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The Horn Fly

I’m cognizant enough to know that not every newspaper has space to print my weekly submission each week, which is surely understandable. I’m also in tune enough to know that the topic selected to discuss each week may not be of interest to everyone. What I do hope, is that for those who have been following articles this summer realize it that flies have been a topic and this week is the third specie in a triple crown of Diptera pest effecting livestock - the Horn Fly.

Horn flies increase stress in beef cattle due to their painful bite. Elevated stress lead to reduced milk production and rate of weight gain. A collaborative research study conducted between Kansas State and Oklahoma State Universities determined stocker cattle with an insecticidal ear tag gained 0.21 more pounds per day compared to their counterparts with no horn fly control, resulting in a $12 net profit over the cost of the tag during a 90-day grazing period.

Horn flies are a small black, blood sucking fly that feeds on the back, sides and belly of animals and are a very common fly found on cattle. During the summer months, a generation of horn flies can complete their life cycle in roughly two weeks, so populations can rapidly explode. We’re approaching the time of year where a second peak in horn fly populations often occurs. Economic losses begin to occur when fly populations reach 150-200 insects per animal. Horn fly populations frequently exceed 300 flies/animal when no control measure is in place. It is not uncommon to see swarms of horn flies hoovering over and on the herd during summer.

Much like face fly and stable fly discussion from past articles, control measures are most successful with a multi-pronged approach. Simple, self-applied, control methods such as dust bags or back rubbers are effective with proper placement and usage. If cattle are accustomed to being called, baited with feed or handled in the pasture, spraying is a good option. Pour-on products are also common and effective, but cattle will need to be moved through a working facility on a monthly basis for accurate application and with limits to product duration. Additionally, rain can reduce the duration of effectiveness for spray and pour-on products.

Insecticidal ear tags are another established horn fly control method. With roughly a three to five-month window of effectiveness, timing of tagging in conjunction with horn fly prevalence is critical. Feed and mineral products containing an insect growth regulator (IGR) are another convenient control measure. Horn flies utilize fresh manure piles to lay their eggs and IGR’s work in the manure to prevent fly larvae from maturing to adult flies. These products should be in place in early spring for best results.

Each product varies in terms of application rate and number of applications within a season, so as always, be sure to read and follow label instructions. Following the label not only increases the effectiveness of the product, but helps to prevent potential development of product resistance. Rotation of chemical classes of insecticides is also helpful in resistance prevention. Keep in mind, that just because a product has a different name doesn’t necessarily mean it contains chemicals from different chemical classes.

As with all animal health related topics, your herd veterinarian is a great resource to use to discuss fly control strategies. Extension has many resources as well and your local Extension agent can be a resource. The University of Nebraska has a good publication dedicated to Horn Flies called “The Horn Fly” NebGuide G1180 that is accessible online.