



BIODIVERSITY CONSERVATION & NATURAL RESOURCE MANAGEMENT 2020/2021

INTRODUCTION

Our soil type is “BLACK CLAY” and we have five ponds surrounding the growing area. There are several species of birds that migrate to this area including hummingbirds, red-tailed hawks, cranes, owls, mallards, pelicans and killdeer. Invasive species are snakes, rats, mice, skunks, coyote and raccoon.

The natural resources and biodiversity of ANUME Foundation is as follows:

NATURAL RESOURCES

1. **Our Spring-fed lake is an Oasis** providing protection, security, food and natural drinking water for an array of birds, amphibians, toads, turtles and fish (catfish, perch, bass, crawfish) while supporting aquatic insects who contribute to the food chain. The lake also contributes to new tree growth & cattails (who provide havens for tiny fish and their eggs while preventing erosion). The rhizomes & lower leg portion of the cattails also provide food for ducks and geese and trap sediment and silt while removing pollution from the water.
 - New birds we have witnessed in late 2020 and early 2021 have been the White Pelican and the Drake Mallard.
 - February 12-20, 2021 had a week of winter temperatures between 1-11 degrees. It actually helped us with the accumulation of snow that melted and brought water to the soil to promote new growth of flowers, grasses and trees around the ponds.
2. **Rain water collection** assists us in watering plants and provides a drinking source for birds of all kinds.
3. **Mulch and hay** from our lands for water erosion
4. We provide **birdhouses and bird feeders** for pest control, preserving species in our area and pollination of plants.

5. **Plant remains** go back into our growing fields or compost area.
6. We **excavate land for new ponds** producing more areas for wildlife.
7. We **plant flowers** in between and around our growing area to promote the butterfly population.

BIODIVERSITY:

1. **We Minimize Tillage** to reduce soil erosion, maintain water retention, encourage fungi and earthworm growth, reduce labor, use less fuel and reduce carbon emissions.

2. **We Cover Crop** our fields to control erosion and improve soil health and sequester carbon.

- In 2020, we **planted Sorgham Sudan grass** on 10 acres of La Grange 1 (0313) to promote soil health and further increase habitat for birds, rats, mice and snakes. The cover smothered weeds. It provided ample biomass and subsoil aeration. We disked the grass at 4 feet and when the tops grew back and we believe it improved surface drainage. Our farmland consistently rotates cover crops but with Covid conditions, we felt it best to invest in the land by completely covering with the Sorgham. We also had been advised that it was especially good at suppressing nematodes.
- For 2021, ANUME will plant the Sorgham Sudan Grass cover crop in La Grange 2- just south of La Grange 1 (2.5 acres).

3. **We Save our Seeds** to improve crop health and save money. In 2020 & 2021, we used prior year Clemson spineless Okra (from La Grange 3) in La Grange 1 & raised beds (1/2 of Beds 2&3). Unbeknownst to ANUME, the fertilization and increased watering brought seeds to fruition and became part of our food bank donations in 2020. White Icicle Radish and Kale had been planted in 2018 and 2019 and produced fruit in 2020.

4. We Rotate our Crops to prevent crop specific pests and disease.

5. **Conservation -Increased Technological Information**

- We continue to use our no till planter purchased in 2018 to increase our produce production, reduce manpower and have seed planted in uniform and correct depth. In 2021, we adopted the use of thermo imaging with Lidar technology (Drone imaging) to understand more of our land/water capabilities and management. The imaging will guide us on how best to use and expand our biodiverse environment. Our goal is to manage more

efficiently fuel use and costs, reduce manpower, increase soil health and plant more efficiently.

6. We Plant Trees and Grow New Trees. Collaborating with arborists, ANUME will be growing more trees and planting around the entire 55 acres for purposes that involve the following:

- Conserving energy
- Producing oxygen
- Preventing water pollution
- Preventing soil erosion
- Providing shade for people, plants, birds and animals
- Bringing Economic opportunities
- Bringing beautification
- Increasing property value
- Providing windbreaks from prevailing winds throughout the land of the ANUME farm
- Limiting carbon into the atmosphere
- Providing shelter and food for wildlife

In 2021, we will experiment with growing our own trees for both the biodiversity of the farm and for financial gain for our organization. We currently are pricing trees and will submit approval from CCOF on our choices. We will have a budget of \$2,000 to increase the number of trees on our property. By growing trees in containers, we will expand our capabilities financially to provide more food and opportunities for the food banks and fund our organization.

7. We Fish our Ponds. ANUME will generate income and provide a serene location for community to join ANUME learning more about gardening, fishing our ponds and donating to our operations. Monthly, we have community members fish our ponds for catfish, bass and perch to keep the ponds aerated, maintain algae population and educate others on the important impacts fishing has on both the environment and human health, i.e., good food choices, outside in nature, time with family/friends, education on options in fishing and developing a hobby.

8. We teach Biodiversity. ANUME will host groups/organizations as in year's past about the importance of caring for nature and incorporating a plan to increase biodiversity in their own area of living. Classes will be held on the ways to begin a personal journey into sustainability, biodiversity and an organic lifestyle.

9. We Increase our Bee population by trailing flower rows all around the farm with native Texas plants and organic produce.

With these inputs to our diversity plan, we, at ANUME believe that our efforts will entice others to begin their journey and our community will be better for it.