

Student Workbook

Differences in Phase 1 and Phase 2

Why is the project expanding?

Since 1997 the sustainable agriculture has had several positive results, but that is no reason to just quit there and not try to improve. In April of 2002, Texas Tech and its partners were fortunate to receive a new grant from the USDA – SARE Southern Region Program to expand this system research project. During the past four years of research with the original project, Texas Tech has not only identified ways to improve conservation of resources and improve profitability, but the research has also identified ways to make further improvements. Thus, this new generation of research is built on the findings of the original research. The original systems will be continued as the bench-mark for comparison with the new systems. The project is expanding over 325% to see what other positive results may be generated by the project.

The previous project contained only two systems-continuous cotton and the alternative; however, this new area will contain four systems. The findings of the research on the expansion area will make the project much more flexible when it comes to options that producers have when wanting to implement a sustainable system.

What are some systems that could be implemented in the new phase of the project that would work well for

your community? (they might be systems that you have started to develop in your poster)

What parts of the old system did you not like that you would like to see changed, and why?

Why will the old system be continued? What purpose will it serve in the new phase?

Dryland Cotton

System #1 is composed of continuous dryland cotton. Just like the irrigated continuous cotton in the old system, this will be used for comparison with the other systems. Also, there are several producers in the Southern High Plains that plant dryland cotton, so information about dryland cotton is needed in the new phase.

What are the pros and cons of dryland farming?

Pros: _____, _____, _____, _____

Cons: _____, _____, _____, _____

Buffalograss /Bluegramma

System #2 is composed of a forage sorghum and cotton rotation with the use of native sideoats grama, buffalograss, and bluegramma grass for summer grazing. This system is very similar to the old alternative system in that the forage sorghum and cotton rotation are the same, but instead of irrigated W.W. B-Dahl for grazing, this system uses native grasses.

Why are native grasses being used in this new system?

Dahl bluestem

System #3 is composed of a 3-paddock grazing system that uses Dahl-OWB for the base pasture and bermudagrass as the two supplemental pastures. Steers graze from April to the end of the grazing season on these three grasses. All three paddocks will be irrigated by a drip irrigation system.

Why are other types of irrigated grasses being studied?

Dahl-OWB Pasture

System #4 is composed of a single-paddock system that uses Dahl-OWB for grazing from late winter to late July. Seed will be harvested from the bluestem in October. Steers will be supplemented with gin trash if forage becomes limited for grazing.

Why are the researchers experimenting with a single-paddock system?
