



Texas A&M AgriLife Extension Service

Hopkins Dairy Notes

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Special points of interest:

- Happy 2014
- East Texas Forage Conference
Feb 28, 2014

New Year, Happy Wishes from the Extension Office Dr. Mario Villarino, County Extension Agent in Hopkins



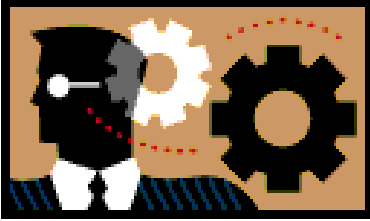
Last year came with a storm of activities and my newsletter paid the consequence since I could not write during the year as often as I wanted. I know it is important for you to have the latest information related to your dairy operation and keeping communication is the best way to accomplish this. At the end of the year 2013 the Market Administration reported 69 dairy producers in Hopkins County, ranking 11th in the state in milk production for 2013. These are impressive numbers giving the current economy where most agricultural commodities showed low or no growth during 2013. I am aware that this might not be important for the day to day operation of your dairy but as a community, our relationship to dairying remains strong. During 2013, at least two new dairies started in Hopkins County, and I have met them during educational training sessions already. Effective communication seems to be a big challenge in our society today. With so many commercial companies and related industry trying to get part of your operational dollars, it is hard to tell what makes sense long term as a farmer. Also, I noticed that social media outlets have got commercial advertisement now so it will be hard for you to find information without the sale speech needed to maintain business operations. It is important then to be selective in your sources of information, seek research based principles to adopt so you can have fundamentally sound technology to use. One of the big challenges is to adopt quality preventive medicine programs using reliable vaccines. To understand better the importance of vaccination, we must understand that there is an increase on the restrictions imposed in drug usage in dairy cattle. There are very few products available to treat lactating cattle, making the prevention of diseases more important than ever. As we move on into milk markets with more drug residues restrictions, the scrutiny for drug residues will increase. It is important to understand our preventive medicine tools to make successful vaccination programs. Look into the section “how it works” in this newsletter to learn more about how vaccines are produced. As with any agricultural product application, always follow the label recommendation included on the vaccine packaging.

Mario Villarino

Dr. Mario Villarino
 County Extension Agent
 Texas AgriLife Extension
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You can always check this and older newsletters by going to: [www. Hopkins-tx.edu/newsletters](http://www.Hopkins-tx.edu/newsletters)

How it works: Vaccines



Vaccines are medical products designed to create a defense response to the agent used. Vaccines can be made to protect animals from viral and bacterial diseases or substances produced by them (known as toxoids). Viruses are very small particles, way smaller than a cell, that usually require the organism to get infected to replicate. The viral vaccines contain complete viruses or parts of them and are useful to prevent or reduce the effect of the target virus into the animal. Some viral vaccine only reduce the effect of the virus in the animal and do not prevent infection. In fact, very few vaccines can keep animals from getting infected. Once the target of the vaccine gets into the body of the animal, self-defense mechanisms get activated and a protection response occurs. But the defense mechanisms require proteins and energy, so an animal must have proper nutrition to be able to respond to the challenge. Another important component is hormones. Some hormones normally inhibit immune responses (as in during pregnancy when defenses of the mother are usually suppressed) and a proper response cannot occur. Stress is another important factor affecting defense response since stress hormones can block defense mechanisms from the animal. Make sure you check with your veterinarian for appropriate vaccine selection before including any vaccine product in your preventive medicine program.

Coming UP!:

- **East Texas Forage Conference– February 28, 2014 at the Rains County Fairgrounds in Emory, Texas. 9:30 AM to 4:00 PM. \$15.00 3 CEU PAT (2 IPM, 1 GEN) 2 DOPA credits. Gopher Control, Legume management, Forage and Pasture Systems, hay testing, insecticide update. Call 903-885-3443 to RSVP.**

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