New Initiative Aims to Provide

For generations, ranchers in the Southern Great Plains have fed their cattle the same way: During the spring and summer months, cattle graze on a sea of open pastures across the prairie. In the fall, grass begins to go dormant, and ranchers typically substitute hay in place of grazing. This can be a pricey endeavor, but this has been the tried-and-true process used for decades.

The Noble Foundation is launching a new research initiative — Forage365 — aimed at providing a sustainable, year-round grazing system.

"Hay is an expensive input for cattle producers," says Billy Cook, director of the agricultural division. "Regardless of whether a producer makes their own hay or purchases hay, it's an expensive alternative to grazing. If we can extend the effective grazing period and reduce the need for hay, we can have positive impacts on profitability and sustainability of ranching operations."

As part of the Forage365 initiative, the Noble Foundation will look to develop a system of forages that enables ranchers to graze cattle year-round and use less or no hay. Noble Foundation scientists are focusing on four pillar crop species — alfalfa, Bermuda-grass, tall fescue and winter wheat — that could work together, as well as with other forages, to provide consistent grazing throughout the year.

The Forage365 initiative includes a strategic set of interconnecting projects that will improve forage system productivity and the profitability of livestock production, examine management practices and economic systems, and demonstrate how the system can improve water quality and sustainability. Select outcomes will be available as early as 2018; however, several of the projects are intended to provide building blocks for scientists and breeders to provide

Year-round Grazing System

improvements through the next decade.

"As a whole, Forage365 focuses on the importance of native and introduced plant species working in a unified system, as well as advancing the use of cover crops," says Zengyu Wang, director of the forage improvement division. "This whole-system approach enhances the sustainability of grazing lands, taking quality practices by our agricultural producers to the next level."

The Noble Foundation has been focused on developing better systems and improved plants for forage-based beef cattle systems — the primary agricultural endeavor across Oklahoma and Texas — since its inception in 1945. In the last two years, a year-round grazing system was identified as a strategic objective due to its potential impact on agriculture and the organization's capacity to achieve this objective.

Forage365 draws together each of the Noble Foundation's three divisions, including fundamental plant science, plant breeding and management, and applied agricultural researchers, into one cohesive set of projects. Key to the success of this initiative, Noble scientists and researchers will identify and work with external scientists and researchers around the region and nation to expedite the progress.

"The Noble Foundation has the combination of expertise and resources, along with the necessary relationships within the research community, to successfully develop and execute this program," says Michael Udvardi. "We have a wealth of dedicated individuals at the Noble Foundation and beyond, working together with the ultimate goal of improving agriculture and the environment."

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