

3. Measure and stake off the appropriate calibration course based on nozzle spacing. The course should be on the same type of ground that will be sprayed. (Speeds may be faster on roads than on sod, changing the application rate.)
4. Drive the course in the gear and rpm you will use when actually spraying. Record the time in seconds. Do this twice and average the time.
5. Park the tractor and maintain the same rpm.
6. Turn on the sprayer and use a trash bag and bucket to catch the water for exactly the same number of seconds that it took to drive the calibration course. (Note: You can also use a 2-liter soda bottle, cut a hole in the side of the bottle, big enough to fit over the cluster nozzle, in place of a trash bag.)
7. Pints caught = gallons per acre.
8. Check all nozzles. Flow rate should not vary more than 10% among all nozzles. Replace any nozzles that do not fall into this range.

* To determine calibration course for a swath width not listed, divide 5460 square feet (1/8 acre) by the swath width in feet.
 Example Calibration distance for 32- foot swath width = 5460 divided by 32 = 171 feet.

If I can be of assistance, please call me at 336-651-7348.



SPRING DEWORMING

By: John Cothorn, Livestock Agent, Wilkes County

If you plan on deworming cattle, spring is the right time. Parasite burdens in pastures peak during the spring, drop over the summer, and rise again in the fall. Internal parasites cause subclinical effects that are then followed by clinical signs. Subclinical effects show up as production losses. The animals don't look sick but they experience reduced gain, decreased milk production, lowered conception rates, etc. Clinical effects can be seen and include rough coats, anemia, and edema. Subclinical effects have major economic impacts, so it's important to deworm cattle before you see the physical signs.

How often you deworm depends on the type of cattle you have and how much of a parasite load they are exposed to. Mature cows usually only need to be dewormed once a year. They should be treated shortly before calving. Calving is a stressful time in a cow's life and it can lead to suppressed immune function which makes her more susceptible to parasites. Treating twice a year may be needed if you have a large parasite load. Bulls are naturally more susceptible to parasites so they should be treated in the spring and fall. Calves require more frequent deworming. Treatment should start at 3 to 4 months of age and be given again at weaning. Depending on your farm's parasite levels, deworming every 3 to 4 months until they reach 1 year may be necessary. Yearlings can be dewormed in the spring and fall until they reach maturity. Heifers aren't technically considered mature until they are pregnant with their second calf.

The two main types of classes of dewormers are benzimidazoles and avermectins/milbemycins. Please note that these are the active ingredients and not brand names. The avermectin/milbemycin group also offers external parasite control and works well in calves. When choosing a dewormer, keep in mind its spectrum of control, withdrawal time, cost effectiveness, product efficacy, and method of application. It's important to follow the product dosing guide. There is always a chance that parasites can develop resistance and continual under-dosing could contribute to resistance. If you can't weigh each animal and dose based on that, calculate your dose based on the heaviest animal in the group, not the group's average weight. It is also important to not overgraze pastures. This causes cattle to graze closer to the ground and they will ingest more worm larvae. Internal parasite control should be a combination of pasture management and treatment with dewormers.

The information in this article applies to cattle. Controlling parasites in sheep and goats is more complicated and there are real problems with resistance in parasites that affect these animals. If you would like more information on controlling parasites in any type of livestock, please call the Cooperative Extension office at 651-7331.

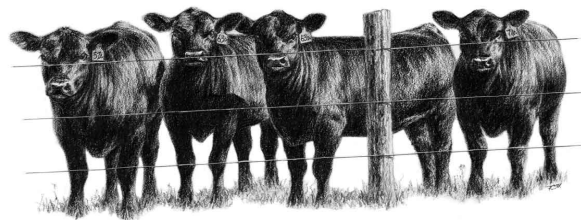
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Extension

April, 2016

Cattle Call



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Weed Control

John Cothren, Livestock Agent, Wilkes County

With the recent spring weather, many calls have come into the office on how to mix herbicides to suppress or kill those springtime weeds. Most herbicide labels give directions in ounces, pints, quarts or gallons per acre. To correctly apply the right amount of herbicide, one will need to know how many acres you can spray with your particular size sprayer. Listed below is a simple way to calibrate (Boom or Boomless) your sprayer to be certain the amount you are applying per acre will do the job.

Boom Sprayer Calibration:

1. Determine nozzle spacing.
2. Refer to the following chart to determine calibration course:
Nozzle Spacing Length of Calibration Course *



15"	272'	18"	227'	20"	204'	22"	186'
24"	170'	28"	146'	32"	127'	36"	113'
40"	102'						

3. Measure and stake off the appropriate calibration course based on nozzle spacing. The course should be on the same type of ground that will be sprayed. (Speeds may be faster on roads than on sod, changing the application rate.)
4. Drive the course in the gear and rpm you will use when actually spraying. Record the time in seconds. Do this twice and average the time.
5. Park the tractor and maintain the same rpm.
6. Turn on the sprayer and catch the water from one nozzle for exactly the same number of seconds that took to drive the calibration course.
7. Ounces caught = gallons per acre.
8. Check all nozzles. Flow rate should not vary more than 10% among all nozzles. Replace any nozzles that do not fall into this range.

*To determine calibration course for a nozzle spacing not listed, divide 340 by the spacing expressed in feet.

Example Calibration distance for 19-inch nozzle spacing = $340 \div (19/12) = 215$ feet.

Boomless Sprayer Calibration:

1. Measure effective swath width.
2. Refer to the following chart to determine calibration course:
Swath Width Length of Calibration Course *

35'	157'
40'	136'
45'	121'
50'	109'

