Her participation in the No-Till Organic Market Garden Project reflects a broader movement taking place across Louisiana—one in which farmers are rebuilding soil, strengthening local food systems, and creating a more sustainable future for the next generation.