Monitoring Your Forage and Livestock Production with Apps

MISSISSIPPI STATE UNIVERSITY EXTENSION

Technology has changed the way farm today. This is especially true for forage and livestock producers. Nowadays, the majority of livestock producers own a smart phone and it can be used for more than just placing a call, surfing the internet, or sending and receiving text messages. There are a large number of phone applications geared towards forage production and livestock management. Although some of the calculations can made with paper and pencil, these applications (app) made it easier, faster, and accessible at any time and place. These applications a producer friendly in your phone or tablet and the technology can help producers make decisions about managing their forage and livestock inventory.

From a productive and sustainable point of view, forage diversity and pasture production represent the most important source of livestock production. To maintain a sustainable livestock industry in a changing climate, new, cost-effective forage and livestock monitoring and forecasting tools are needed. It is important to keep in mind that some of the basic applications might be free while others (full or pro) might require a small fee to have access to some of the advance features.

Mississippi State Cattle Calculator (Android and iOS)
This calculator allows cattle producers to make important calculations relayed to reproduction, animal performance, and management decisions. Some of the reproductive calculations include expected calving date based on known breeding date, breeding date based on a known calving date, number of pregnant dates for a cow based on a breeding date, and a breeding season calculator. The animal performance section allows to determine calculations for weight (adjusted birth, weaning, yearling), average daily gain (ADG), and required gain. The management section will allow to calculate dosage for dewormers and medications based on animal weight and recommended manufacturer's dosage, as well as frame score calculations (body scoring), trailer stocking density, and yield grade.

Canopeo (Android or iOS)
This application is a tool to measure green canopy cover. It quantifies the percent canopy cover of live green vegetation on downward-facing pictures taken with your mobile phone or tablet. Some of the applications include evaluating grass stands, measuring forage damage by frost or herbicide, and determining impact of your grazing management. The application record the date and coordinates of the picture taken. When taken pictures to be analyzed by Canopeo, it is recommended keeping the device at least 2 feet from the top of the canopy.

Cow Poop Analyzer (iOS)
This application allows livestock producers to estimate the forage quality of the livestock on pastures. Fecal photos are used to determine the approximate crude protein and digestibility of the forage the cattle are consuming.

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farmGRAZE (Android or iOS)
This application was developed to help improve grazing management for dairy cows, beef cattle, and sheep. The application can estimate the grazing need of the livestock by using the recorded sward height or the biomass production in kilograms per hectare (multiply by 0.893 to convert to pounds per acre) from 30 observations. Sward height should be talking with a grazing stick or a grazing plate meter. After providing some inputs, the application can indicated whether the estimated forage present in pasture can support production for the specific livestock that was selected.

Feed Cost Calculator (Android or iOS)
This application will help livestock producers compare commodity feeds based on the relative cost per pound of protein and energy content. Keep in mind this application is dedicated to make more informed decisions about what pricing and buying commodity feeds and not intended to develop feed ration recommendations.

GrassSnap (Android or iOS)
This application monitor pastureland by using photos. If a producer is involved in conservation programs, this tool can be used to monitor conditions and record keeping.

Stocking Rate Calculator for Grazing (iOS)
Overstocking could lead to overgrazing, decreased forage production, increased feed costs, erosion problems, and degraded habitat. *The Stocking Rate Calculator uses forage production and grazing acreage to determine available forage for cattle, horses, sheep and goats.* This application allows a producer to quickly and easily calculate a correct stocking rate for your property based on the measured forage production. The app allows a producer to change the number of animals and grazing months based on the average size of the animal estimated available forage.

ID Weeds (Android or iOS)
This application allows to search for weed using their common or Latin name. Weeds can be identified using different number of characteristics. This also include photographs of the specified weed.

Upcoming Events
   February 20, 2019—Central Mississippi Producer Advisory Meeting, Raymond, MS
   February 21, 2019—North Mississippi Producer Advisory Meeting, Verona, MS
   February 26, 2019—Costal R&E Center Producer Advisory Meeting, Biloxi, MS
   March 12, 2019—Outdoor Business Workshop for Landowners Kiln, MS

   For upcoming forage related events visit: *http://forages.pss.msstate.edu/events.html*

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