Newsletter

CaroVail
Agronomy Update
April 1, 2016

Robotics
Frank Flis

Will robots be the next labor supply in agriculture? Robots are milking cows, feeding calves, packing and sorting agricultural products, and contributing to harvest systems. A quick check shows over 35 different applications of robot-use by agriculture.

Some of the areas where robots are used outside the barn include mowing, pruning, seed and spraying. Use in orchards, vineyards, and row crops is becoming more common place. Recently, while attending a meeting in Arizona, we learned of a robot team of tractors that, equipped with tillage equipment and planters, can descend on a field, till, and plant with only the programmer and/or attendant as they load and unload themselves off the transportation unit and attack the field. In series they line-up, then till, then plant using from 2 to 20 smaller units in sequence, thereby reducing compaction and accomplishing tasks in less time than the use of big horsepower and larger equipment operated by human control. When they complete the task they load themselves back on the transport unit and move to the next assignment. Sounds like the Jetsons but prototypes are already in use .

A team at Carnegie Mellon University have developed ROWBOT (see rowbot.com), which is a self driving, multi-use device that travels between rows at ground level removing the height constraints of a corn crop that plague larger conventional equipment. Robot can apply nitrogen in sync with crop removal needs, monitor growing conditions, interseed cover crops, and collect data that can be used real time or for future planning.

A large grower in Florida who produced oranges and raised beef once asked how do you know which trees or group of cattle produce best? "The ones with the most footprints of the manager and his advisors around it" was his philosophy. Not sure if robot tracks will replace stewardship but robotics will offer ways to expand yield and quality potential.

Last Minute Soil Sampling
Mark Avery

Although planting time is rapidly approaching, there's still time to get your soil sampling in. Please contact your local CaroVail office for any "Last Minute" sampling you may need. As Spectrum likes to say, "Why guess when you can test?"

Weather Update

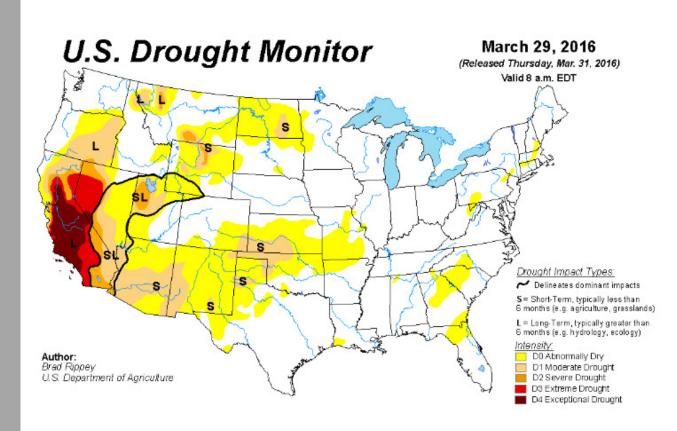|	Approx. Weekly Rainfall	Avg expected high Temp next week	Avg expected Low Temp next week	GDD (Base 50) since Jan 1	GDD (Base 50) since Mar 1	GDD (Base 50) since Apr 1	GDD (Base 50) since May 1
Auburn	0.98	39	26	24.5	24.5	0	0
Bernardston	2.29	40	26	25.9	25.9	0	0
Niverville	2.18	43	27	32.9	32.9	0	0
Oriskany Falls	2.13	37	24	19.5	19.5	0	0
Salem	2.89	40	26	24.5	24.5	0	0
TVCC	2.74	39	24	30.3	30.3	0	0

Auburn

Bernardston

Niverville

Oriskany Falls

Salem

Tri Valley

A few showers crossed the Northeast, but the general trend across the northern Mid-Atlantic States and southern New England was toward drier-than-normal conditions and below-average streamflow. Some of the low streamflow values can be explained by the lack of late-season snow and a warm spring that has accelerated vegetative demands for soil moisture. Coverage of abnormal dryness (D0) was slightly expanded in a narrow strip from the central Appalachians into southern New England, reflective of precipitation deficits at multiple time scales