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KANSAS STATE UNIVERSITY
KANSAS 66506

U. S. DEPARTMENT OF AGRICULTURE

COOPERATIVE EXTENSION SERVICE



KANSAS DAIRY EXTENSION NEWS

VOLUME 15 (4)

July-August, 1994

July 21

DAIRY FIELD DAY Doug and Beth Unruh Walton, KS

"Managing bST"

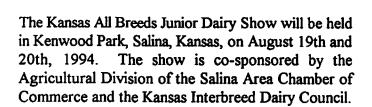
August 19-20

JUNIOR DAIRY SHOW Kenwood Park Salina, KS

(Entries due by Aug. 15)

KANSAS ALL BREEDS JUNIOR DAIRY SHOW

Salina, Kansas Kenwood Park August 19-20, 1994



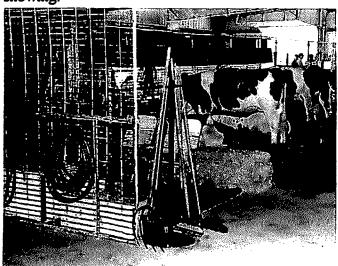
SHOW STARTS FRIDAY - August 19th ENTRIES MUST BE IN PLACE BY 4 P.M.

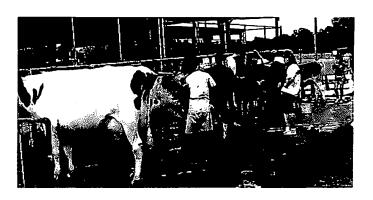
BANQUET - 6 P.M.

KENWOOD HALL

Tickets available on the grounds before the banquet.

The Show will be limited to 4-H and FFA members who are enrolled in a bonafide dairy project and National Junior Program members who have reached their 7th birthday before January 1, 1994, or are not older than 19 on January 1, 1994. However, older members of the respective breed National Junior Programs will qualify for this show, except fitting and showing.





BREEDS ELIGIBLE

AYRSHIRE□BROWN SWISS□GUERNSEY HOLSTEIN□JERSEY□MILKING SHORTHORN

ENTRY CLASSES

2111111			
Class 1	Jr. Heifer Calf	Class 7	Sr. Yearling
Class 2	Intermediate Heifer Calf	Class 8	Jr. 2 yr. olds
Class 3	Sr. Heifer Calf	Class 9	Sr. 2 yr. olds
Class 4	Summer Yearling	Class 10	3 yr. olds
Class 5	Jr. Yearling	Class 11	4 yr. olds
Class 6	Winter Yearling	Class 12	Aged Cow
	_	Class 13	Dry Cow

CASH PREMIUMS FOR BLUE, RED, AND WHITE RIBBONS

Fitting and Showing Competition

Class 15	7 & 8 yrs. 9 & 10 yrs.	Class 18	13 & 14 yrs. 15 & 16 yrs.
Class 16	11 & 12 yrs.	Class 19	17, 18 & 19 yrs.
Class 20	County Herd (5 animals any age and breed, at least two exhibitors - a family is one exhibitor.)		

OWNERSHIP & HEALTH REGULATIONS

Each animal must have health certificate signed by a veterinarian. Health requirements same as for Kansas State Fair on cows and calves...and be registered in their own name by July 1, 1994. An agent or teacher must certify ownership is correct for grade animals.



Entries will be accepted until August 15, 1994. Mail entries to the Chamber of Commerce, P.O. Box 586, Salina, KS 67402-0586.

Entomology 221

Should I buy fly parasites for my dairy?

Gerald L. Greene
Livestock Entomologist
Southwest Research Extension Center

Donald E. Mock
Extension Specialist
Livestock Entomology

Advertisements focusing on fly parasites have some dairy operators considering their use. However, there are several questions that must be answered before a decision to use can be made.

How do fly parasites work?

In order to lay an egg, the parasitic wasp stings the fly pupa. The egg hatches and the parasite larva feeds on the developing fly, which then dies.

Do fly parasites control flies?

Yes—up to 50 percent control.

What fly does the parasite control?

Stable fly, if *Spalangia nigroaenea* is the parasite species used.

House fly control is still questionable with any species of parasite available. Research in New York dairies has shown house fly reduction, but the parasite species used are not adapted to Kansas dairies. Current research may provide house fly control in the future.

What are the components of a good fly control program?

Sanitation. The most important management task to do is clean up fly breeding areas (wet manure, hay and feed), fill low areas so water drains, and remove and spread all manure. Wet manure piles produce millions of flies. Until fly breeding areas are reduced to a minimum, parasites probably will not be effective and may be a waste of money. For that matter, without sanitation, chemical insecticide use is also futile.

Where do fly parasites fit in?

When manure and feed have been cleaned up and removed from the dairy (preferably spread on fields), fly parasites can be used to reduce fly production in the small fly breeding areas left that are impossible to remove.

How many fly parasites are needed?

There is currently not a good formula or plan to predict how many parasites to release. The best estimate is 50 to 200 per week per animal. However, the fly breeding area is the key to knowing how many to release. Releasing x number per animal does not account for the fly breeding area and the number of flies being produced. Until further study of fly breeding areas and potential fly production is completed, the number to release will be a guess.

One pest manager has been using 100 per week per animal in a large dairy (2,000+ animals), which is probably the best recommendation available. But, knowing the fly breeding area is critical to this discussion and dairies with fewer than 100 animals may need to release 500 per animal. The rate of fly breeding is the key!

How often should fly parasites be distributed?

Fly parasites actively sting fly pupae for about a week in the outside environment, necessitating weekly distribution. Less frequent distribution will allow fly emergence and, once they emerge, the parasites cannot kill emerged adult flies.

How do you release fly parasites?

Fly pupae are shipped with parasites developing inside. Place them in fly breeding habitats. One sure method is to use a shovel or fork to uncover fly maggots and pupae (about 1 to 2 inches deep), place the fly parasites there and loosely replace the covering material without packing. Fly parasites placed in the damp area where flies are breeding have the best chance of surviving.

By inspecting for fly breeding areas, you will gain a better idea of the areas to clean up to reduce fly breeding.

What are the costs of stable fly feeding?

The stable fly feeds on animal blood and will irritate cattle and reduce milk production. Dairy producers have reported 20 percent reduction in milk production when flies are irritating cows. In scientific tests, stable fly feeding reduced beef animal gain by 0.2 pounds per day.

What are the costs of fly parasites?

Costs range from \$.50 to \$3.00 per 1000 parasitized fly pupae, depending on the supplier and volume ordered. A reasonable cost is probably \$.70 to \$1.20 per 1000. The \$.50 price is for a parasite species that is totally inactive in the outside environment of Kansas.

What species of fly parasites should be purchased?

Parasite releases for stable fly control should be *Spalangia nigroaenea*. Tests with releases of other parasite species have failed to reduce stable fly numbers or to increase fly pupal parasitism.

When should parasites be released?

This depends on the season, location and weather. Spring is the predominant stable fly season. Stable flies appear seven to 10 days after gnat swarms are observed. Therefore, parasite releases should begin when you see flies biting cows or calves, usually about May 1, and continue as long as temperatures exceed 100°F for about five days. Locations further west in Kansas will see stable fly numbers decline earlier in the summer than in eastern Kansas.

Weather conditions influence stable fly numbers. Cool springs delay their emergence and dry periods reduce populations. They cannot develop in dry animal or plant waste. Dry, hot conditions considerably reduce fly populations.

Where can fly parasites be purchased?

Several commercial insectaries and distributors sell fly parasites. Experience with insectary material has shown one to provide viable parasites of *Spalangia*

nigroaenea in pure colonies. Fly parasites that are not adapted to Kansas conditions have not proven to reduce fly numbers and house fly control has not been experienced. For further information contact the authors.



Cooperative Extension Service, Manhattan

MF-1159

JULY 1994

Issued in furtherance of Cooperative Extension Work, acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Richard D. Wootton, Associate Director. All educational programs and materials available without discriminatin on the basis of race, color, national origin, sex, age, or disability.

File Code: Entomology—8



'KANSAS SUMMER DAIRY FIELD DAY"

Thursday, 21 July 1994



Hosted by:

THE DOUGLAS UNRUH FAMILY

Walton, Kansas

The Theme: bST

- ☐ How it works?
- ☐ How it will affect us?

The Location

From Walton Blinker Light, 1¼ mi. West (Harvey Co. 560) and ¾ mi. North

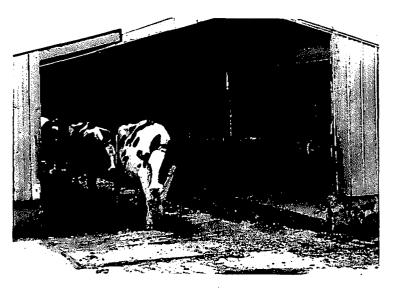
The Program

9:30 Registration: Trade Show (Visit Commercial Exhibits)

10:30 Introductions

10:45 Panel Discussion: bST





-NOON-Complimentary Lunch "Big Jim BBQ"

1:00 pm Tours: Freestalls, Self-Locking Stanchions, Computer Feeders

2:30 pm Drawing: many prizes

SPECIAL JUNIOR PROGRAM

10:30 am All about Cows and Judging Classes

HEART-OF-AMERICA UPDATE

Ås of July 1, 1994, Årkansas, Kansas, Nebraska, North Dakota and South Dakota have agreed to join or merge into Heart-of-Åmerica DHIĀ. Oklahoma DHIĀ will be voting on the matter in July.

Heart-of-America DHIA, Inc. will commence business on January 1, 1995. The original board of directors will be appointed by each state with Kansas, Nebraska and South Dakota having two directors each and the other states will have one.

Between August 1 and January 1, 1995, the new board will select a general manager and determine the place of business and laboratory location. The board will also be responsible for budgets, membership agreements, by-laws and operating policies for developing Heart-of-America DHIA, Inc.

After January 1, 1995, if Heart-of-America DHIA, Inc. should disband, the remaining assets of the organization will be divided according to the percentage of assets with which each state entered into the merger.

EXPANDING THE DAIRY FARM

Satellite - August 10th

The University of Nebraska-Lincoln, is sponsoring a satellite program about FACTORS TO CONSIDER IN EXPANDING YOUR DAIRY on August 10th. The program will run from 10:00 am to 3:30 pm.

The presentors include: Wayne Cunningham, CPA, Chino, CA: SUCCESSFUL COMPETITION IN CALIFORNIA; Ken Bailey, University of Missouri, Columbia: FACTORS TO CONSIDER IN EXPANSION; Lee Telega, Cornell: WHY SOME MANAGE BETTER THAN OTHERS; Marty Lemains, Hanford, CA, DAIRYMAN; David Reid, Hazelgreen, WI, VETERINARIAN.

The coordinates will not be known until late July. County agents will be informed through the monthly EXTENSION COMMUNICATOR, August 1st.

For interested dairy producers without satellite capabilities, Extension Dairy Science, Kansas State University, will videotape the entire program. The tapes will be loaned from Extension Dairy Science, Kansas State University, Manhattan, KS 66506-1600 or Diana Loomis (913-532-1280).





Cooperative Extension Service

Extension Animal Sciences and Industry Call Hall Manhattan, Kansas 66506-1600 913-532-5654 FAX: 913-532-5681

Dear Producer:

"A real KANSAS Tradition"... That's what the annual summer dairy field day has become! This year, Doug and Beth Unruh of Walton will be the hosts and "Managing bST" will be the theme for the panel discussion. A complimentary barbeque will be served at noon.

All youth with dairy projects are encouraged to enter the 1994 ALL BREEDS JUNIOR DAIRY SHOW at Salina, August 19-20. Check with your county extension office about details. Entry deadline is August 15.

Sincerely,

ward P. Call James R. Dunha

Extension Specialists, Dairy Science

KSU, County Extension
Councils and U.S. Department
of Agriculture Cooperating.
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materials available without
discrimination on the basis
of race, color, national
origin, sex, age, or handicap.