Chairman Scott, Ranking Member Scott, and members of the subcommittee, thank you for inviting me to be here today-

White Oak Pastures is a 153 year old radically traditional family farm that geographically surrounds the town of Bluffton, Georgia. It is a vertically integrated, multi-generational farm that uses the multi-species rotational grazing practices of our forefathers to produce beef, pork, lamb, poultry, goat, eggs, organic vegetables, and honey. We have not used pesticides, chemical fertilizers, tillage, or GMO's in the last 20 years and we operate as a zero waste facility. The fourth, fifth, and sixth generation of the Harris family are currently living and working on the farm.

There are three topics that I want to cover today that I hope you will consider to be important:

- 1. REGENERATIVE FARMING AS AN ECONOMIC DRIVER
- 2. REGENERATIVE FARMING AS A TOOL TO HELP MITIGATE CLIMATE CHANGE
- 3. REGENERATIVE FARMING PAIRED WITH RENEWABLE ENERGY TO CREATE MORE ECONOMIC OPPORTUNITIES FOR FARMERS AND RURAL AMERICA

## FIRST, REGENERATIVE FARMING IS AN ECONOMIC DRIVER, PROVEN AS A WORKABLE BUSINESS MODEL IN BLUFFTON, GEORGIA-

Every conscious American has some level of recognition of the decay that has occurred in our rural communities in the last half century.

Prior to World War II, most rural communities enjoyed a fairly constant agrarian economy.

But after the war, the centralization of our food processing system began, and new mega-plants, owned by large multinational companies and operated with great "economic efficiency" started to starve out our small, hometown, locally-owned and operated processing businesses.

When I was growing up in rural Georgia in the 1960s, every county had at least one family-owned abattoir [artisan slaughter plant]. Today, almost every single one is gone from our 159-county state. And this tragedy has been replicated across the rural United States.

Regenerative farming at White Oak Pastures has revitalized the economy in our county, and it can do the same for other communities across this great nation.

White Oak Pastures is the largest private employer in our county. In the last 20 years, our farm has grown from four full time employees, and a million dollars in annual revenue, to 155 full time employees, and twenty million dollars in annual revenues. We write payroll checks for over \$100,000 each week, in a county that has fewer than 3000 residents. The average salary of our employees is approximately twice that of the average salary in the county.

There could, and should, be a White Oak Pastures in every agricultural county in the United States. Maybe two or three of them. It is a highly replicable business model.

AND NOW FOR THE SECOND TOPIC I WISH TO SHARE WITH YOU ALL TODAY. REGENERATIVE FARMING HELPS TO MITIGATE CLIMATE CHANGE, PROVEN SCIENTIFICALLY BY THE LIFE CYCLE ASSESSMENT THAT I HAVE PROVIDED FOR YOU -

https://blog.whiteoakpastures.com/hubfs/WOP-LCA-Quantis-2019.pdf?hsCtaTracking=6d515b16-e2ed-4bea-a286-a7433c983b81%7C7a0781f6-8e32-4e28-89e9-563565ab2eea

White Oak Pastures is likely the only farm in the world that has a peer reviewed, third-party scientific study that verifies and validates that we sequester more carbon than we emit. We are a contributor to the mitigation of climate change.

The organic matter of our soil has increased from 0.5% to 5.0% over the last two decades. Each 1% of organic matter will absorb over 20,000 gallons of water. Our 3200 acres of land will absorb a 5 inch rain event. The neighboring farms can only absorb a one-half inch rain event, which has enormous downstream impact.

Our farm has sequestered over one ton of carbon per acre per year, on 3200 acres of land, for the last 20 years. During this period of time, our farm has pulled the carbon equivalent of about 500,000 barrels of crude oil out of our atmosphere.

White Oak Pastures used a \$50,000 USDA - REAP Grant to construct a 50,000 kW solar array in 2010. It provides our farm with energy resilience and helps to power our on-farm red meat and poultry slaughter plants, both USDA-inspected.

WHILE THIS ON-SITE SOLAR ARRAY INTRODUCED US FIRSTHAND TO THE BENEFITS OF RENEWABLE ENERGY, FOR MY THIRD TOPIC I WANT TO SHARE HOW REGENERATIVE FARMING PAIRED WITH RENEWABLE ENERGY CREATES EVEN MORE ECONOMIC OPPORTUNITIES FOR RURAL AMERICA-

A couple of years ago, I learned that Silicon Ranch, one of the largest owner-operators of solar power plants in the country and the leader in our state of Georgia, would be building a solar farm on over a thousand acres of land next to my operations. I liked solar, but I didn't like what it typically meant for the land it occupied—un-natural, unhealthy monoculture—and dead dirt.

I invited my new neighbors to visit. And during the visit, we discussed the opportunity for a mutually beneficial partnership: I could use my livestock and regenerative farming practices to manage the vegetation on Silicon Ranch's solar farm - a big operational challenge for them usually managed with mowing and spraying - and at the same time I could access more grazing land without additional investment and improve my bottom line.

Following months of collaborative discussions, White Oak Pastures has formed a meaningful partnership with Silicon Ranch, and they have transformed their approach to managing the land under their arrays across the country.

For our part, White Oak Pastures will be bringing regenerative land management to close to 2,400 acres of solar farm land in Southwest Georgia. Twenty years from now, Silicon Ranch's land will have 5 percent organic matter like mine does and even more economic value per acre by layering clean energy generation, food production, and ecosystem services.

The White Oak Pastures-Silicon Ranch partnership model is replicable anywhere willing farmers and solar energy intersect. Solar is a decentralized form of power generation that can support the decentralization of agriculture by providing regenerative farmers with finance-free access to land and a new source of income. The co-location of renewable energy generation and regenerative agricultural production is a win-win-win: for the solar developers, the farmers, and the community.

And the replication process has already begun: Silicon Ranch has replicated this model in Mississippi, Tennessee, Arkansas, and Colorado, and will be implementing it in additional states in the coming years.

To date, Silicon Ranch's co-location model has integrated regenerative sheep grazing, as well as pasture-raised poultry, on its solar farms. This innovation has created a unique and significant opportunity for farmers and rural America.

Adding regenerative cattle grazing to the model would greatly expand this opportunity to even more farmers and communities because cattle are by far the most widely consumed ruminant in the country. Nearly a quarter of all land in the U.S. is dedicated to cattle grazing.

Integrating cattle grazing on large-scale solar farms is not an option without new research and development due to current solar power plant design and limitations related to the financing of untested new designs.

In partnership with the National Renewable Energy Lab and experts from three renowned academic research institutions, White Oak Pastures and Silicon Ranch have applied to work with the Department of Energy, through a grant from the Solar Energy Technologies Office, to custom build a 250kW Outdoor Test Lab on my land to power my USDA slaughter facility, and to demonstrate cattle and solar compatibility. If the DOE awards our grant application it would be yet another example of how targeted federal programs can help support innovation and progress to advance the mission of our family farm.

Moreover, if our Test Lab is successful, Silicon Ranch intends to scale and replicate this new model, the CattleTracker model, across the country, keeping even more land in ag production while supporting and leading the transition to clean energy.

White Oak Pastures is honored to have helped Silicon Ranch transform "renewable energy production" into "regenerative energy production" and we

Will Harris, Owner, White Oak Pastures

look forward to expanding the positive impacts of energy projects through building a CattleTracker project on our farm.

I want to thank the members of the House Agricultural Committee for giving me the opportunity to share our story today. It is indeed a story of hope and innovation, and it is a story of how we can bring prosperity back to impoverished rural America. Thank you.

Will Harris, Owner, White Oak Pastures