

NORTH CAROLINA  
 AGRICULTURAL EXTENSION SERVICE  
 ANNUAL REPORT

FOR

1953

Period covered December 1, 1952 to November 30 1953

Name of Project DAIRY EXTENSION

Covering work done by <u>J. A. Arey</u>	<u>R. B. Redfern</u>
<u>T. C. Blalock</u>	<u>R. R. Rich</u>
<u>F. R. Farnham</u>	<u>W. R. Roberts *</u>
<u>J. D. George</u>	<u>Marvin E. Senger</u>
<u>George Hyatt, Jr.</u>	<u>R. L. Wynn (Asst. Dir.) **</u>

\* Part Time  
 Percentage of time devoted to project    \*\*Report Under Separate Cover

Date Submitted:   , 195   . Signed:     
 Project Leader

Date Approved:   , 195   . Signed:     
 Asst. State Director  
 of Extension Work

Date Approved:   , 195   . Signed:     
 Director of Extension  
 Work, U. S. Department  
 of Agriculture

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PERSONNEL OF DAIRY EXTENSION SECTION 18

Name of Worker	Nature of Work	Territory
<del>Arey, J. A.</del>	<del>In Charge of Dairy Extension Retired June 30, 1953</del>	Entire State
Blalock, T. C.	Artificial Breeding Dairy Cattle Breeding	Entire State
Farnham, F. R.	Production	Western Section
George, J. D.	<del>Subs</del> Junior Dairy Program	Entire State
Hyatt, George Jr.	In Charge of Dairy Extension Since July 1, 1953	Entire State
Redfern, R. H.	Dairy Manufacturing	Entire State
Rich, R. R.	Production	Southeastern Section
Roberts, W. M.	Dairy Manufacturing (Part Time)	Entire State
Senger, Marvin E.	<del>DMA &amp; Official Testing</del> Production Testing	Entire State
Wynn, R. L. (Negro)	Production (with <del>Wagners</del> AT College)	Entire State
Pirnat, Miriam T.	Secretary	Office
<del>Pickard, Frances</del>	<del>Secretary</del> Resigned September 10, 1953	<del>Office</del>
Dowdy, Helen B.	Secretary Began September 21, 1953	Office
<del>Henny, Mable K.</del>	<del>Secretary</del>	Office
Lurley, Millicent	Secretary	Office

INTRODUCTION

The major problems outlined in the 1953 Plan of Work to be faced in developing an adequate and profitable dairy industry in North Carolina were:

1. A widely scattered cow population
2. A relatively new industry
3. A low average milk production of 4500 pounds
4. A lack of both quantity and quality roughage
5. An acute shortage of experienced dairy farm labor
6. Small farms inadequately mechanized
7. Use of low grade bulls
8. Lack of veterinarians and therefore maintenance of herd health and sanitation
9. A shortage of experienced milk plant personnel
10. A shortage of family cows especially in the eastern part of the state

These ten major problems are all covered in the following six projects on which the Dairy Extension Specialists devoted most of their time during 1953:

1. Dairy Cattle Breeding
2. Production Testing
3. 4-H Dairy Club Work
4. Dairy Farm Management
5. Cooperation with Breed Associations and other organizations
6. Dairy Manufacturing



### 1953 Results or Accomplishments

Milk production hit a new all time high in North Carolina during 1953. The number of Grade A dairymen increased from 4599 in September of 1952 to 4906 on September of 1953. A state milk commission was set up by the 1953 legislature to assist in the more orderly purchasing and marketing of milk.

Progress was made on each of the dairy extension projects in 1953. There was an increase in dairy 4-H club work, number of cows on production test, and number of cows bred artificially. Another severe drought during the summer and fall months very materially reduced the supply of roughage for winter feeding as well as the yield and improvement of pastures. On the other hand it stimulated greatly the building of trench and upright silos which in the long run will do much to improve the feed situation.

Specific details of results and accomplishments are given in the following narrative covering each project worked on during 1953

#### Project I - DAIRY CATTLE BREEDING

Since the genetic make up of an animal determines the ceiling for level of milk production it is necessary to constantly try to raise this ceiling if we are to continue to make progress. One method of doing this on a mass basis is to make available to farmers through artificial breeding the services of production proved bulls. A program of this type requires constant supervision and during 1953 T. C. Blalock, leader of this project for North Carolina devoted approximately 80 per cent of his time to this program.

#### Details of Operation

As of December 1, 1953 there were sixty-five active artificial breeding associations in operation - with but two exceptions these are all organized

as farmer cooperatives incorporated under the laws of the State of North Carolina. The other two associations, one in Forsyth and one in Transylvania county, are operated by the county and supported with county funds.

Sixty-four of the associations receive daily shipments of semen from the American Breeders Service stud at Asheville. This is a private organization owned and operated by J. Rockefeller Prentice. Actually, through an airplane shuttle arrangement, one-half of the semen is supplied by another stud owned by this same organization at Carmel, Indiana.

The local organizations are completely independent of the stud and simply enter into a contract with the stud to purchase semen at the rate of \$1.75 per first service. Nearly all of these associations are using semen from all three of the major dairy breeds - Guernsey, Holstein, and Jersey. Fourteen counties also receive Aberdeen Angus semen. They are: Alamance, Ashe, Buncombe, Cabarrus, Duplin, Pender, Guilford, Haywood, Henderson, Mecklenburg, Rockingham, Rutherford, Wake and Wayne. Seven counties, Ashe, Guilford, Henderson, Iredell, Macon, Union and Wake, are using some Brown Swiss semen.

Forsyth County operates its own stud of Guernsey and Holstein bulls and breeds only in that one county. The program has been supported by county funds since it was organized in 1946 as the first artificial breeding organization in the south.

Semen is supplied to ten state institutional herds from a stud of Holstein bulls located at the College Dairy Farm in Raleigh. This program, started in 1949, was designed to not only provide these herds with the services of better bulls, but to also serve as a source of information for genetic research. Since July 1950, these herds have all been tested by the same tester each month which should lead to more uniformity of records.

Ayrshire semen is being supplied to fourteen associations through an arrangement worked out with the Central Ohio Breeding Association of Columbus,

Ohio. The semen is flown to Indianapolis, Indiana, where it is picked up by the American Breeders Service shuttle pilot and delivered to Asheville. The semen is then repackaged and shipped out along with the rest of the organization's semen. This service started on October 1, 1953 and has proved more satisfactory than previous arrangements.

#### Short Courses

Three short courses for training inseminators were held during 1953 by the College Dairy Department, with assistance from this office. A total of sixty-six men completed the training, bringing the total number trained since 1947 to over 375.

#### Educational Methods

To operate successfully an artificial breeding program must have:

1. A well informed technician who can maintain a high conception rate.
2. A sound financial organization operated by an active board of directors.
3. A group of farmers who understand the value of the program and the part they must play in obtaining best results.

Following are some of the methods used during 1953 to try to accomplish the above objectives:

1. Technician Conferences. The inseminator can make or break a local organization. If he is to do his best job he must be contacted frequently and kept up-to-date on development in the field. These technician conferences are excellent ways of doing this.

During the past year a total of fifteen such meetings were held. They were dinner meetings, compliments of American Breeders Service, with agents in attendance as well as the technicians. The meetings were arranged so that

every technician had an opportunity to attend two conferences during the year. Among the items discussed were new developments in artificial breeding, methods of promotion, ways of improving breeding efficiency and general problems encountered by the inseminator. Time was allowed for discussion and exchange of ideas among the inseminators. At the fall meetings the technicians were asked to bring their records and inseminating kit to the meeting. The records were checked for compliance with the new rules governing artificial breeding as set up by the Purebred Dairy Cattle Association and the kits were inspected for cleanliness and neatness. A prize was awarded to the man with the best kit. It was apparent that between the time the letter regarding the meeting was received and the day of the meeting about three-fourths of the kits had been scrubbed and freshly painted.

2. Technician Contest. The contest started in September 1952 was concluded in February 1953. Awards were made to the top ten men with P. W. Scott, inseminator for the Guilford Breeding Cooperative Incorporated, declared as winner. Periodic reports were sent out during the contest showing the rating of the various inseminators, and it served to create considerable enthusiasm among the technicians. Future contests should probably be of a shorter nature with fewer items involved in determining the winner. The counties should also be split into two groups - those breeding over 750 cows per year and those breeding less than 750.

3. Promotion Week. Most breeding organizations in North Carolina need to increase their volume of business in order to be financially sound and to be able to attract better men as inseminators. Many more farmers also need to be taking advantage of the opportunities available through the artificial breeding program. In an effort to accomplish both of these objectives, it was decided by the local associations (at the technician conferences) that they would all join together and sponsor, during the week of August 17, 1953, an

"Artificial Breeding Promotion Week".

The idea was to get as much publicity as possible on artificial breeding during this one week. Stories and advertisements were carried in the papers throughout the state. For example, in the Charlotte Observer there was a one-half page advertisement on artificial breeding sponsored by local business men. Special radio programs and spot announcements were used. Milk companies were asked to send out a series of three "stuffers" in their milk checks. "Dollar bills" were distributed by merchants doing business with farmers. Circular letters were prepared by this office and sent out by the local agents. Copies of this material will be found at the end of the Dairy Cattle Breeding summary.

In addition to the above publicity, during this week each member of the board of directors was asked to spend one day riding with the inseminators contacting prospects in his community. They were often accompanied by the County Agent or dairy plant fieldmen.

This proved to be a most effective way of increasing the number of cows being bred. It is planned to hold another state wide promotion week again in 1954.

4. Radio and Television. During the year a series of six tape recorded radio programs, each dealing with a different phase of the artificial breeding program, were made by T. C. Blalock and George Hyatt, Jr., from this office and J. F. Brown and Dr. F. I. Elliott from American Breeders Service. These programs were recorded at the bull stud and were seven to eight minutes in length. Enough tapes were provided by the stud so that six complete sets of all six programs are available for loan to county agents to use on their local radio program. The idea has proved to be very popular with the agents, and the tapes have been in constant use.

One television program on artificial breeding was put on over Station WFMY-TV in Greensboro. It dealt largely with the organization and operation of the



program as well as some of the advantages offered by artificial breeding.

5. Stud Field Day. The first field day ever held at the Asheville stud was held on August 18, 1953, with over 900 people in attendance. This was the first time that most of these people had had the opportunity of visiting the stud and personally inspecting the bulls. Demonstrations on the collection and processing of semen were held and there were a number of educational exhibits on display. Two of these exhibits were prepared by this office - one on roughage and one on improving breeding efficiency. The main speaker for the program was Dr. Vic Rice who spoke on "What's Ahead in Dairy Cattle Breeding?"

6. Exhibits. A portable exhibit was prepared entitled "Better Breeding Results through Herd Management and Disease Control" showing how farmers can improve the breeding efficiency in their herds. The exhibit was displayed at various events throughout the state including all the District Junior Dairy Shows, Stud Field Day, N. C. State Fair and numerous county fairs.

The exhibit prepared for the 1952 State Fair on Artificial breeding and D. H. I. A. testing was again on display at the 1953 fair.

7. Slide sets. A new set of twenty-five colored slides illustrating some of the advantages of artificial breeding as well as pictures of some of the bulls and their daughters was prepared. These were duplicated so that six sets are available for loan to agents, technicians, vocational agricultural teachers and others to use in their meetings.

#### Progress and Results

##### 1. Number of Services

During the past year a total of approximately 46,255 cows were artificially bred in North Carolina. This represents a new high and is an increase of approximately 2500 cows over 1952.

Table I traces the growth of artificial breeding in this State since 1946 when the first association was formed.

Table I

<u>Year</u>	<u>No. of Assns.</u>	<u>No. of Counties Served</u>	<u>No. of Cows Bred</u>	<u>60-90 Day Non Return</u>	<u>% of Cows Bred Artificially</u>
1946	1	1	663	-	0.2
1947	3	3	1,050	-	0.2
1948	34	39	16,073	56.5	5.0
1949	50	55	27,531	59.0	6.6
1950	56	63	34,424	65.0	9.6
1951	63	75	42,421	66.0	12.7
1952	65	81	43,843	61.7	13.1
1953	65	74	46,255*	65.3*	13.8

\* Month of December 1953 estimated

2. Organizations

The following new associations were organized during 1953:

<u>Name of Association</u>	<u>Date Organized</u>
Franklin Breeders Cooperative, Inc.	May 1, 1953
Durham Breeders Cooperative, Inc.	July 1, 1953
Halifax Breeders Cooperative, Inc.	July 1, 1953

In addition to the above three new associations the Granville Cooperative Breeding Association, Inc., resumed operation on August 1, 1953. This organization discontinued operation on April 1, 1952, due to insufficient volume of business resulting from a very low conception rate. A new inseminator has been



trained and interest in the program in this county is at an all time high. A contributing factor in this renewed interest on the part of the farmers has been the way the first daughters from artificial breeding have produced on their farms.

Four associations found it necessary to suspend operations during the past twelve months. They were:

<u>Name of Association</u>	<u>Date Discontinued</u>
Albemarle Breeders Cooperative, Inc.	July 1, 1953
Jackson Breeders Cooperative, Inc.	May 1, 1953
Madison Breeders Cooperative, Inc.	May 1, 1953
Polk Breeders Cooperative Inc.	July 1, 1953

In three of these organizations, Albemarle, Jackson and Polk, low cow numbers are mainly responsible for the problems encountered. They were unable to keep on the job the type of men necessary to keep the program growing. In Madison county, however, according to the 1950 census, there are over 6000 dairy cows. Therefore, lack of cows was not a problem. The program never has been promoted as it should have been by the extension service in that county. Due to the extremely low number of cows being bred they too have been unable to keep a good inseminator. It must be admitted, however, that telephone service in that county is extremely poor and this problem is made worse by the size and terrain of the county.

The adjoining county, Buncombe, found it necessary to employ a second inseminator during 1953 in order to take care of their business. To help this new man breed as many cows as possible, arrangements were made to split the territory so that he would work in the north-east section of the county. This enables him to also provide service for those farmers living in the southern part of Madison county. This arrangement is working out to the advantage of everyone concerned and has actually strengthened the program in Madison county

even though they do not have a county organization.

### 3. Fall Freshening and Breeding Efficiency

Due to heavy periods of surplus milk in the summer months and shortages in the fall and winter months, increased emphasis has been placed on having cows freshen in the fall of the year. Table II shows that progress is being made in that direction since the numbers bred in November, December, and January represent approximately one-third of the total for the year.

<u>Month</u>	<u>Number Services</u>	<u>60-90 Day Non-returns</u>
September 1952	2,829	66
October	3,694	69
November	4,459	64
December	4,982	63
January 1953	4,126	64
February	3,367	65
March	3,412	64
April	3,260	67
May	2,864	68
June	3,050	66
July	3,009	63
August	2,966	66
Total or Average	42,018	65.3

A marked improvement in breeding efficiency was noted during the past year. The drop in conception rate that occurred in late 1951 and early 1952 seriously retarded the rate of growth in 1953. Reports on the number of first services for November 1953, however, indicate that these effects have

about been overcome. During this month a total of 6078 cows were bred which is 25 per cent higher than the next highest month.

#### 4. Semen Efficiency

About two years ago American Breeders Service became concerned over the inefficient way in which its semen was being used, especially in view of the fact that on the basis of research information available they had about reached their maximum level of dilutions. If the program was to continue to grow and more cows be bred, it simply meant either of two things - more bulls and necessarily bulls of lower quality had to be added or with the same amount of semen breed more cows by avoiding wastage wherever possible.

A good way to measure efficiency in the use of semen is to determine the average number of cubic centimeters of semen shipped for each service performed - including firsts and repeats. During 1952 this average for North Carolina was 4.14 and for 1953 it was 3.62 - a drop of .52 cubic centimeters of semen. No incentives were offered and no threats were made by the stud. This decrease was accomplished strictly through educational work with the inseminators and local boards of directors. Many of the large associations averaged between 2.50 and 2.75 which is considered excellent.

#### 5. Advertising

To assist the county artificial breeding programs with their advertising and at the same time give some financial help to the inseminator, arrangements have been worked out whereby automobile dealers have turned over to the local inseminator for use in his work a new truck or car. The vehicle is still owned by the motor company but operation and maintenance costs are borne by the technician. At present sixteen inseminators are driving cars or trucks furnished them by local dealers. They have been a tremendous help and in

some instances have been the difference needed to get a top man for the job.

## 6. Bull Health

One of the advantages of artificial breeding is that it aids in the control of certain diseases. However, unless the health program for the bulls in service is rigid it can be a way of rapidly spreading disease.

American Breeders Service maintains a full-time veterinarian who has set up an excellent health program for its bulls. During the past year a member of the Dairy Extension office met with the directors of the Forsyth stud for the purpose of assisting them in setting up a stud health program. The following recommendations were made:

- a. All bulls in the stud be tested at least annually for brucellosis, vibro fetus infection, and tuberculosis.
- b. At least two consecutive tests for trichomaniasis be run on all bulls currently in service and annually thereafter.
- c. All new bulls before entering the stud be tested and found free from all of the above diseases. That in addition the status of the herd from which the bull originates be carefully checked and also found to be free from these same diseases.
- d. That streptomycin (500 units per cubic centimeter of diluted semen) be added to all semen.

All of these recommendations were approved by the directors and have since been put into effect.

## 7. Ayrshire Semen

It appears that the new arrangements for providing Ayrshire semen to North Carolina are working more satisfactorily than any arrangements in the past. During October and November of this year, the first two months semen was received, over 200 cows were bred. This represents almost as many as were bred during any previous six months period. Much of this increase can be attributed to the fact that service has been very good and plans are to offer the service on a

year-round basis instead of for a six months' period.

### 8. Progeny Performance

Over one-third of all the animals shown at the 1953 District Junior Dairy shows were a result of artificial breeding. Their excellent showing offered ample proof of the desirable type in these animals resulting from artificial breeding. The judging was on the Danish system and the 316 artificial heifers were placed as follows:

149 or 47 per cent were awarded blues  
 145 or 46 per cent were awarded reds  
 22 or 7 per cent were awarded whites

A few more production records on artificial progeny are now available. While the number of daughters in two of the breeds is still small, the level of production has been very satisfactory. The number of dam-daughter pairs is still small, but the overall average shows a significant increase in the daughters in both milk and fat. Following are the averages:

#### Guernseys

	<u>Lbs. Milk</u>	<u>%</u>	<u>Lbs. Fat</u>
50 daughters, 54 recs. ave.	7,946	4.73	376
18 daughters, 19 recs. ave.	7,799	4.85	378
18 dams, 24 recs. ave.	7,800	4.67	364
Difference	- 1	+ .18	+ 14

#### Holsteins

165 daughters, 191 recs. ave.	11,545	3.56	411
81 daughters, 102 recs. ave.	11,690	3.57	417
81 dams, 171 recs. ave.	11,153	3.49	389
Difference	+ 537	+ .08	+ 28



Jerseys

	<u>Lbs. Milk</u>	<u>%</u>	<u>Lbs. Fat</u>
41 daughters, 45 recs. ave.	7,968	4.72	376
22 daughters, 26 recs. ave.	6,996	5.15	360
22 dams, 45 recs. ave.	7,294	5.07	370
Difference	-298	+0.08	-10

All Breeds

267 daughters, 290 recs. ave.	10,034	3.95	396
121 daughters, 147 recs. ave.	10,258	3.91	401
121 dams, 240 recs. ave.	9,953	3.84	382
Difference	+ 305	+0.07	+19

Following is a list of all associations that operated between November 1, 1952 and October 31, 1953, the number of cows bred, and the percentage of total cows bred artificially during this period:

<u>Association</u>	<u>No. of Cows Bred</u>	<u>% of Cows in Area Bred</u>
Alamance	1862	32
Albemarle	42	2
Alexander	904	29
Alleghany	482	6
Anson	296	10
Ashs	786	7
Avery-Carter	144	5
Buncombe	2456	24
Burke	292	11
Cabarrus	500	11
Caldwell	674	21
Caswell	417	12

<u>Association</u>	<u>No. of Cows Bred</u>	<u>% of Cows in Area Bred</u>
Catawba	986	16
Chatham	502	8
Cleveland	726	10
Coastal	823	19
Columbus-Bladen	271	5
Cumberland	368	16
Davidson	780	13
Davis	1003	22
Durham	65	3
Eastern	306	
Forsyth	2001	42
Gaston	839	17
Granville	93	2
Guilford	1860	23
Halifax	41	2
Harnett	88	3
Haywood	1086	15
Henderson	1470	32
Iredell	1426	14
Jackson	68	2
Lee	61	4
Lenoir	253	13
Lincoln	1108	23
Macon	876	25
Madison	94	1
Mecklenburg	1058	14
Mitchell	217	7



<u>Association</u>	<u>No. of Cows Bred</u>	<u>% of Cows in Area Bred</u>
Montgomery	181	14
Moore	413	18
Murphy	615	11
McDowell	204	12
Northampton	130	8
Orange	1225	27
Person	274	8
Pitt	203	11
Folk	270	19
Randolph	1082	16
Richmond	232	17
Robeson	405	11
Rockingham	941	20
Rowan	1089	15
Rutherford	740	17
Sampson	194	6
Stanly	657	18
Stokes	343	8
Surry	618	11
Transylvania	277	18
Twin	307	7
Union	1417	17
Vance-Warren	829	13
Wake	1283	20
Watauga	114	2

<u>Association</u>	<u>No. of Cows Bred</u>	<u>% of Cows in Area Bred</u>
Wayne	769	27
Wilkes	507	7
Yadkin	1031	21
Yancey	389	9

PROJECT II - PRODUCTION TESTING / C

Production testing is essential in providing the necessary information for efficient herd management. It is also basic in a good dairy extension program. Therefore, it is definitely a long-time project and must be continued year after year if it is to provide the maximum benefits to dairymen for more efficient operation. Continuous production testing of all cows is the best guide any dairyman can have to increase and maintain the production level of his herd. This, in turn, will increase his income and afford him and his family a better living. Table I is a summary of returns of cows at different production levels in N. C. Dairy Herd Improvement Associations in 1952 and will illustrate that high producing cows give higher returns.

Table I - Returns at Different Levels of Production  
North Carolina DHIA Study - 1952

<u>Pounds B*Fat</u>	<u>Value of Product</u>	<u>Cost of Roughage</u>	<u>Cost of Grain</u>	<u>Total Cost of Feed</u>	<u>Value Above Feed Cost</u>	<u>Return Over* All Costs</u>
160	\$235	\$ 74	\$ 63	\$137	\$ 98	- \$ 39
206	299	91	73	164	135	- 29
253	372	95	86	181	191	10
301	447	97	90	187	260	73
350	518	100	104	204	314	110
399	596	103	113	216	380	164
448	655	99	122	221	434	211
495	725	102	135	237	488	251

\* Assuming feed cost is one-half the cost of producing milk

This table emphasizes the advantage of high producing cows and clearly illustrates that production testing is a good measuring stick to use in improving our dairy herds. Production records are the basis for intelligent culling of low-producing and unprofitable cows, improvement of feeding and management practices, and selecting replacements from high-producing cows in planning a

sound breeding program. In addition, production records stimulate interest and a desire for better dairying. Table II and Table III will show that these factors have been effective in increasing production and returns for DHIA members.

Table II - A Summary of Average Production, Feed Cost, Value of Product and Returns Over Feed Cost For All cows in DHIA by Years

Year	Average Milk Production	Average B'Fat Production	Value of Product	Feed Cost	Value of <sup>above</sup> Product Over Feed Cost	Return Over All Costs*
1941	7188	317	\$ 264	\$ 87	\$ 177	\$ 90
1942	7019	313	271	97	174	77
1943	6676	301	279	113	166	53
1944	7215	316	324	145	179	34
1945	7545	337	364	161	203	44
1946	7798	334	393	173	220	47
1947	7291	321	423	188	235	47
1948	8048	339	487	215	272	57
1949	7799	340	495	203	292	89
1950	8076	341	485	186	299	113
1951	8158	351	500	194	306	112
1952	8126	337	507	209	298	89

\* Assuming feed cost is one-half the cost of producing milk

When the average DHIA cow is compared to the average production of all North Carolina dairy cows, the value of production testing becomes a sizeable figure and greatly exceeds its cost to the dairymen. The average production of all N. C. dairy cows in 1952 was 4500 pounds of milk and 198 pounds of butterfat. The average production for DHIA cows of the same year was 8126 pounds of milk and 337 pounds of butterfat. This is a difference of 3620 pounds of milk and 139 pounds of butterfat per cow in favor of DHIA cows. By fitting these production averages into Table I, the value of production testing to N. C. dairymen can be easily recognized. Table III will show a comparison of average

production of all N. C. dairy cows with that of cows tested in North Carolina Dairy Herd Improvement Associations over the years. It should be noted that the rate of increase in production per cow has been much greater for cows in Dairy Herd Improvement Associations.

Table III - Average Production of All Milk Cows and DHIA Cows in North Carolina

Year	All Cows		DHIA Cows	
	Milk	B'Fat	Milk	B'Fat
1930	3770	162	6298	267
1935	3450	148	6359	278
1940	3930	173	7188	317
1945	4030	181	7545	337
1950	4460	198	8076	341
1951	4450	198	8159	351
1952	4500	198	8126	337

It is impossible to determine the total influence of production testing on dairy farming in North Carolina but it should be recognized that herds with production records are demonstrating better dairy practices and providing herd sires and foundation females for other dairymen throughout the state. Outstanding bulls used for artificial breeding are selected from herds on test on the basis of production of their daughters and other animals in the pedigree. Production records are also serving as a basis for the selection of 4-H Dairy calves.

A large number of dairy cows must be on continuous test if dairymen the state over are going to be able to breed and raise high-producing herds that are more profitable to them.

#### Dairy Herd Improvement Associations

The U. S. Department of Agriculture and the N. C. Agricultural Extension Service cooperate in carrying out this project with the dairymen in the state.

County agents take an active part in organizing and guiding the local Dairy Herd Improvement Association in their respective counties. Extension dairymen train the testers, help supervise their work in the field and assist dairymen with problems confronting their association. The county agents and Extension dairymen work closely together with all problems confronting the testers and the dairymen. This should be the basic type of production testing for North Carolina dairymen.

Even though only one new association was started in 1953 considerable increase was made in number of herds and cows on DHIA during the year. As of November 30, 1953 there were 453 herds and 15,238 cows enrolled in DHIA test. This is an increase of thirty-five herds and 1,584 cows over a year ago and is the largest number of cows ever to be enrolled in DHIA in North Carolina. Table IV will show the growth of DHIA testing in North Carolina by years.

Table IV - Dairy Herd Improvement Associations in North Carolina by Years

Jan. 1 of each year	Ass'ns Active	Herds on Test		Cows on Test		Average Per Association	
		No.	%	No.	%	Herds	Cows
1925	2			648			
1926	5	88	8.0	2722	.9	17.6	544
1927	5	75	6.8	2464	.8	15.0	497
1928	5	77	7.0	2786	.9	15.4	557
1929	8	128	11.6	4235	1.5	16.0	529
1930	7	116	10.5	3719	1.3	16.5	531
1931	7	88	8.0	3154	1.0	13.0	451
1932	8	90	8.1	3089	.9	11.2	386
1933	9	89	3.1	3020	.8	10.0	336
1934	7	82	7.4	2697	.7	11.7	385
1935	6	81	7.3	2936	.8	13.5	489
1936	6	88	8.0	3713	1.0	14.7	619
1937	8	100	9.0	4389	1.2	12.5	549
1938	8	109	9.9	4800	1.4	13.6	600
1939	10	128	11.6	5475	1.6	12.8	548
1940	11	158	14.3	6471	1.9	14.4	588
1941	11	160	14.5	6913	2.0	14.5	628
1942	12	187	16.9	7986	2.2	15.6	666



Table IV Continued

Jan. 1 of each year	Ass'ns Active	Herds on Test		Cows on Test		Average Per Association	
		No.	%*	No.	%	Herds	Cows
1943	9	135	12.2	5566	1.5	15.0	618
1944	8	132	11.9	5512	1.4	16.5	689
1945	7	104	9.4	4132	1.0	14.9	590
1946	6	79	7.1	3100	.8	13.2	517
1947	15	141	12.8	4676	1.2	-	-
1948	23	-	16.4	5571	1.5	-	-
1949	22	201	18.2	6226	1.7	-	-
1950	19	283	25.6	8403	-	-	-
1951	21	265	24.0	9075	2.3	12.6	432
1952	24	298	27.0	10092	2.7	11.9	404
1953	30	418	-	13654	3.5	13.9	455

\* Based on 1940 census report of herds of 15 cows or more kept on farms for milk.

Greater emphasis was placed on reorganization of the existing DHIA testing in numerous areas throughout the state as well as to establish local testing organizations. This included increasing the average number of herds and cows in an association, and at the same time eliminating excessive travel for supervisors and making travel charges to dairymen more reasonable and uniform. Even though the average number of herds and cows is still low per association (see Table IV) some have sufficient numbers within a reasonably small area to make testing jobs somewhat more attractive salary-wise as well as in convenience, especially for married men. The low average in number of herds and cows is attributed in part to several associations that have only a part-time job. More work needs to be done, however, along this line and the increase in the enrollment in this program in the next year or two will come mainly in increasing membership of local associations rather than any great number of new associations. Table V is a listing of the active associations in North Carolina including the counties cover-



ed, and number of herds and cows in each. Figure I will show the distribution of DHIA testing throughout the state in number of cows on test by counties.

Table V - Active DHIA's in North Carolina  
November 30, 1953

<u>Association</u>	<u>County or Counties Covered</u>	<u>No. Herds</u>	<u>No. of Cows</u>	<u>Tester</u>
Alamance *	Alamance	11	415	E. Love
Alexander *	Alexander	8	152	L. Payne -organized '53
Burke-Caldwell *	Burke & Caldwell	20	492	K. Sims
Capitol #1	Durham & Person	10	493	G. Hager
Capitol #2	Wake & Granville	12	537	C. Hambeau
Catawba #1 *	Catawba	8	273	H. Mauser
Catawba #2 *	Catawba	12	321	J. Wilkinson
Davidson *	Davidson	15	428	K. Keil
Davie *	Davie	8	219	E. Greble
East Central *	Wayne, Lenoir, Onslow, Carteret, Craven & Wilson	22	887	H. Wilkie
Forsyth *	Forsyth & Stokes	24	531	E. Greble
Golden Belt	Granville, Vance, Warren, Halifax & N. Hampton, <i>Bertie</i>	11	341	M. Hughes
Iredell *	Iredell	14	427	T. C. Henderson
Macon	Macon	4	79	J. Williams
N. Eastern	Pitt, Nash, Edgecombe & Beaufort	15	469	G. Ingram
N. Western	Watauga, Ashe & Avery	13	323	E. Moretz
Orange-Chatham *	Orange & Chatham	27	941	G. Reynolds
Piedmont I-A	Guilford	21	699	R. McKoin
Piedmont I-B	Guilford & Rockingham	22	672	E. Harrison
Piedmont 2	Cabarrus & Mecklenburg	9	328	W. Black
Piedmont 6 *	Union	11	293	K. Williams
Piedmont 9	Rowan	10	355	T. S. Sloan
Randolph *	Randolph	22	800	C. Glass
S. Eastern	Cumberland, Sampson, Seetland, Robeson, Bladen, Columbus, New Hanover, Fender & Duplin	23	851	E. Rivenbark

S. Western 1	Henderson	18	726	H. Lutz
S. Western 2	Haywood	12	423	H. Francis
S. Western 3	Cherokee & Clay	10	230	W. Walker
S. Western 4	Polk, Rutherford, Gaston, Lincoln	16	745	C. R. Nichols
S. Western 5	Cleveland	11	313	J. Hunt
State Insts. *	Wake, Burke, Durham, Wayne, Watauga and Lenoir	9	727	J. D. Washburn
Tri-County *	Beke, Lee, Moore, Stanly, Montgomery	12	387	C. Burleson
Miscellaneous **	Marion, Buncombe, Caswell, Yadkin	13	361	E. McCall W. P. Walker C. Stephens
31 Ass'ns.		<u>453</u>	<u>15,238</u>	

\* Properly organized as an association

\*\* Not considered as an association. Consists of scattered herds that are not in the area of any of the associations listed.

During the year, five more of the testing groups were properly organized into testing associations with the dairymen assuming the responsibility of the operation of the association. Those setting up local organizations during the year were Catawba #1 and #2, Orange-Chatham, Piedmont #6, and Northeastern. This makes a total of sixteen associations properly organized with two others in the process of organizing. Ten of these associations are within one county each, two consists of two counties cooperating and four consists of three or more counties cooperating.

Setting up these local organizations has been a tremendous help in the supervision and the expansion of the DHIA program in North Carolina. It places more responsibility of the operation of the association with the membership where it should be. This local interest and responsibility is providing a better understanding of the entire DHIA program and how it should operate. Steps are now under way to provide satisfactory protection for DHIA members, where organizations have been established, through incorporation in some manner.

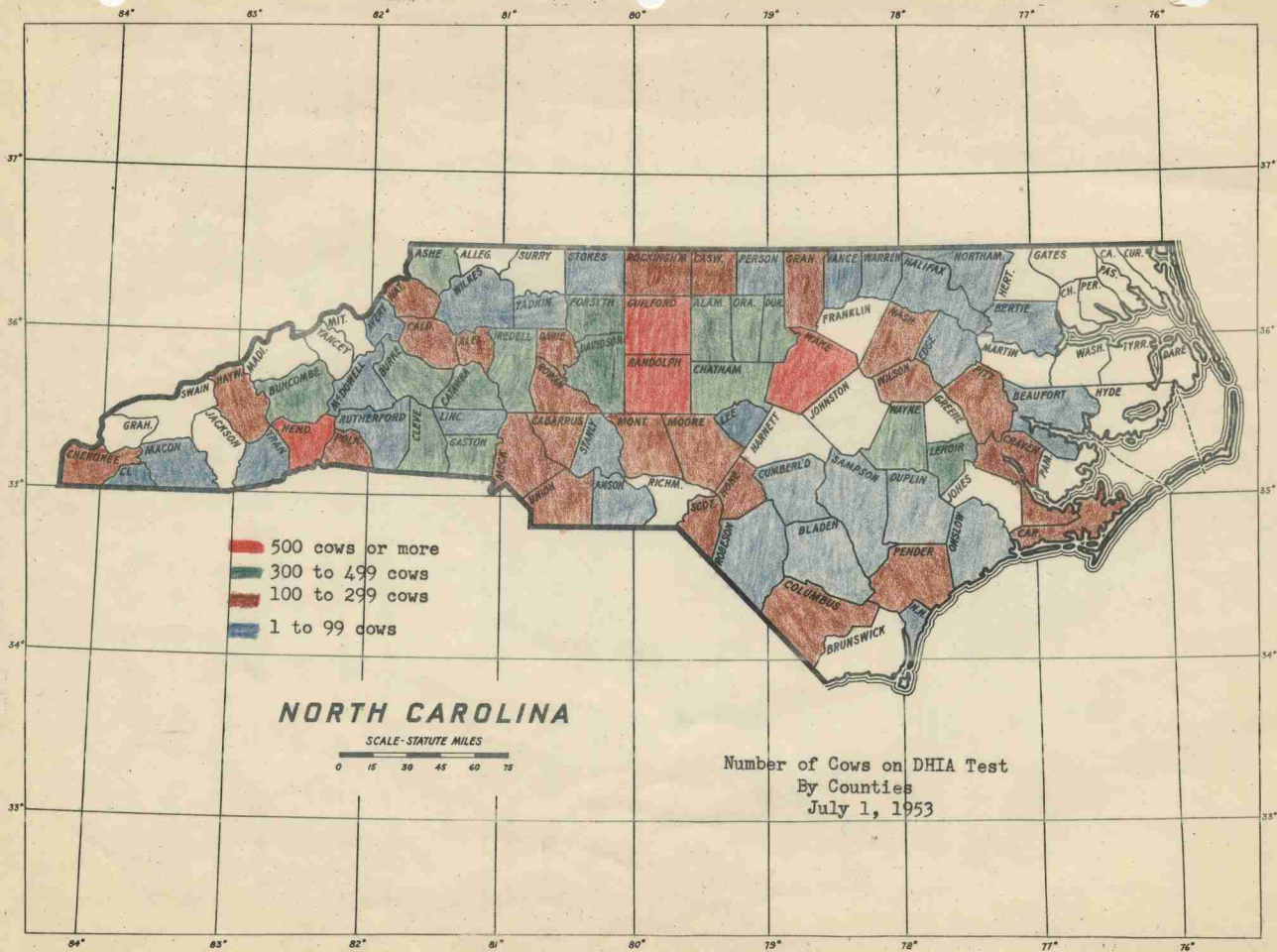


Figure I.

### Training Testers

One of the main problems in DHIA testing is securing sufficient trained personnel to meet the need for replacements in existing associations and to start new associations. This past year this problem has not been quite as acute as during the war years but it is still a major handicap to the project. To provide properly trained personnel for testing jobs, three two-week training courses were conducted during the year. Qualifications to attend the training course to become eligible to apply for a testing position consisted of farm experience, a high school education or equivalent, ability to handle simple arithmetic, and a liking for record keeping and interest in Dairy Husbandry. Only persons completing the training course satisfactorily are recommended for testing positions. In the three training courses twenty-seven men enrolled; twenty-five men completed the training course satisfactorily and sixteen were placed in North Carolina associations. Three men were from another state and returned to that state for testing work. An outline of instruction of a typical training course will be found with exhibits following the production testing section. (Exhibit I)

### Tester Conferences

One two-day DHIA Supervisor's Conference was held in August 1953. This conference was for the purpose of bringing the supervisors up to date on DHIA procedure as well as other new material relating to dairy production. Several changes were reviewed in the DHIA procedure. Such discussions aid in standardizing the work throughout the state and help to provide a better understanding in related fields. All but three testers attended the conference. To make it more convenient for them, two conferences were held, one in the western and another in eastern part of the state with the same program given at each place. A copy of the conference program will appear in the exhibits following the production testing section. In addition to the testers conference, numerous field visits were



made with testers on the job to review their record keeping and testing work. Considerable assistance was given in this way to many of their individual problems. (Exhibit II)

#### Meetings

To better acquaint the dairymen and dairy leaders with production testing and to encourage greater use of production records, production testing was one of the major subjects of discussion at twenty-seven dairy meetings of which six were annual meetings of DHIA's. Production testing was further discussed at eight different county agent meetings, three Artificial Breeding Short courses and seven other meetings of dairy cattle breeders, dairy leaders and leaders in related fields. In addition, this subject was a part of material presented at forty-one dairy schools held in forty-one counties.

#### Recognition

To recognize good dairy management practices in DHIA herds as measured by high average production and encourage greater use of DHIA records, Honor Roll Certificates were issued to DHIA members with herds averaging 350 pounds of butterfat per cow or more. One-hundred and two herds received these certificates with one averaging over 500 pounds of butterfat per cow, seven between 450 and 499 pounds, thirty between 400 and 449 pounds and sixty-four between 350 and 399 pounds. These certificates were presented in cooperation with the Purebred Dairy Cattle Association.

#### News Letter and Releases

To further encourage production testing, to summarize production records, and to bring timely material on various phases of dairying to DHIA members, the "Dairy Extension News" is published monthly. This publication is sent to each dairyman doing any type of production testing, as well as to county agricultural

agents, DHIA testers, and others who have indicated their interest in dairying. An average of approximately 950 copies was mailed each month in 1953. Representative copies are exhibited following the production testing summary. (Exhibit III and IV) Much of this material was used in radio and newspaper releases throughout the state. In addition to the statewide letter, ten local DHIA News letters are published monthly through the cooperation of the county agent and dairy testers.

To keep DHIA testers, county agents, vocational agricultural instructors, and dairymen informed of various activities in the production testing program throughout the year, thirty form letters were prepared and a total of 3300 of these letters were mailed to testers, county agents, vocational agricultural teachers, and breeders. Since many of these letters were directed to the testers relative to their activity, a special news letter to testers has been developed. This will make it possible to cover several subjects in the same letter and it is hoped that it will get more information to the testers more effectively and more efficiently. This news letter is referred to as a "Chat With the Testers" and a copy is included in the exhibits at the end of this section. (Exhibit V) A copy is also sent to the county agent that has a tester working in his county. Three of these letters have been sent out and were included in the numbers given above.

To further aid with the efficiency in supervising the production testing work twelve mimeograph and two printed forms were prepared, three mimeograph forms were revised, of which two were printed, and five mimeograph leaflets were prepared and one additional leaflet revised. This material was prepared for use by testers, county agents, and office personnel.

#### Office Procedure

Some time was used in reviewing and revising office procedure in an effort to collect and use data from production testing more efficiently. Some progress

has been made but further developments are anticipated in the coming year. A simple procedure which will give a maximum of data readily available on herds on test is badly needed and desired. This year a summary of production and feed costs for individual herds and associations was sent to county agents whose counties predominated in the association summary. In the future it is preferred that this information be sent to the county agent on a county basis.

### Contests

Through the cooperation of the National Dairy Products Corporation, two DHIA contests were sponsored; the Efficient Dairy Production Contest for DHIA members and the DHIA Supervisor's Contest for DHIA Testers. Information on each contest and a basis on which the scoring was done can be found in exhibits following this section. (Exhibits VI & VII) The 1952 winners of each contest which were announced this year are as follows:

#### Winners of Efficient Dairy Production Contest - 1952

<u>Placing</u>	<u>Name and Address</u>	<u>Prize</u>
1.	R. M. Lefler, Willard	\$30 and Bronze Plaque
2.	Russell Oxford, Taylorsville	20 " " "
3.	J. R. Nipper, Raleigh	30
4.	B. R. & G. C. Daniels, Blanch	25
5.	Fred Bahnson, Winston Salem	20
6.	Wm. E. Cummings, Summerfield	15
7.	Wm. H. Brake, Rocky Mount	10

#### Winners of DHIA Supervisors Contest - 1952

<u>Placing</u>	<u>Name</u>	<u>Association</u>	<u>Prize</u>
1.	Edwin Greble	Forsyth County	\$30 and Bronze Plaque
2.	Robert McKoin	Piedmont 1-A	20 " " "
3.	Wm. P. Walker	Southwestern	30
4.	Edmond Harrison	Piedmont 1-B	25
5.	Charles Sisk	Burke-Caldwell	20
6.	Kenneth Powell	Catawba #2	15
7.	Ervin Love	Alamance	10



Seventeen DHIA members entered the Efficient Dairy Production contest and some very interesting and helpful information was summarized from their entry questionnaires.

Some of the information summarized is given in Table VI.

Table VI - Summary of Efficient Production Contest  
1952

	Winners	All Entries
Average years con't. test	3.4	4.5
Acres of pasture per cow*	2.7	2.4
Length of pasture season	291 days	255 days
Milk per acre cleared land	2223	1830
Cows per man unit	18.4	18.2
Average number of days in milk	311	306
4% milk per cow	10,432	8663
Milk per man per year**	192,024	--
Milk per man per day**	526	--
Gallons milk per man per day**	61.2	55.3
Milk grain ratios*	1:3.9	1:3.4
Feed Cost per 100# milk*	\$2.13	\$2.33
% cows freshening in Sept., Oct., Nov.	45.7	--

\* Temporary and permanent

\*\* Milk production converted to pounds of 4% milk

#### Lactation Records

A very important phase of DHIA testing is the information it provides for the improvement of our dairy herds through breeding. Special effort has been made to encourage DHIA supervisors to report all 305 day lactation records for use in proving sires. Sires known to transmit high production to their offspring are invaluable in dairy herd improvement and it is especially important that a high percentage of sires used in dairy herd improvement associations be proved. This is the main source of information for locating and selecting sires for artificial breeding. Bull selection committees are making good use of the DHIA proved-sire service as a basis for intelligent selection of bulls to be used. It is also

essential that all 305 day lactation records be reported on as many daughters as possible of bulls used in artificial breeding so as to give added information on these bulls.

Table VII - Number of 305-Day Lactation Records Reported and Sire Data Received by Years

Year	305-Day Records		Sire Data	
	Number	Per Cent*	Proved Sire Records	Daughters Aves.
1938	194	4.0	4	
1939	562	10.3	8	
1940	988	15.0	21	
1941	868	13.0	13	
1942	475	6.0	13	
1943	330	6.0	22	
1944	308	6.0	15	
1945	192	5.0	7	
1946			3	
1947	380	8.1	10	
1948	707	12.3	14	
1949	1462	23.5	40	
1950	2807	33.4	29	
1951	2507	27.6	18	89
1952	5120	50.7	41	140
1953	5416	39.9	94	

\* Per cent of 305-Day Lactation Records reported of all cows on DHIA test as of January 1, of that year.

During 1953, 5416 305-day lactation records were reported by DHIA supervisors. This is 39.9 per cent of all cows enrolled in DHIA test as of January 1, 1953. During the same period and as a result of reporting 305-day lactation records previously, ninety-four proved sire records were received from the Bureau of Dairy Industry by the Dairy Extension Office. As this information was received through the Dairy Extension Office, it was forwarded to the owners of the bulls concerned, the dairy tester and the county agent. Table VII shows the progress that has been

made in reporting lactation records and the amount of information that has been made available in the form of proved sire reports and daughter averages.

I wish to recognize the splendid cooperation given us by Dr. J. F. Kendrick, Head Dairy Herd Improvement Investigations Division, Bureau of Dairy Industry, USDA, and his staff. They have been extremely helpful in supplying proved sire information and daughter averages to be used in the selection of superior sires for artificial breeding, as well as for individual herds. He has also provided us with production and feed cost summaries for individual herds, for associations and for the state. These summaries have proved very helpful in the dairy extension program, to dairy specialists, and county agricultural agents.

I also wish to recognize the fine cooperation of the State Dairy Cattle Breed Association, the National Dairy Products Corporation, other extension specialists, county agricultural agents, DHIA Boards of Directors, and dairy testers for their cooperation in the advancement of a sound production testing program in North Carolina.

As a member of the Dairy Records Committee of the American Dairy Science Association some assistance was given to the National DHIA testing program as well as receiving many helpful suggestions for the production testing program in North Carolina.

#### Owner-Sampler Testing

Recognizing the need for more production records as a guide to higher producing dairy herds in North Carolina, a simplified type of production testing has been developed which may appeal to dairymen that are hesitant to adopt the standard DHIA testing system as a part of their herd management practices. This type of production testing is referred to as owner-sampler testing. As the name implies, the owner will take his own milk weights and samples but the regular DHIA tester will make the butterfat tests and calculate the records.

This will be done once each month and, in general, the DHIA testing pattern will be followed. The record will provide the monthly milk and butterfat production and the butterfat test for each cow. This information will be accumulated to date each month to provide yearly production records and lactation records can be determined. The record forms will provide space for calving and breeding records for each cow. This type of testing will not, however, provide the detailed feed records (consumption and costs) nor will it show the return over feed cost as in the standard DHIA work. Since the owner-sampler testing permits the owner to take the weights and samples the resulting records will not and should not be given any publicity whatsoever. Neither can lactation records be used in the proving of sires or the sale of cattle. The owner-sampler record will be used strictly as a private record and only within the herd where it is made. Even then, this record can provide valuable help to the dairymen in culling low producing cows, selecting herd replacements and providing the basic information for an efficient feeding program. Because it does not offer as much as the standard DHIA record it can be secured at about one-half the price of the standard DHIA testing.

This type of testing has been presented to the testers and to some of the county agents in an effort to get some of it started on a limited scale. The owner-sampler testing should be administered locally as a part of the local production testing program. For this reason owner-sampler testing should be approved by the local DHIA before attempted in any county. It is important that DHIA members thoroughly understand the purpose of the owner-sampler record and that it is not competing with their standard DHIA records.

An extensive study of this type of testing was made in other states. It is believed that the owner-sampler record will serve as a stepping stone to more standard DHIA testing which we recognize to be more valuable to our dairymen. The necessary forms have been prepared to carry out this type of testing, part of which are exhibited at the end of this section. (Exhibits VIII & IX).

Herd Improvement Registry

For many years the agricultural colleges in all states have served as a disinterested party between the breeders and the breed association in supervising official testing. Each of the five breed associations has extensive official testing departments and is interested in providing the breeders with a system of records adapted to their needs. These records must be carefully supervised and are of two types, Herd Improvement Registry and Advanced Registry.

The Herd Test, as sponsored by the breed associations, is not unlike Dairy Herd Improvement Association testing because it too emphasizes continuous testing of all animals in the herd over a period of years. Throughout the United States its popularity is very definitely on the increase and more and more of the pure-bred breeders are relying on this type of test to develop a herd, build a breeding program and likewise furnish official records which are beneficial in helping them dispose of surplus breeding stock and in making up pedigrees. In most instances in North Carolina the Herd Test is run in conjunction with the regular monthly Dairy Herd Improvement Association test. In this way the same tester does all the work in one visit at a considerable saving in cost to the breeder.

Table VIII - Herds and Cows on Herd Improvement Registry Testing (As of November 30 of Each Year)

	1951		1952		1953	
	No. Herds	No. Cows	No. Herds	No. Cows	No. Herds	No. Cows
Ayrshire	15	495	15	530	15	530
Guernsey	19	438	18	466	18	461
Holstein	38	916	39	1047	38	1145
Jersey	34	1076	35	1236	28	1125
Goats	0	0	0	0	2	49
Total	106	2925	107	3279	101	3310

In the past year there has been a slight increase in the number of cows on HIR test with a decrease in the number of herds. This would indicate an increase



in size of the purebred herds. Several small herds dropped the HIR test in preference to DHIA only, while several other herds on this type of test dispersed during the year. Nine herds started HIR test during the year.

Annual recognition of high producing HIR herds is being made by three of the State Dairy Cattle Breed Associations in an effort to encourage more of this type of testing in the purebred herds as well as to get breeders to make better use of their records. As can be expected this type of testing is helping to bring about an increase in average milk and butterfat production. Since HIR testing is a continuous test on all cows it is a very helpful tool in culling dairy herds and establishing a sound breeding program for breeders.

#### Advanced Registry

The number of herds and cows on Advanced Registry test has declined rather steadily in the last two years. This type of test seems to be losing in popularity not only in North Carolina but throughout the entire United States in preference to a testing program for the entire herd. The Advanced Registry Test has been very popular with the Guernsey breed and as shown in Table IX is still in comparison with other breeds. However, in the United States ninety-three per cent of the cows in this breed are now being tested in a herd test plan.

This type of selective testing is expensive and does not lend itself to the wide spread use in practical dairy herds where the production of the entire herd is the chief concern rather than that of a few selected individuals. This type of testing is used primarily by the larger dairy cattle breeders.

Table IX - Herds and Cows on Advanced Registry Test  
(As of November 30, of Each Year)

	1951		1952		1953	
	No. Herds	No. Cows	No. Herds	No. Cows	No. Herds	No. Cows
Ayrshire	0	0	0	0	0	0
Guernsey	44	929	35	784	29	765
Holstein	0	0	0	0	1	1
Jersey	5	134	3	118	4	100
Goats	2	18	2	16	0	0
<b>Total</b>	<b>47</b>	<b>1081</b>	<b>40</b>	<b>918</b>	<b>34</b>	<b>866</b>



Although the amount of Advanced Registry testing has been and will be quite limited, many benefits are derived from it by North Carolina dairymen. These officially tested herds have been and are sources of highly bred seed stock for newly developing herds and proving established herds in many sections of the State. It provides information on maximum production that can be expected from our dairy cattle under ideal environmental conditions.

Each year the North Carolina Guernsey Breeders and the North Carolina Jersey Breeders Associations recognize outstanding production for individual cows in this type of test at their annual meeting.

Though the bulk of the Advanced Registry testing is done by DHIA supervisors, one full-time tester is employed to work largely with Advanced Registry herds, checking Herd Improvement Registry herds, and assisting with Dairy Herd Improvement work where needed to keep the records continuous.

DHIA TESTERS TRAINING COURSE

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Monday \_\_\_\_\_

- 9:30 A. M. Welcome to State College Campus - Dr. J. W. Pou, Head, Animal Industry Dept.  
10:00 A. M. Organization and Scope of DHIA Program
- 1:15 P. M. The Value of Production Testing  
2:00 P. M. Film, "John Martin and Son".  
2:30 P. M. The Supervisor's Job.

Tuesday \_\_\_\_\_

- 8:30 A. M. Explanation of Barn Book
- 1:00 P. M. Monthly Testing Period - The Centering System.  
2:00 P. M. Uniform Testing Rules for Standard DHIA.

Wednesday \_\_\_\_\_

- 8:30 A. M. Checking Barn Book and Testing Period Problems.  
9:30 A. M. Explanation of the Monthly Association Report and Testers Computer.
- 1:00 P. M. Getting Information From the Dairymen and Miscellaneous Rules and Regulations  
2:00 P. M. Explanation of DHIA Herd Book

Thursday \_\_\_\_\_

- 8:30 A. M. Checking Barn Book and Herd Book  
9:30 A. M. Identification and Tagging Program. Entries on "Register of Animals in Herd", page EDI-DHIA-16.
- 1:00 P. M. Explanation and Demonstration of the Babcock Test - Dr. R. B. Redfern, Dairy Manufacturing Specialist.

Friday \_\_\_\_\_

- 8:30 A. M. Checking Barn Book and Herd Book  
9:30 A. M. Why Milk Tests Vary - Dr. Robert B. Redfern, Dairy Manufacturing Specialist.
- 10:30 A. M. How to Average Records and Calculate Records for Nurse Cows.
- 1:00 P. M. Babcock Testing Practice - Dr. R. B. Redfern, Dairy Manufacturing Specialist.

Saturday \_\_\_\_\_

- 8:30 A. M. Babcock Testing Practice - Dr. R. B. Redfern, Dairy Manufacturing Specialist.

Monday \_\_\_\_\_

- 8:30 A. M. Checking Barn Book and Herd Book
- 9:30 A. M. 305 Day Lactation Records and Proved Sire Program.
- 1:00 P. M. Feeding the Dairy Herd - J. D. George, Extension Dairy Specialist.
- 2:30 P. M. 305 Day Lactation Records and Proved Sire Program.

Tuesday \_\_\_\_\_

- 8:30 A. M. 305 Day Lactation Records and Proved Sire Program.
- 9:30 A. M. Yearly Individual Cow Report BDI-DHIA-46
- 1:30 P. M. Checking Yearly Individual Cow Report and Filling Out BDI-DHIA-780.
- 3:00 P. M. To Dairy Barn to Test College Herd.

Wednesday \_\_\_\_\_

- 5:00 A. M. To Dairy Barn to Test College Herd and Calculate Barn Book.
- 1:15 P. M. Herd Improvement Registry Testing Rules and Regulations.
- 2:30 P. M. Herd Improvement Registry Testing Filling Out Forms.

Thursday \_\_\_\_\_

- 8:30 A. M. Checking HIR Testing Problem
- 9:30 A. M. Advanced Registry Testing (Rules and Regulations)
- 11:00 A. M. Fundamentals of Dairy Cattle Breeding - Dr. J. E. Legates, Professor Dairy Husbandry.
- 1:00 P. M. Artificial Breeding in North Carolina - T. C. Blalock, Extension Dairy Specialist.
- 2:00 P. M. Advanced Registry Testing (Filling Out Forms)
- 3:45 P. M. To Dairy Farm to Identify Cows and Review AR Testing.

Friday \_\_\_\_\_

- 8:30 A. M. Checking HIR and AR Problems.
- 9:30 A. M. Some General Dairy Herd Management Practices - George Hyatt, Jr., In Charge, Dairy Extension Office.
- 10:30 A. M. How to Figure Charges for DHIA, HIR, and AR Testing.
- 11:30 A. M. Review Over All Phases of Testing Work.
- 2:00 P. M. Examination Over Dairy Records.

Saturday \_\_\_\_\_

- 8:30 A. M. Review Herd Books and Examination Papers.
- 9:30 A. M. How to Get Started and Make Good on the Job.

DHIA TESTERS CONFERENCE

August 19 & 20 Marion, N. C.  
August 21 & 22 Raleigh, N. C.

Afternoon Session

- 1:30 P. M. Purpose of DHIA Supervisors Conference and Introductions.
- 1:45 P. M. DHIA Is On the Move.
- 2:00 P. M. Training 4-H Club Members in Production Records, J. D. George, Extension Dairy Specialist.
- 2:30 P. M. The Butterfat Testing Program of the Dairy Division, N. C. Dept. of Agriculture, C. W. Pegram, Chief of the Dairy Division.
- 3:30 P. M. Milking Parlors and Pipeline Milkers Present a Problem to DHIA Testers.
- 4:00 P. M. Does Owner-Sampler Testing Have a Place in North Carolina?
- 4:30 P. M. Checking Dairy Scales for Accuracy - J. D. George, in charge.

Evening Session

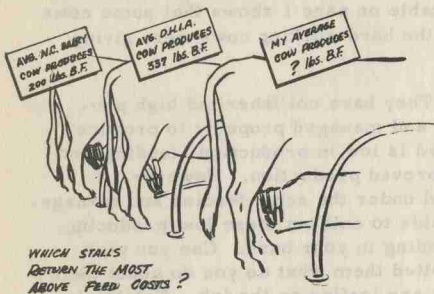
- 6:00 P. M. Dinner - Sunset Restaurant in Marion.  
Sandhill Room, S. & W. Cafeteria, Raleigh.
- 7:00 P. M. Organized Effort Will Bring Results, George Hyatt, Jr., In Charge, Dairy Extension Office.
- Presentation of awards - winners of 1952 DHIA Testers Contest - Representative of Southern Dairies, Inc.
- Film: "All the Things We've Wanted" by National Dairy Products Corp.

Morning Session

- 8:30 A. M. Evaluating Our Methods of Determining Pasture Charges, George Hyatt, Jr., In Charge, Dairy Extension Office.
- 8:45 A. M. Our Responsibilities as Official Testers.
- 9:15 A. M. Identification System in Artificial Breeding and What is Breeding Efficiency, T. C. Blalock, Extension Dairy Specialist.
- 10:00 A.M. DHIA Testing is Your Job.
1. 305 day lactation records and proving sires.
  2. Yearly DHIA summaries are important to the dairymen.
  3. DHIA contests for members and testers.
  4. Testing equipment and its care.
  5. Social security and the DHIA tester.
  6. The "Chat Sheet" and surveys.
- 11:30 A.M. Business and announcements.

By Marvin E. Senger  
Extension Dairy Specialist

## HOW HARD ARE YOUR COWS WORKING?



are lying around. The energy necessary to pump all this blood through the cow's udder is only a small part of the work she does. She has to consume and digest large quantities of feed to supply the necessary nutrients to the blood stream from which the milk is made, as well as for her many other bodily functions. If we don't provide sufficient feed for our cows, they use additional energy that could go for other purposes to find the feed they need or they lose body weight and drop off in milk. We must conclude then, that a high producing cow is truly a hard-working animal.

In the same herd many cows that are fed very similar do not produce alike. They are not bred alike. Some have inherited the characteristics of high production or hard work while others have inherited the characteristics of low production. These are the ones that are loafing on the job. The hard-working cows cannot express their ability to produce milk unless they are fed and managed properly. Therefore, we may be making some loafers out of hard working cows.

Feed Cost and Return Over Feed Cost at Different Levels of Production  
Summary of 1952 DHIA Data

Pounds of 4% milk	Pounds B'Fat	Value of Product	Total Feed Cost	Value above feed cost	Return over all costs*
4000	160	\$ 235	\$137	\$ 98	- \$ 39
5150	206	299	164	135	29
6325	253	372	181	191	10
7525	301	447	187	260	73
8750	350	518	204	314	110
9975	399	596	216	380	164
11200	448	655	221	434	211
12375	495	725	237	488	251

\* If feed cost is one-half the cost of production. This is subject to variation depending on the size of herd and production level of the herd.



During 1952 the average DHIA cow in North Carolina produced 8126 pounds of milk and 337 pounds of butterfat. The feed cost for the 1952 average DHIA cow was \$209 with a return over feed cost of \$298. This means that many cows were producing less than this amount, while others were producing much more than this. The table on page 1 shows that some cows on DHIA test were hard workers and as may be expected the hard working cows were giving the greatest return over feed cost.

The low producing cows are loafing on the job. They have not inherited high production from their ancestors or they have not been fed and managed properly to produce at their inherited level of production. If the entire herd is low in production, feeding and management practices may need some changes for improved production. However, if there are both high and low producers in the same herd under the same feeding and management, as there usually are, DHIA records are your guide to cull out these low-producing, unprofitable cows. These are the loafers that are standing in your barn. Can you pick them out with your DHIA records? After you have spotted them what do you do about them? You cannot afford to feed high-priced feed to cows that are loafing on the job. Establish a culling program in your herd now if you haven't already done so.

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### BUY HAY ON U. S. GRADES

By

O. W. Faison, Marketing Specialist  
N. C. Department of Agriculture

For the past two years North Carolina farmers have been faced with a drought. This has cut our hay production tremendously and necessitated the purchase of much outside hay. This year in North Carolina, many dairy and beef cattle farmers will be purchasing all kinds of hay.

The most important thing to remember about purchasing hay or any other commodity is knowing the quality that you are buying. To know the quality of hay it is necessary to have the hay graded. We need to purchase hay on official U. S. Hay Grades. Those buying hay on a U. S. Hay Grade basis are assured of the quality that they have ordered.

Generally, hay shippers will dispose of low quality hay to purchasers that are not known and that are not buying according to U. S. Standards. Unless you are acquainted with your shipper, make your purchase through reliable local or state handlers who have their contacts with out-of-state hay shippers who buy and sell on U. S. grades or subject to U. S. grades. The risk of delivering to you the quality of hay that you order is borne by your handler. This system will give you higher quality hay that is higher in feeding value.

The freight on a carload of hay is on a weight basis and our North Carolina farmers can not afford to pay freight on low quality hay. Don't be fooled by over enthusiastic hay salesman. Stick to the U. S. grades for an accurate measure of quality.

AYRSHIRE SEMEN NOW AVAILABLE IN NORTH CAROLINA

By

T. C. Blalock, Extension Dairyman

Plans have been completed whereby Ayrshire semen will again be made available in North Carolina beginning on October 1, 1953. While the service has been available periodically for the past two years and has worked satisfactorily this year's arrangements are by far the best yet.

The following series of questions and answers will give you the facts concerning the program.

1. When will it start?  
The first shipment will be made on October 1, 1953.
2. How long will it be available?  
From now on the service will be available throughout the entire year the same as your other breeds.
3. Where will the semen come from?  
The semen will be purchased from the Central Ohio Breeders Association of Columbus, Ohio.
4. How will it get to my county?  
The semen will be flown from Columbus, Ohio to Indianapolis where it will be picked up by the Asheville shuttle pilot and delivered to Asheville along with the rest of the semen from Indiana. At Asheville it will be placed in your regular county package and sent out as usual. This should give almost perfect service.
5. How fresh will the semen be when our technician receives it?  
It will be only about 12 hours older than the semen he regularly receives from Asheville. He will receive shipments every other day and it will contain semen from two different bulls each time.
6. What will it cost me?  
The semen will cost you the very same as the other breeds from Asheville, therefore, the technician will charge you the same for Ayrshires as for other breeds. This is a distinct advantage because in the past it has been more expensive.
7. What kind of bulls does the Central Ohio Breeders Association have?  
In my opinion they have one of the best studs of Ayrshire bulls available anywhere in the United States. Every bull is proved with a high level of production in his daughters.
8. What should I do to obtain the service?  
Contact your County Agent and he will in turn contact the Dairy Extension Office. Shipments can be started anytime after October 1, 1953.

\* \* \* \* \*

Is dairying a business or a habit with you? If it is a business with you, you are keeping records of how much each cow is producing for you and eliminating the low producing cows from your herd. If it is a habit with you, you are milking your cows night and morning with no concern of what each cow is producing or any intentions of developing a better herd.

\* \* \* \* \*

## PROVED-SIRE REPORTS, MAY AND JUNE 1953

During May and June, 1953, twenty-one proved-sire reports were received from the Bureau of Dairy Industry, Washington, D. C. This makes a total of 39 proved-sire reports received up to July 1, 1953. Copies of these reports have been sent to owners of these bulls if in North Carolina or to the DHIA herd having the most daughters in the proved-sire report. Since many other DHIA herds in North Carolina may have one or more daughters included in some of these reports a summary of each proved-sire report received in May and June is given. Bulls known to be alive are starred (\*).

AYRSHIRE		No.			
		Records	Milk	Test	Fat
Breadalbane True Line 79527	14 dau.	24	9,169	4.0	364
Born, 10-8-44; proved, 6-11-53	14 dams	57	9,803	4.0	388
Sire, 54152; dam, 256143	Difference		-634	.0	-24
Owner: Maurice T. Fero, Esperance, N. Y.					
Carolina's Admiral's Frank 78160	16 dau.	31	8,161	4.2	341
Born, 6-8-44; proved, 6-11-53	15 dau.	29	8,188	4.1	338
Sire, 63692; dam, 264079	15 dams	55	7,779	4.2	330
Owner: Betty Ayr Farm, Statesville, N.C.	Difference		+409	-.1	+8
Carolina's Admiral's War Lord 78156	17 dau.	37	8,528	4.0	343
Born, 3-4-44; proved, 6-1-53	14 dau.	31	8,664	4.0	350
Sire, 63692; dam, 168007	14 dams	52	8,931	4.0	358
Owner: Shufford Ayr Farm, Statesville, N.C.	Difference		-267	.0	-8
Forest Vu Star Governor 81191	7 dau.	15	7,021	4.0	284
Born, 2-1-45; proved, 5-20-53	7 dams	57	9,311	4.2	390
Sire, 61693; dam, 216250	Difference		-2,290	-.2	-106
Owner: Forest Vu Farm, Mt. Alto, Penna.					
Willow Grange Eddie 80279	34 dau.	47	8,121	4.2	344
Born, 2-6-45; proved, 5-20-53	18 dau.	27	8,309	4.2	345
Sire, 51943; dam, 151242	18 dams	61	8,553	4.1	352
Used in Lehigh Valley Co-op. A. B. A., Pa.	Difference		-244	+1	-7
Anchor Mere Spectacular 88808	7 dau.	8	8,844	3.9	349
Born, 2-17-47; proved, 5-20-53	7 dams	27	11,315	3.9	444
Sire, 79383; dam 200114	Difference		-2,471	.0	-95
Owner: Ernest Forrest & Son, Litchfield, Conn.					
Ohio Clever Diplomat 89916	7 dau.	7	9,678	4.1	394
Born, 1-31-47; proved, 5-20-53	7 dams	23	9,143	4.1	371
Sire, 70151; dam, 162474	Difference		+535	.0	+23
Owner: R. S. Edmiston & Sons, Mooresville, N. C.					
<u>GUERNSEY</u>					
* 384844	5 dau.	6	9,171	5.4	497
Born, ; proved, 5-22-53	5 dams	15	8,998	5.3	474
Sire ; dam,	Difference		+173	+1	+23
Owner: Dr. T. E. Sikes, Greensboro, N. C.					
* Quail Roost Master Max 397090	12 dau.	14	8,163	5.3	433
Born, 5-12-45; proved, 6-2-53	8 dau.	9	8,415	5.3	446
Sire, 212946; dam, 397373	8 dams	18	8,903	5.0	447
Owner: George Watts Hill, Rougemont, N.C.	Difference		-488	+3	-1



Guernsey proved-sire reports cont'd.

Coronation Langmore 400062	7 dau.	7	10,072	4.7	476
Born, 7-24-46; proved, 6-3-53	6 dau.	6	9,690	4.6	450
Sire, 339697; dam, 766582	6 dams	19	10,281	4.5	461
Used in American Breeders Service, N. C. (A. B. A.)	Difference		-591	+1	-11

* Fanning Fields Maxim Noah 370904	7 dau.	8	10,239	4.8	489
Born, 2-8-45; proved, 6-2-53	6 dau.	6	10,198	4.7	484
Sire, 296660; dam, 517572	6 dams	13	8,916	5.1	453
Owner: John R. Kimberly, Tryon, N. C.	Difference		+1,282	-.4	+31

Clear Springs' Honormost 384204	6 dau.	7	8,201	5.5	449
Born, 5-24-45; proved, 6-10-53	5 dau.	6	8,360	5.5	457
Sire, 338291; dam, 669323	5 dams	13	7,586	4.9	373
Owner: N. C. State College, Raleigh, N. C.	Difference		+774	+6	+84

Noble's Ben 366204	13 dau.	18	7,681	5.0	387
Born, 8-29-44; proved, 6-9-53	6 dau.	8	7,412	5.0	369
Sire, 324230; dam, 869921	6 dams	13	6,662	5.0	333
Used in Virginia A. B. A., Va.	Difference		+750	.0	+36

HOLSTEIN

Lauxmont Golden Corsair 903260	19 dau.	39	13,317	3.7	498
Born, 3-11-44; proved, 6-24-53	15 dau.	31	14,201	3.7	519
Sire, 793004; dam, 2253625	15 dams	67	12,820	3.7	475
Used in W. Va. Co-op. A. B. A., W. Va.	Difference		+1,381	.0	+44

Rosni Conqueror Ormsby 990354	6 dau.	6	13,656	3.7	507
Born, 8-12-46; proved, 6-19-53	6 dams	23	13,180	3.7	490
Sire, 847473; dam, 2075139	Difference		+476	.0	+17
Owner: Frank S. Walker, Orange, Va.					

Locvale Master Noble 957748	18 dau.	22	12,066	3.5	419
Born, 1-15-46; proved 6-18-53	17 dau.	20	11,989	3.5	417
Sire, 811986; dam, 2265173	17 dams	59	12,899	3.6	462
Owner: Fairhaven Farms, Sykesville, Md.	Difference		-910	-.1	-45

* Harden Farms King Twenty-Four 1052555	5 dau.	5	11,699	3.3	389
Born, 3-16-47; proved, 6-10-53	5 dams	14	11,666	3.4	401
Sire, 903720; dam, 2200823	Difference		+33	-.1	-12
Owner: J. K. Glenn, Winston-Salem, N. C.					

Wimbledon Inspiration Governor 997786	7 dau.	7	13,110	3.7	481
Born, 2-12-47; proved, 5-8-53	6 dau.	6	13,695	3.6	498
Sire, 933204; dam, 2340690	6 dams	15	12,336	3.6	443
Owner: J. W. Cummings & Sons, Guilford College, N. C.	Difference		+1,359	.0	+55

JERSEY

Beauty's Sparkle Designer 473423	7 dau.	8	5,391	5.1	274
Born, 1-19-46; proved, 6-12-53	5 dau.	6	5,101	5.1	260
Sire, 450796; dam, 1248569	5 dams	10	5,416	5.1	277
Owner: John C. Campbell Folk School, Erastown, N. C.	Difference		-315	.0	-17

Jersey proved-sire reports cont'd.

Design Wonderful Regent 473724	6 dau.	7	7,644	4.8	367
Born, 9-18-45; proved, 6-5-53	5 dau.	6	7,630	4.8	366
Sire, 398039; dam 1390835	5 dams	8	6,807	4.9	337
Owner: Graham Farms, Washington, Ind.	Difference		+823	-1	+29
* Sybil Owl's Carolina King 475547	13 dau.	18	9,319	5.0	469
Born, 12-28-45; proved, 5-26-53	11 dau.	15	9,360	5.0	469
Sire, 396681; dam, 1124540	11 dams	23	8,164	5.0	407
Used in American Breeders Service, N. C.	Difference		+1,196	.0	+62
(A. B. A.)					

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DHIA TESTERS' TRAINING COURSE

To Be Held November 9 to November 21, 1953

A two weeks DHIA Testers' Training Course will be held at N. C. State College November 9 to November 21, 1953, to train more men for DHIA testing jobs. If your association does not have a tester or if it will be needing a tester following this date DHIA members are urged to find a well qualified person to take this training course. Testers are needed in the Mecklenburg-Cabarrus County area, Davie-Yadkin County area, and several other counties would like to start a production testing program if testers were available.

Anyone with farm experience, a high school education or equivalent, and the ability to handle simple arithmetic readily are eligible to attend this short course. They should also be interested in record keeping and dairy husbandry. Persons working with dairy cattle wanting more experience and knowledge of dairy farming might well afford to do DHIA testing work for two or three years. Testing jobs are excellent experience for anyone interested in dairy work. Those interested in taking this training course or learning more about testing work should see their local County Agricultural Agent or write to the Dairy Extension Office, N. C. State College, Raleigh, North Carolina

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FORAGE SHOW - N. C. STATE FAIR

By

S. H. Dobson, Agronomy Extension Specialist

This fall when you load up your prize winning dairy exhibits why not include entries in the Forage Show? After all, a good livestock program depends on a good grazing hay and silage feed program. Since you are going to make the trip anyway, how about selecting a small sample of that good pasture sod, a good section of that good hay and a gallon of that good silage and make a Forage Exhibit too. See page 49 of the State Fair Catalog for details. It will be a real credit to your dairy winnings to also have a blue ribbon in the Forage Exhibits.

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CALENDAR OF DAIRY EVENTS

October 13 & 14 - Dairy Cattle Judging, Dixie Classic, Winston-Salem.

Dairy Cattle Judging at N. C. State Fair

October 21 - Ayrshire Show - Judge, Prof. S. M. Salisbury, Ohio State University.

- Guernsey Show - Judge, Prof. G. W. Trimberger, Cornell University.

- Milking Shorthorn - Judge, Mr. Ralph P. Kennedy, USDA, Beltsville, Md.

October 22 - Holstein Show - Judge, Prof. G. W. Trimberger, Cornell University.

Jersey Show - Judge, Prof. S. M. Salisbury, Ohio State University.

November 9 to 21 - DHIA Testers' Training Course, N. C. State College, Raleigh, N. C.

February 24 & 25, 1954 - Dairymen's Conference, N. C. State College, Raleigh, N. C.



HIR AND AR RECORDS

Summary of Official Testing  
August 1953

	Advanced Registry		Herd Improvement Registry	
	No. Herds	No. Cows	No. Herds	No. Cows
Ayrshire	0	0	16	558
Guernsey	31	738	16	419
Holstein	1	3	38	1094
Jersey	4	148	28	1076
Goats	0	0	2	49
Totals	36	889	100	3196

Cows completing AR and HIR records with 400 lbs.  
of fat or more on 2x milking or 500 lbs. of fat or more on 3x milking.

Owner	Cow's Name	Age	Times Milked	No. Days	Lbs. Milk	Lbs. Fat
<u>AYRSHIRE</u>						
North Carolina Sanatorium, McCain	Lady D of S	6	2x	305	11088	442
<u>GUERNSEY</u>						
Brown, A. L., Concord	Clear Springs' Fashion's Lassie	Jr2	3x	365C	10758	600*
	Clear Springs' Majesty's Grace	Sr3	3x	365	10219	582*
	Klondike Pre-Starlight	Sr2	3x	365C	11425	576*
Bumpass, R. D., Roxboro	Jadan Comet's Lady Jen	Jr2	3x	365	9510	518
	Jadan Imprint's Virginia	Jr2	3x	356C	9370	510
Carlson, C. I., Guilford College	Skuggek Butterfat Edna	5	2x	305	11706	608*
Carr, H. C., University	Guernsdel Noble Kathy	Jr3	3x	365C	8699	504*
Chatham, Thurmond, Elkin	Klondike Pearl	8	3x	365C	16598	841*
	Klondike Kareen	8	3x	365	11970	523*
Coble, George S., Lexington	Sarnia Farm Charm	5	3x	365C	19423	823*
	Spruce Run Cavalier's Viol	5	3x	365C	17777	810*
	Zimalcrest King's Rose	6	3x	365C	14478	766*
	Spruce Run Oberon's Susi	6	3x	305	13449	733*
	Spruce Run Oberon's Bella	5	3x	365	14665	717*
	Langmore A. Lucy	6	3x	305C	12679	698*
	Marshallane's C Laurel	5	3x	365	12962	687*
	Spruce Run Darelu	Sr4	3x	365	11537	665*
	John's Flossie	7	3x	365	11982	644*
	Alert's Dottie of Mt. Ararat	8	3x	365	12211	592*
	Maegeo Dynamo's Luxury	Sr3	3x	305	10606	578*
	Ideal's Claremont's Emily	5	3x	365C	12151	578*

\* Herds on Advanced Registry

## GUERNSEY'S Cont'd.

Coble, George S., Lexington cont'd.

Maegeo Emory's Aline	5	3x	305C	10285	571*
Maegeo D. Winnie	Sr3	3x	365	10445	570*
Maegeo Winner's Ruth	Sr3	3x	305	9366	513*
Kenmoor Maxim Primrose	7	3x	365	10348	512*
Pharos Baron's Quess	7	3x	305	9048	508*
Gray, Bowman & Gordon, Winston-Salem					
Two Brooks T Rose	8	2x	365	14987	776*
Hill, George Watts, Rougemont					
Skuggek Lady Flora	5	3x	365C	10886	595*
Quail Roost Proud Jan	Jr2	3x	365C	10191	500*
Huffman, R. O., Morganton					
Idlehour's Juanita	Sr4	3x	305	12512	573*
Kimberly, John R., Tryon					
Eskdale Camille's Josephine	Sr3	3x	365C	14864	751*
Corium Maxim's Iola	7	3x	365C	11712	710*
Bonnie Lee Livia of Elm Echo	6	3x	365C	14242	609*
Knight, Clarence O., Guilford College					
Knightdale No Max Queen	Sr2	2x	365	8899	455
Knightdale No Max Fern	Jr2	2x	365C	8518	433
N. C. State College of Agriculture, Raleigh					
N. C. State Renia 3d	5	2x	365	10555	426
Sikes, T. Edgar, Greensboro					
Sikco Maxim's Ina	Sr3	2x	365	9491	493*
Sikco Maxim's Marie	Sr2	2x	365	8687	483*
Sikco Maxim's Inez	Sr2	2x	365	8723	482*
Snarr, Ward, Siler City					
Wardhaven Max Poll	Sr2	2x	365	8432	469
Stokes, E. S., Linwood					
Sauratown Mountain Star	8	2x	305C	10956	500*
Hillbright King's Maxine	Sr4	2x	305C	7934	419*

HOLSTEIN

Agr. &amp; Tech. college of N. C., Greensboro

Patsy Burke De Kol	2-7	2x	365	12090	439.9
Appalachian State Teachers College, Boone					
Appalachian Bess Korndyke	5-3	2x	305	12003	467.6
Appalachian Bonheur Colantha	4-6	2x	305	13060	445.5
Baptist Orphanage of N. C., Thomasville					
B O N C Velma Jolan	7-8	2x	305	11868	457.2
B O N C Abel Irene	8-5	2x	305	13008	451.8
B O N C Dixie Sarah	3-9	2x	305	13140	432.4
B O N C Olga Homestead	2-6	2x	305	12158	424.9
Bayside Farm, Morehead City					
Willow Range Artis Segis	8	2x	365	17026	584.9
Becky Ormsby Clothilde	4-7	2x	305	15117	507.4
N A C Pabst Cassie	3-4	2x	305	12731	424.9
Bowles, Louis G., Statesville					
Sensation Design Nina	3-11	2x	305	15636	519.6
King Mooie Ormsby Hannah	3-10	2x	305	14663	501.9
Cedar Lodge Dairy, Thomasville					
Prilly Patriarch Irene	8-7	2x	305	12848	424.7
Superb White Rose Orm De Kol	4-6	2x	305	11632	418.5
Minnie Inka Posch Rag Apple	3-6	2x	322	10877	403.5
Cummings, J. W. & Sons, Guilford College					
Sally Kirk Sleepy Hazel	2-5	2x	305	11183	439.6
Glenn, J. K., Winston-Salem					
B O N C Cascade Jolan	7-4	2x	305	16978	550.4

HOLSTEIN'S Cont'd.

Glenn, J. K., Winston-Salem					
Pinky Burke Ormsby Imperial	2-8	2x	365	14906	523.7
Thackers Colantha Marie	9-2	2x	305	15733	519.2
Colantha Marie Korndyke Lass	5-10	2x	305	14646	496.5
Spring Valley Duchess Alice	4-1	2x	305	13472	441.5
Buck Run Milly Flora Maid	6-4	2x	286	10782	425.5
Graham, C. E., Linwood					
Spot Rag Apple Lochinvar	7-1	2x	305	17029	562.9
Korndyke Fon Ormsby	5-10	2x	305	12979	446.6
Badger Mound Ilo Lass	2-2	2x	365	11685	410.2
Kivett, T. G., Jamestown					
Hilltop Farm Model Aristocrat	3-1	2x	305	12450	434.1
McEachern, A. O., Wilmington					
MCE Korndyke Bessie Ormsby	3-7	2x	365	12190	445.2
Nipper, J. R., Raleigh					
Senorita May Patsy	4-4	2x	305	12029	412.8
N. C. State College of Agriculture, Raleigh					
Tensen Abbekerk Pride	11-6	2x	305	17026	581.4
North Carolina Jolan Echo	3-9	2x	304	13547	511.2
Cobles Segis Star	8-5	2x	342	13331	417.0
Reich, Dr. E. H., Lexington					
Deerspring Abbekerk Pietertje	4-10	2x	305	12230	469.7
Shuford, A. L., Jr., Newton					
B O N C Juanita	11-4	2x	365	11757	454.0
Sutherland, William, Fayetteville					
Cottonade Chieftain Inga	5-4	2x	305	11052	413.3

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ATTEND YOUR DAIRY MEETINGS

Are you an active member,  
 the kind that would be missed?  
 Or are you just contented  
 that your name is on the list?  
 Do you attend the meetings  
 and mingle with the flock?  
 Or do you stay at home  
 and criticize and knock?

So you ever go to visit  
 a member who is sick,  
 Or leave the work to just a few  
 and talk about the clique?  
 There's quite a program scheduled  
 that I'm sure you've heard about  
 And we will all appreciate it  
 if you'll come and help us out.

So come to the meetings often  
 and help with hand and heart--  
 Don't be just a member  
 dig in, do your part.  
 Think this over, member,  
 you know right from wrong.  
 Are you an active member,  
 or do you just belong?



D. H. I. A. RECORDS

Taken from the DHIA Supervisors' Monthly Reports  
ASSOCIATION SUMMARIES FOR AUGUST, 1953

ASSOCIATION	TESTER	NO. HERDS	TOTAL COWS	DRY COWS	AV. MILK	AV. FAT	AV. FEED		NO. 305 DAY CARDS REP'D
							COST 100	LBS. MILK	
Alamance	E. Love	10	394	141	456	18.9	2.13		22
Alexander	L. Payne	8	149	27	582	28.2	1.82		0
Burke-Caldwell	K. Sims	15	412	97	537	25.0	2.47		17
Capital 1	G. E. Hager	9	465	111	507	25.5	3.73		0
Capital 2	C. Rambeau	8	416	90	671	25.6	2.46		29
Catawba 1	H. mauser	8	269	58	491	21.2	2.21		0
Catawba 2	J. Wilkinson	10	256	70	501	26.1	2.95		22
Davidson	R. Lineberger	13	392	82	710	25.4	1.94		19
Davie	E. Greble	7	186	50	582	24.7	3.38		0
East Central	H. B. Wilkie	24	960	222	654	23.5	2.89		24
Forsyth	E. Greble	22	453	103	681	26.5	2.79		40
Golden Belt	M. Hughes	9	186	53	654	23.0	2.10		15
Iredell	T. C. Henderson	17	493	137	575	21.2	2.39		20
Macon	w. P. Walker & J. E. Williams	5	95	16	697	30.0	1.90		3
N. Eastern	S. Carraway	17	517	152	597	23.5	2.38		1
N. Western	E. Moretz	15	351	100	515	21.0	2.33		0
Piedmont I-A	R. McKoin	20	663	165	665	25.8	3.55		0
Piedmont I-B	E. Harrison	20	604	157	577	22.1	2.76		15
Piedmont 2	R. Hogue	12	382	114	484	20.4	2.88		36
Piedmont 6	K. Williams	14	438	79	530	22.1	2.30		12
Piedmont 9	T. S. Sloan	8	255	75	465	20.3	3.20		23
Piedmont 12	G. A. Reynolds	24	740	198	615	24.3	2.10		0
Randolph	C. Glass	21	733	192	618	24.1	2.40		16
S. Eastern *	R. Rivenbark	11	432	111	592	22.3	1.69		17
S. Western 1	H. K. Lutz	19	664	133	724	29.0	2.18		10
S. Western 2	H. Francis	12	421	75	522	22.2	2.28		0
S. Western 3	W. P. walker	10	215	44	628	27.5	2.09		3
S. Western 4	C. R. Nichols	14	668	167	589	24.3	3.12		50
S. Western 5	J. Hunt	15	475	95	549	23.3	2.88		0
State Insts.	R. Allen	9	721	140	764	25.7	2.89		88
Tri-County	C. Burleson	13	387	103	539	23.0	2.14		0
Miscellaneous	E. McCall & C. Stephens	11	338	94	501	22.5	2.80		10
TOTALS		430	14130	3451	596	23.9	2.59		492

\* All herds not included.

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TWELVE HIGH HERDS IN BUTTERFAT PRODUCTION IN DHIA, AUGUST, 1953

ASSOCIATION	OWNER	BREED	TOTAL	COWS	AV.	AV.
			COWS	DRY	MILK	BUTTERFAT
Southwestern 1	H. K. Key	H	26	2	1121	41.9
Southwestern 3	Eugene Waldrop	H	11	2	1125	41.8
Southwestern 1	Mrs. Huntington Jackson	RJ	34	5	792	39.9
Randolph County	W. F. Wright	RJ	20	1	841	39.8
Northeastern	Ray Wayne	J	43	6	819	39.4
Southwestern 1	Mountain Sanitarium	RJ	37	5	741	38.8
Piedmont I-A	J. W. Cummings & Sons	RH	21	2	1158	38.7
Macon	George T. Honnicutt	GG	10	0	1038	38.2
Alexander	Russell Oxford	RJ	17	4	643	38.1
Southwestern 4	Huntland Farms	G	32	0	709	37.4
Piedmont I-A	T. G. Kivett	H	10	2	1082	37.0
East Central	J. W. Taylor	RJ	34	8	719	37.0

## DHIA LACTATION RECORDS

305-Day Lactation Records Taken From DHIA Supervisors' August  
Reports For Cows Producing 400 Pounds or More Butterfat

ASSOCIATION	OWNER & ADDRESS	COW IDENTI- FICATION	BREED	AGE	LBS.	LBS.
	Cow's Name				MILK	FAT
Alamance County						
	N. R. Hargrove, Snow Camp "Lniune Farrfields Rag Apple"	2675935	RH	7-2	12600	432
	Mr. & Mrs. D. W. Ireland, Elon O'l Acres Dream	1715260	RJ	4-6	7010	402
	Frank Lindley, Snow Camp	403636	RA	3-0	11050	417
Burke-Caldwell						
	A. H. Bradshaw, Valdese Woodside Valiant's Carrie	911203	RG	10-10	12400	489
	R. O. Huffman, Morganton Riegeldale Lustrious Berdine	1244973	RG	2-7	7580	402*
	Shuford Mills Inc., Granite Falls Cowslip Robin Dora	1552921	RJ	6-3	7770	462
	Volunteer Baroness Pride	1381847	RJ	10-5	8660	403
Capital # 2						
	K. R. Myatt, Raleigh	1665582	RJ	4-6	9070	474
	" "	1590251	RJ	6-0	8780	462
	J. R. Nipper & Sons, Raleigh	3196468	RH	3-5	11960	470
	Pine State Creamery, Cary	792664	RG	9-2	9810	445
	" "	1001027	RG	5-10	8450	405
Catawba County # 2						
	Mike Kiser, Vale Gayeety Pontiac Hoesly	2775653	RH	5-9	13580	460
	Level Acres Hazel Bush Chieftain	2768719	RH	5-10	10500	444
	J. O. Lutz, Newton	1521324	RJ	6-10	8290	479
	A. L. Shuford, Newton Usnad Netherland Daisy	2846054	RH	5-7	13450	442
Davidson						
	C. E. Graham, Linwood	2435094	RH	8-6	15810	635
	" "	3257076	RH	7-2	16920	552
	Hobert L. Hill, Lexington	3192609	RH	6-10	9750	401
	J. Walter Lambeth, Thomasville	2708563	RH	6-11	12690	405
	Wheatmore Dairy, Trinity	2877541	RH	5-2	12490	467
	" "	3148305	RH	2-10	11240	424
	" "	2965640	RH	4-11	10910	411
Last Central						
	J. W. Taylor, Richlands	1654813	RJ	4-3	9270	521
	Carolina Beauty	1545967	RJ	6-4	9740	480
	Lynn Ruby	1700536	RJ	3-4	7730	418
	Westbrook Bros. Dairy, Four Oaks					
	Nancy Jolly	1434215	RJ	8-8	7640	403
Forsyth						
	Paul B. Blackwelder, Mocksville Twin Brook Maxim Bella	923208	RG	6-10	8450	429
	J. K. Glenn, Winston-Salem Cottonade Elsie	2556743	RH	7-6	14380	550
	Thackers Segis Colantha	2448065	RH	8-4	14530	462
	Hobson Brothers, Boonville Nico Design Stan's Delta	1778860	RJ	2-11	6600	442
	C. S. Kimel & Son, Winston Salem Kimels Carrie Jane	2956760	RH	5-9	12410	448
	Wilma Jean	55-7269	GH	6-5	10330	423



(DHIA Lactation Records, Con't.)  
(Forsyth County, con't.)

R. L. Lassiter, Clemmons					
Forest Hills Farm Cornelia	1245596	RG	2-6	6730	413
C. L. Petree, Winston Salem					
Pinky Ormsby Fayne	3393545	RH	5-6	15510	531
Pinky Ormsby Fayne			4-6	13390	403
C. H. Reed & Son, Winston Salem					
Beallgray Kite Betty	3112101	RH	4-10	10920	430
H. G. Thacker, Jr., Winston Salem					
Thackers Senator Romeo	3018306	RH	3-4	14880	506
Finky Queen Ormsby	2622210	RH	7-1	14410	506
R. F. Voss & Sons, Belews Creek					
Oaklawn Jeff's Gay	1369704	RG	2-1	8590	437
Golden Belt					
R. D. Buchan, Henderson	1299340	RG	3-6	9660	471
" "	1468214	RG	5-5	9130	417
C. C. Currin, Jr., North Side	2737203	RH	5-9	14280	519
" "	2737181	RH	5-4	13580	457
J. C. Peed, Creedmoor	2705468	RH	6-7	13270	432
" "	3097723	RH	3-6	12620	432
" "	1215185	RG	2-8	7310	407
Iredell County					
H. C. Myers, Jr., Union Grove					
Sunnyside Ormsby Fobes Della Lass	2876835	RH	4-10	11340	479
Piedmont Dairy Res. Farm, Statesville	325721	RA	6-8	10980	481
Piedmont I-B					
R. L. Bradsher, Reidsville					
Hilda	398150	RA	4-7	12130	493
Rosebud	398149	RA	4-8	10400	488
Lois	445924	RA	2-2	8610	400
S. E. Thacker & Sons, Whitsett					
Speckle	55-9049	GH	6-0	12550	504
Piedmont 2					
C. M. Lowe, Stanly					
Molly	D196649	GH	4-0	12810	451
Cat	M765768	GH	4-0	10570	409
Polly	FV103774	GH	4-0	11780	401
Piedmont 6					
C. H. Green, Charlotte	2825038	RH	6-10	11440	402
J. R. Haney, Marshville	983217	RG	7-0	9230	448
Piedmont 9					
Wade Carrigan, Mooresville					
Gippy Peerless Kate	1026754	G	5-6	7910	418
R. S. Edmiston & Sons, Mooresville					
Edmiston Farm K. Carola	466728	A	3-0	10080	429
Harold E. Myers & Son, Cleveland					
Sapona's Camilla Ann	118897	G	5-10	7950	441
Randolph County					
R. E. & Nan B. Cummings, Asheboro	3491919	RH	4-11	16350	592
B. E. Davis, Randleman					
Davis Pearl Pontiac De Kol	2736941	RH	5-5	12010	410
Southeastern					
Blake Brothers, Chadbourn					
Bessie	9925402	GH	7-0	13740	422
Lil	99308A	GH	4-0	11220	402
C. W. Hall, Millard					
Lefler Cow	55-A0562	GH	6-0	10530	406

(DHIA Location Records Con't.)

Southwestern 1					
A. W. Nesbitt, Fairview	2586013	RH	4-7	13344	446
" " "	2586013	RH	3-9	12282	414
" " "	2306920	RH	7-10	10140	400
Southwestern 3					
John C. Campbell Folk School, Brasstown					
Campbell Coin Golden Flower	1512836	RJ	9-4	7940	432
Southwestern 4					
Flintwood Farm, Union Mills	55-A0727	H	3-11	10870	457
" " "	55-A0738	H	6-0	9830	406
Robert L. Hunt, Jr., Lattimore	998185	G	6-11	10100	516
" " "	1184503	G	3-3	7780	459
Shoal Falls Farm, Inc., Hendersonville	1154146	G	3-7	7920	418
Walden Weaver, Bessemer City	2735242	H	5-9	14820	482
" " "	3261801	H	6-1	12940	435
" " "	3130578	H	3-4	11990	434
" " "	55-5967	H	3-9	12110	409
State Institutions					
Appalachian St. Teachers College,					
Boone	3010273	RH	5-0	16200	572
Caswell Tr. School, Kinston	55-6155	GH	8-8	10980	452
" " "	55-6174	GH	5-8	10870	401
N. C. School for Blind, Raleigh					
Betty	2847159	RH	6-0	15220	625
" " "	3274612	RH	2-2	12560	431
N. C. School for Deaf, Morganton	2968196	RH	4-6	12510	485
State Hospital, Butner	2636231	RH	6-10	12040	438
" " "	55-6967	GH	5-4	13720	404
State Hospital, Goldsboro	2826617	RH	5-8	13440	509
" " "	55-6731	GH	5-10	14410	504
" " "	2402247	RH	9-1	15250	483
" " "	55-6729	GH	8-0	11580	407
State Hospital, Raleigh	55-7099	GH	2-7	13720	485*
" " "	55-7096	GH	2-7	13510	445*
" " "	3393410	RH	1-9	11840	436*
" " "	55-7073	GH	2-3	12870	428*
" " "	55-7075	GH	2-2	11760	408*
" " "	1464739	RJ	8-4	7470	404
Miscellaneous					
B. R. Daniel & Son, Blanch	3042817	RH	4-0	14686	464.2
" " "	D-181921	GH	2-11	12668	444.7
" " "	D-181819	GH	7-4	9180	412.4

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STATE FAIR EXHIBITORS PLEASE NOTE:

The state Fair Catalog reads to the effect that animals shown in calf classes must be over 4 months of age and dropped after June 30, 1952. July 1 and January 1, are the base dates for computing ages. For calf classes the July 1 date will be used and animals should be 4 months of age by July 1, 1953. Thus, they must be born prior to March 1, 1953.

R. L. Waugh, Head  
Dairy Husbandry Section and Supt. of Dairy Cattle

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AGRICULTURAL EXTENSION SERVICE

DAIRY EXTENSION OFFICE  
RALEIGH, N. C.

RETURN POSTAGE GUARANTEED

Sec. 34.66, P.L. & R.  
U. S. POSTAGE

**PAID**  
Raleigh, N. C.  
Permit No. 258

100	0001	1-1	H	100000
100	0002	1-1	H	100000
100	0003	1-1	H	100000
100	0004	1-1	H	100000
100	0005	1-1	H	100000
100	0006	1-1	H	100000
100	0007	1-1	H	100000
100	0008	1-1	H	100000
100	0009	1-1	H	100000
100	0010	1-1	H	100000
100	0011	1-1	H	100000
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100	0095	1-1	H	100000
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100	0097	1-1	H	100000
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100	0099	1-1	H	100000
100	0100	1-1	H	100000

North Carolina

# DAIRY EXTENSION News

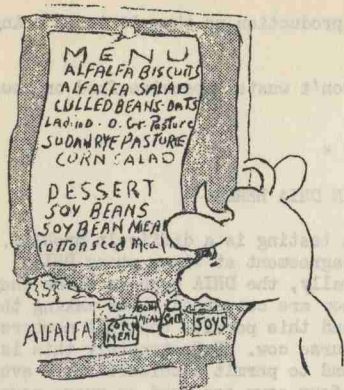


PLEGGED TO THE DEVELOPMENT OF:

- ECONOMICAL FEEDING
- HIGH PRODUCING COWS
- EVALUATING SIREs
- EFFICIENT HERD MANAGEMENT

COMPILED FROM SUPERVISORS' REPORTS BY  
DAIRY EXTENSION OFFICE, N. C. STATE COLLEGE, RALEIGH, N. C.  
MARVIN E. SENGER, EXTENSION DAIRY SPECIALIST, EDITOR





You may have to Alter Bossy's Menu  
This Fall and Winter

## DAIRY DROUGHT SUGGESTIONS

By

George Hyatt, Jr., In Charge  
Dairy Extension Section  
and

R. K. Waugh, Head  
Dairy Husbandry Section

Many dairymen are very short of feed or will be before more can be grown. This means that considerable adjusting will be necessary in many feeding systems to get the greatest production with an economical feeding program. Feeding cottonseed hulls, corn husks, or a high level of grain will not be the best feeding system generally, but it may be the most economical in some sections this fall and winter. It will depend on your hay and silage supply. Following are some suggestions that may help this acute situation.

1. If some silage or hay is available, but additional roughage is needed, cottonseed hulls and molasses may be fed. These hulls mixed with molasses can be purchased for about \$28 per ton in sacks. This would mean TDN per pound would cost about 3 cents. In comparison, TDN in good mixed hay at \$50 per ton would cost 5 cents per pound and 5 cents per pound in grain costing \$70 per ton. Hulls are worth more as a roughage than a real poor quality hay.

**Caution:** Hulls mixed with molasses should not be kept in sacks for over two to three weeks in hot weather or they will sour.

2. If the only roughage available is silage and there is an ample supply of it, you don't have to feed any hay. However, cows will milk some better if a small amount (3 to 5 pounds daily) of hay is fed.
3. If hay need be purchased, remember to buy it on a grade basis. Don't just specify the kind of hay, but even more important specify the grade, U. S. No.1, U. S. No. 2, etc. You can't afford to transport poor hay.
4. In disaster designated counties where corn, wheat, and cottonseed meal are to be made available at a much reduced price, it may be well for dairymen to feed heavy on grain and light on roughage if only a small amount of roughage is available. Rationing of roughage under these circumstances may be profitable. It may be that citrus meal can be used in grain rations to furnish bulk at a relatively cheap price. Citrus meal is usually a better buy than citrus pulp. Remember, though, if little roughage is fed, butterfat tests may be lowered.
5. Molasses may be a good buy. Feeding tests indicate that 6.5 gallons of molasses is equivalent in feed value to 1 bushel of corn. The price varies greatly over the state. It is best mixed or applied on poor quality roughage, such as cornshucks, hulls, and poor quality hay. It contains about 54 per cent TDN, which is about the same as hay, but contains practically no protein.
6. Make maximum use of fall and winter pasture from small grain.

7. Don't ruin permanent pastures so you can't graze them early next spring. When it rains take your cows off of them and let them grow.
8. Remember, it is easier and cheaper to keep production up than it is to bring it up after it has dropped.
9. Cull non-breeders and unprofitable cows. Don't waste expensive feed on cows that do not pay.

\* \* \* \* \*

#### WHAT ABOUT NURSE COWS IN DHIA HERDS

How to handle nurse cows in herds on DHIA testing is a difficult problem. It has resulted in considerable discussion and disagreement at times among DHIA members, testers, and extension workers. Generally, the DHIA members think they should be taken off the record especially if they are concerned about making the highest possible herd average. On the other hand this permits the DHIA members to shift a low producing, unprofitable cow, to a nurse cow. Unfortunately this is a practice too frequently adopted. This would tend to permit a selected herd average especially in some herds where two, three, and four cows are used as nurse cows. By omitting some cows from the record the purpose of DHIA testing is partially defeated. Every cow that freshens in a DHIA herd is to be put on the records and remain on the records until they die or are sold. If the records show that she is a low producing, unprofitable cow she should be culled from the herd rather than used as a nurse cow.

It must be recognized however, that it might be economical and wise to use some cows as nurse cows occasionally. Take the good old brood cow that has served her usefulness as a milk cow but would likely be good for two or three more calves if kept in the herd, but basically is it profitable to keep cows primarily for calves alone? A sure way to raise good calves is to use a nurse cow but there could be considerable question whether or not this is the most economical way. From an economical viewpoint high veal prices during seasons of surplus milk could also justify the use of nurse cows.

Since there is some discussion both for and against nurse cows in DHIA herds a regulation was adopted by the American Dairy Science Association in June 1952, that is somewhat of a compromise between considering nurse cows as dry cows or omitting them entirely from the yearly herd average. This regulation is as follows:

"Cows nursing calves on the testing day should be considered for the time being as dry cows. Feed records are taken as usual and recorded in the herd-record book. No milk samples are to be taken. Milk weights and tests obtained on the first testing day after calves have been removed or the last testing day before calves are put on cows should be used in computing production for the testing periods in which calves were nursed. (See rule 22 on page 3 in Herd Book).

Cows nursing calves throughout the year shall be recorded each month as dry cows and shall be included in the monthly and yearly herd averages. They shall be given production credit in the yearly herd average for one-half the average of all their production records made in previous testing years."

All DHIA testers are trained to handle records for nurse cows according to this regulation. If used by all testers in all herds alike it will be just as fair for one DHIA herd as another. Your tester will appreciate your cooperation in complying with this regulation which has been and probably always will be one of controversy.

\* \* \* \* \*



### 1953 DISTRICT JUNIOR DAIRY SHOWS

By  
J. D. George, Extension Dairy Specialist

A record number of dairy animals was shown by boys and girls at the eight District Junior Dairy Shows this fall. A total of 1,012 prize animals was paraded before the eyes of the judges. This number represents an increase of almost 200 head over last year. One new show was inaugurated this year-- the Northwestern Carolina Junior Dairy Show at Elkin. Also, the show at Murphy was broadened somewhat.

This increased number of exhibits reflects increased interest in dairying among our young people. These are truly the dairymen of tomorrow. Not only did the exhibits grow in number, but also the quality of the animals was the best ever. Of the 1,012 animals, blue ribbons were awarded on 448, red ribbons on 470, and only 94 animals were of poor enough quality to receive white ribbons. The animals as a whole were well fitted and shown, indicating that the boys and girls had spent considerable time and effort preparing for the shows.

The largest show was held at Statesville where 298 animals passed through the ring. Other shows were held at Dunn (160 animals), Asheville (85 animals), Greensboro (147 animals), Wilmington (110 animals), New Bern (56 animals), Murphy (89 animals), and Elkin (68 animals). All of these shows were financed and sponsored by local business and civic firms. The private groups contributed more than \$11,500 for premiums and other expenses connected with the shows. These groups are certainly to be commended for their support, without which the shows could not have been held.

Fitting and showmanship awards were given at all shows. Each of the State Dairy Breed Associations, i.e., Guernsey, Jersey, Holstein, and Ayrshire provided fitting and showmanship prizes at five of the District Shows. At the other shows local firms provided these awards.

Approximately 150 animals have been entered by boys and girls in the Junior Show at the North Carolina State Fair. In most cases these entries represent only blue ribbon winners in the District shows; therefore, the quality in the State Show should be outstanding.

The interest among our young people in dairying, as evidenced by the wide-spread participation in these shows, is indeed encouraging. The dairy enterprise in North Carolina should continue to grow in future years.

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#### EAST CENTRAL DHIA HELD ANNUAL MEETING

East Central DHIA members from Wilson, Wayne, Lenoir, Onslow, Craven, and Carteret Counties held their annual meeting at Kinston on October 12. The group enjoyed and appreciated a fine steak dinner as a courtesy of one of the feed dealers in that area. Even though this group covers a rather large area they are very enthusiastic about production testing and are one of the most active groups in the state. This DHIA started with 15 herds and 576 cows in May 1952 and now have 24 herds and 960 cows in the association. Out of the 24 members, 22 of them attended their annual meeting. They are considering the addition of a second tester to their association and further expanding the testing work.

After their business meeting Mr. George Hyatt, In charge, Dairy Extension Office, spoke to the group on more efficient and profitable feeding of our dairy cows.

Continued on page 5.

## PROVED-SIRE REPORTS - JULY 1953

During July, fifteen proved-sire reports were received from the Bureau of Dairy Industry, Washington, D. C. This makes a total of 54 proved-sire reports received up to August 1, 1953. Copies of these reports have been sent to owners of these bulls if in North Carolina or to the DHIA herd having the most daughters in the proved-sire report. Since many other DHIA herds in North Carolina may have one or more daughters included in some of these reports a summary of each proved-sire report received in July is given. Bulls known to be alive are starred(\*).

AYRSHIRE

		No.			
		Records	Milk	Test	Fat
Laneway Master Blend 89416	5 dau.	5	10,321	4.3	442
Born, 4-20-47; proved, 7-17-53	5 dams	27	10,504	4.2	444
Sire, 65610; dam, 213993	Difference		-183	+1	-2
Owner: Laneway Farm, Taunton, Mass.					
Pinehurst Click 80823	7 dau.	10	7,436	4.5	333
Born, 11-8-44; proved, 7-17-53	6 dau.	8	7,774	4.5	347
Sire, 55032; dam,	6 dams	19	8,437	4.0	338
Owner: Jean Hood, Goldsboro, N. C.	Difference		-663	+5	+9

GUERNSEY

Owen's Place Mona's Admiral 283808	22 dau.	54	9,643	4.8	465
Born, 8-21-39; proved, 7-7-53	7 dau.	8	9,785	4.9	477
Sire, 218349; dam, 513015	7 dams	20	8,509	4.4	372
Used in University of Wis., Wis.(A. B. A.)	Difference		+1,276	+5	+105
Quail Roost Judy's King 358695	13 dau.	19	8,695	5.1	441
Born, 6-3-44; proved, 7-7-53	11 dau.	16	8,751	5.0	442
Sire, 262465; dam, 702468	11 dams	22	7,998	4.8	386
Owner: J. C. Rawls, Franklin, Va.	Difference		+753	+2	+56
Holliknoll Maxim Prince 386139	5 dau.	6	8,930	5.4	486
Born, 4-25-46; proved, 7-22-53	5 dams	12	8,221	5.4	442
Sire, 247877; dam, 776790	Difference		+709	.0	+44
Owner: Neisler Mills, Inc., Kings Mt., N. C.					
Sky Brook Rose Maxim Faithson 369216	9 dau.	13	5,542	5.6	310
Born, 2-28-45; proved, 7-22-53	7 dau.	9	5,676	5.5	311
Sire, 265647; dam, 670597	7 dams	22	5,751	4.8	278
Owner: Randolph Shields, Culberson, N. C.	Difference		-75	+7	+33

HOLSTEIN

* Hillsboro Model Ormsby 894663	19 dau.	27	11,712	3.6	424
Born, 12-26-43; proved, 7-2-53	14 dau.	19	11,996	3.6	435
Sire, 846055; dam, 1705173	14 dams	30	12,273	3.5	434
Used in N. C. State College, N. C.(A. B. A.)	Difference		-277	+1	+1
* Gov-Inka Klaver Pride Friend Paul 874987	10 dau.	14	14,300	3.4	491
Born, 5-8-43; proved, 7-2-53	5 dau.	6	16,596	3.4	568
Sire, 730828; dam, 1847750	5 dams	18	14,533	3.5	515
Used in N. C. State College, N. C.(A.B.A.)	Difference		+2,063	-.1	+53

Holstein proved-sire reports cont'd.

Olirlich Vale Major 923209	19 dau.	30	12,582	3.9	495
Born, 4-17-44; proved, 7-2-53	11 dau.	18	12,538	4.1	508
Sire, 780059; dam, 1857196	11 dams	44	14,772	3.7	546
Used in Tri-State Co-op. A.B.A., Wis.	Difference		-2,234	+4	-38
Lamaga Xanquin Usora Jim 968544	9 dau.	9	12,941	4.1	534
Born, 4-15-46; proved, 7-6-53	6 dau.	6	12,706	4.1	527
Sire, 854298; dam, 2390465	6 dams	8	13,892	3.9	536
Used in American Breeders Service, N. C. (A.B.A.)	Difference		-1,186	+2	-9
Sir Pontiac Inka De Kol 989193	16 dau.	20	11,889	3.7	438
Born, 4-3-46; proved, 7-10-53	9 dau.	10	12,121	3.7	452
Sire, 885613; dam, 2035632	9 dams	15	12,617	3.5	439
Owner: John L. Manahan, Scottsville, Va.	Difference		- 496	+2	+13
Lauxmont L Dale 990282	7 dau.	10	10,182	3.6	362
Born, 8-13-46; proved, 7-10-53	7 dams	35	12,050	3.4	415
Sire, 820083; dam, 2332532	Difference		-1,868	+2	-53
Owner: Leroy Welk, Strasburg, Pa.					
Glenafton Rag Apple Hero 975955	14 dau.	24	11,171	3.5	387
Born, 8-12-45; proved, 7-22-53	13 dau.	22	11,212	3.5	388
Sire, 137532 CHB; dam, 460624 CHB.	13 dams	64	12,360	3.7	452
Owner: J. Mowery Frey, Lancaster, Pa.	Difference		-1,148	-2	-64

JERSEY

Basileus Royal Standard 466373	14 dau.	21	7,109	5.1	365
Born, 2-6-45; proved, 7-10-53	8 dau.	14	6,759	5.2	353
Sire, 400236; dam, 1384648	8 dams	17	9,091	5.1	465
Owner: K. R. Myatt, Raleigh, N. C.	Difference		-2,332	+1	-112
* Bets Observing Design 468487	13 dau.	18	6,460	4.9	313
Born, 3-14-45; proved, 7-22-53	12 dau.	17	6,461	4.8	312
Sire, 382932; dam, 1196705	12 dams	17	5,843	4.9	287
Owner: N. C. Agricultural Technical College, Greensboro, N. C.	Difference		+618	-.1	+25

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Continued from page 3.

Honor Roll Certificates were presented to the high herds that had completed their testing year to date in 1953.

The new officers elected were Fred Eagles, president, Wilson County, Jean Hood, vice-president, Wayne County, Jack Foss, secretary-treasurer, Lenoir County, J. W. Taylor, director, Onslow County, and W. T. Blair, director, Carteret County.

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## HIR AND AR RECORDS

## Summary of Official Testing

September 1953

	Advanced Registry		Herd Improvement Registry	
	No. Herds	No. Cows	No. Herds	No. Cows
Ayrshire	0	0	14	503
Guernsey	31	753	17	434
Holstein	1	1	38	1113
Jersey	4	126	29	1097
Goats	0	0	2	48
Totals	36	880	100	3195

Cows completing AR and HIR records with 400 lbs.  
of fat or more on 2x milking or 500 lbs of fat or more on 3x milking.

Owner	Cow's Name	Age	Times Milked	No. Days	Lbs. Milk	Lbs. Fat
<u>AYRSHIRE</u>						
Bradsher, R. L., Reidsville	A. Gay May	4-2	2x	300	9155	444
Cheek, L. R., Chapel Hill	L Merles Olive	7-11	2x	305	10579	422
Central Experiment Sta., Raleigh	C Jerrys Eva	10-7	2x	304	10198	407
Lindley, Frank, Snow Camp	Lindley Farm Nancy	3	2x	305	10776	405
Piedmont Dairy Res Farm, Statesville	C C Caroline	4+11	2x	305	10199	441
<u>GUERNSEY</u>						
Blackwelder, P. B., Mocksville	Royal Count's Belle	10	2x	365C	13045	625
Carlson, C. I., Guilford College	Skuggek Lady Shamrock	6	2x	305C	8677	507*
	Skuggek's Golden Maid	8	2x	305C	9842	501*
	Skuggek Lady Cheery	Sr4	2x	305C	9639	458*
Carr, H. C., University	Guernsdel Major's Pat	6	3x	365C	10080	559*
Coble, George S., Lexington	Langmore Idol Modernella	8	3x	305C	12941	650*
	Ideal's Beacon's Hyacinth	sr2	3x	305C	11332	561*
	Langmore Flag	6	3x	305C	10907	554*
	Wood Ford Whisper	6	3x	305C	9604	553*
	Spruce Run Shanty's Mame	6	3x	305C	10647	548*
	Chinquapin Dazzil	Sr4	3x	305C	10678	507*
Fowler, O. T., Pfafftown	Skuggek Comet Lydia	Sr3	3x	365C	9691	566*
	Grand View Majestic Ruby	Jr3	3x	365C	10781	551*
Fox, Frances Hill, Durham	Croasdaile Roger's Miss Fritz	Jr2	3x	365C	9160	505*

\*Herds on Advanced Registry



GUERNSEY'S cont'd.

Haney, J. R., Marshville					
Michael's Buttercup	9	2x	3050	8749	404
Pine State Creamery Co., Cary					
Kildaire's Florence	Jr3	2x	365	10160	482
Kildaire's Annabelle	8	2x	3450	9663	459
Jean's Kildaire Connie	5	2x	3650	9707	450
Sikes, T. Edgar, Greensboro					
Sikko Maxim's Eva	Jr4	2x	365	10287	533*
Nejasco Manuel's Valentine	Jr2	2x	365	9830	481*
Sikko Maxim's Annie	Jr2	2x	365	8985	429*

HOLSTEIN

Appalachian State Teachers College, Boone					
Appalachian Abbekerk Homestead	8-10	2x	305	14100	477.5
Appalachian Polly Creamelle	6-5	2x	303	12383	460.7
Bowles, Louis G., Statesville					
Darrow Pabst Lyons Sensation	3-8	2x	312	14036	476.2
King Mooie Ormsby Bonheur	4-2	2x	305	14647	470.7
Darrow Pabst Lyons Sensation	3-8	2x	305	13854	468.7
Ormsby Kings Grant Sensation	2-7	2x	310	9021	402.7
Cedar Lodge Dairy, Thomasville					
Superb Caroline Pride	6-9	2x	305	14801	541.0
Coble, William D., Guilford College					
Matador Bertha Toitilla	4-1	2x	305	12342	408.2
Cummings, David C., Guilford College					
Butterfield Ormsby Jaqueline	4-6	2x	305	14126	537.4
Butterfield Ormsby Sally	4-11	2x	278	12289	447.9
Cummings, J. W., and Sons, Guilford College					
Butterfield Ormsby Pearl	2-6	2x	355	12837	434.8
Davis, B. E., Randleman					
Davis Pontiac Nettle	4-11	2x	305	10148	439.6
Forsyth County Farm, Winston-Salem					
Forsyth King Bessie	6-9	2x	349	12219	447.0
Graham, C. E., Linwood					
Empress Konigen Col Walker	6-9	2x	305	15991	490.5
Johnson, C. F., Hendersonville					
Sally Carnation Acme	5-2	2x	298	11286	413.9
McEachern, A. O., Wilmington					
MCE Pietertje Fobes Korndyke	4-8	2x	305	11469	433.7
Nipper, J. R., Raleigh					
Ju Nipper Fergus Forty Seven	5	2x	305	13534	461.6
Inka Carnation Skokie	2-7	2x	305	12348	437.3
N. C. School for the Deaf, Morganton					
NCSD Bessie Walker Segis	4-7	2x	305	12351	471.6
NCSD Ormsby Senator Homest	6-5	2x	305	13262	467.7
MCE Netherland Helena	6-10	2x	305	12679	420.6
N. C. State College of Agriculture, Raleigh					
North Carolina Crystal 3d	7-1	2x	305	13218	442.3
Peed, J. C., Creedmoor					
Hedge Acreston Dale	4-11	2x	305	13561	514.9
Hedge Acreston Best	3-11	2x	350	9063	404.8
Sutherland, William, Fayetteville					
Cottonade Chieftain Inga	5-4	2x	345	11854	445.4
Cottonade Ida	2-4	2x	365	10920	407.8

JERSEY

Barker, Harrell W., Milton Green Hills Observer Louise	3-9	2x	305	9607	440
Biltmore Farms, Biltmore					
Biltmore Fillpail Harmony	2-3	2x	365	11402	587*
Biltmore Fillpail Winifred	3-7	2x	305	10027	475*
Biltmore S. S. Patty	2-2	2x	365	9577	462*
Biltmore Dandy Pattern	3-4	2x	305	8930	461*
Biltmore Fillpail Rist	2-3	2x	365	8860	455*
Biltmore Gem Dolores	3-10	2x	365	8010	454*
Cowles, Reuben R., Statesville					
Draconis Standard Dot	8-1	2x	305	8422	408
Dan Valley Farm, Blanch					
Dreamer Mildred Alicia	6-11	2x	305	8504	476
Granada Farm, Granite Falls					
Fern Just So Lady	6-2	2x	305	9147	473
Moose, E. L., Conover					
Coronation Pride Fern	6-2	2x	305	9388	436
Morrison, Cameron, Mr. & Mrs., Charlotte					
Sarah of Sharon	5-9	2x	365	12540	653*
Design's Ranwolla	3-9	3x	365	9275	524*
Mountain Sanitarium, Fletcher					
Standard Victor Rosebell	3-5	2x	296	7124	460
Myatt, K. R., Raleigh					
Jester Royal Girl Ruth	3-1	2x	305	9237	456
Royal Nancy Belle S	7-3	2x	305	8370	442
Royal Commandress Girl	6-6	2x	305	7095	406
N. C. State College of Agriculture, Raleigh					
N. C. State Laura	8-4	2x	305	7458	402
Oxford, Russell, Taylorsville					
Suse's Lucky Christine	3-2	2x	305	8314	435
Sipe, V. O., Conover					
Glenview Design Susette	5-4	2x	305	8055	407
Sunbeam Farms, Cherryville					
Sunbeam Famous Fairy	5-7	2x	305	8352	441
Festive Jessie	10-9	2x	305	8860	437

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CALENDAR OF DAIRY EVENTS

November 5 - Annual meeting N. C. Holstein Breeders Association, Shouse Ogburn  
Restaurant at the junction of Highways 66 and U. S. 52, Winston-Salem,  
North Carolina

November 9  
to 21 - DHIA Testers' Training Course, N. C. State College, Raleigh, North  
Carolina

February 24  
and 25, 1954 - Dairyman's Conference, N. C. State College, Raleigh, North Carolina.

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D. H. I. A. RECORDS

Taken From the DHIA Supervisors' Monthly Reports  
ASSOCIATION SUMMARIES FOR SEPTEMBER, 1953

ASSOCIATION	TESTER	NO. HERDS	TOTAL COWS	DRY COWS	AV. MILK	AV. FAT	FEED COST		NO. 305 DAY CARDS REP'D
							PER 100 LBS.	MILK	
Alamance	E. Love	10	383	133	458	18.5	2.41	15	
Alexander	L. Payne	9	175	27	544	26.2	2.09	0	
Burke-Caldwell	K. Sims	20	490	118	472	22.8	2.81	24	
Capital 1	G. E. Hager	9	456	90	520	26.4	3.65	0	
Capital 2	C. Rambeau	8	427	86	693	26.2	2.50	50	
Catawba 1	H. Mauser	8	269	77	405	18.4	2.65	0	
Catawba 2	J. Wilkinson	10	260	68	525	23.8	2.62	16	
Davidson	R. Lineberger	13	397	92	635	22.8	2.56	37	
Davie	E. Greble	7	191	46	621	26.5	3.60	0	
East Central	H. B. Wilkie	23	912	175	657	23.7	3.14	35	
Forsyth	E. Greble	22	474	109	665	27.0	2.92	0	
Golden Belt	M. Hughes	9	194	48	683	23.2	2.58	17	
Iredell	T. C. Henderson	16	466	128	577	22.0	3.23	40	
Macon	J. E. Williams	4	79	4	756	31.8	1.67	0	
N. Eastern	S. Carraway	19	624	140	561	21.8	2.50	10	
N. Western	E. Moretz	14	354	95	449	18.8	2.66	10	
Piedmont I-A	R. McKoin	20	640	162	664	26.3	3.70	49	
Piedmont I-B	E. Harrison	20	619	142	576	22.2	2.88	25	
Piedmont 2		5	220	65	395	18.3	3.08	20	
Piedmont 6	K. Williams	14	434	94	460	19.9	2.60	0	
Piedmont 9	T. S. Sloan	9	302	85	517	23.3	3.02	21	
Piedmont 12	G. A. Reynolds	25	809	187	604	26.8	2.60	37	
Randolph	C. Glass	21	768	193	610	24.0	2.55	23	
S. Eastern	R. Rivenbark	19	712	186	532	20.7	2.49	17	
S. Western 1	H. K. Lutz	15	557	232	683	27.7	2.51	91	
S. Western 2	H. Francis	12	423	91	425	18.4	2.88	0	
S. Western 3	W. P. Walker	15	381	86	564	26.3	2.54	54	
S. Western 4	C. R. Nichols	17	783	203	514	22.4	3.81	0	
S. Western 5	J. Hunt	12	329	87	645	20.3	3.32	0	
State Insts.	J. D. Washburn	9	715	134	753	26.1	2.70	0	
Tri-County	C. Burleson			no Report				0	
Miscellaneous	McCall & Stephens	8	205	48	614	27.8	2.84	0	
Total		422	14048	3431	576	22.6	2.89	591	

TWELVE HIGH HERDS IN BUTTERFAT PRODUCTION IN DHIA, SEPTEMBER, 1953

ASSOCIATION	OWNER	BREED	TOTAL COWS		AV. MILK	AV. BUTTERFAT
			DRY	AV.		
Southwestern 1	A. W. Nesbitt	H	14	0	1142	44.2
Miscellaneous	Reid McConnell	MH	19	0	901	40.6
Alexander Co.	Russell Oxford	RJ	17	2	691	38.8
Piedmont 12	J. W. Beard	RH&J	18	0	1058	38.5
Macon Co.	Gilmer Hinson	GG	19	0	796	38.3
Piedmont I-A	T. G. Kivett	H	11	2	1038	37.7
Southwestern 1	Mountain Sanitarium	J	39	3	726	37.1
East Central	J. W. Taylor	J	36	7	657	37.0
Golden Belt	J. C. Peed	H&G	20	4	1106	36.8
Piedmont I-A	C. I. Carlson	G	74	9	685	36.4
Southwestern 1	Mrs. H. Jackson	J	35	5	717	36.2
Miscellaneous	B. R. Daniel & Son		24	4	876	36.1



DHIA LACTATION RECORDS  
305-Day Lactation Records Taken From DHIA Supervisors' September  
Reports For Cows Producing 400 Pounds or More Butterfat

ASSOCIATION	OWNER & ADDRESS Cow's Name	COW IDENTI- FICATION	BREED	AGE	LBS. MILK	LBS. FAT
Alamance	Frank Lindley, Snow Camp	300460	RA	8-2	9710	427
	Thomas R. McPherson, Mebane					
	Prince's Joy Tempee	897277	RG	7-5	9780	424
Burke-Caldwell	C. B. Bollinger, Granite Falls	2522101	RH	8-6	13950	448
	A. H. Bradshaw, Valdese	1063573	RG	4-10	9955	435
	R. O. Huffman, Morganton	1356541	RG	3-4	10708	467
	" " " "	1211582	RG	3-3	9345	437
	Shufford Mills, Inc., Granite Falls	1628642	RJ	5-5	9130	459
	" " " "	1636263	RJ	5-3	8110	447
	" " " "	1749925	RJ	3-10	9820	418
	Edgar V. Starnes, Granite Falls	2884414	RH	5-0	12970	410
	G. B. Triplett, Lenoir	834042	RG	8-11	11301	429
Capital # 2	K. R. Myatt, Raleigh	1296615	RJ	12-1	10220	552
	" " " "	1759829	RJ	3-0	8650	461
	J. R. Nipper & Sons, Raleigh	2154045	RH	12-11	15460	491
	" " " "	3057884	RH	4-3	12120	403
	Pine State Creamery, Cary	1077895	RG	4-8	8750	442
	" " " "	925327	RG	7-6	8860	438
	" " " "	826659	RG	8-9	8230	419
	John H. Pope, Raleigh	3198672	RH	3-0	11620	410
Catawba County # 2	J. O. Lutz, Newton	1635238	RJ	5-1	8890	583
	" " " "	1648413	RJ	7-7	9840	494
	" " " "	1756044	RJ	3-1	7370	423
	A. L. Shuford, Newton	2768559	RH	5-10	12710	434
Davidson	T. J. Arnold & Son, Lexington	557735	GH	3-11	12200	493
	" " " "	557745	GH	7-0	11240	400
	Aaron & Ray Crouse, Lexington	557746	GH	4-11	14780	487
	" " " "	557747	GH	5-0	15080	478
	C. E. Graham, Linwood	2712143	RH	6-2	14480	503
	" " " "	3178798	RH	2-5	10500	426
	" " " "	3094196	RH	3-11	11710	412
	J. Walter Lambeth, Thomasville	2608610	RH	10-0	12970	546
	" " " "	2608608	RH	10-0	16360	517
	" " " "	2708562	RH	7-2	12070	416
	" " " "	2604766	RH	7-10	12910	406
	C. F. Motsinger & Son, Winston-Salem	559344	GH	4-0	10880	434
	Mills Home, Thomasville	2838712	RH	5-10	11610	409
	" " " "	3257002	RH	2-8	11270	409
	Wheatmore Dairy, Trinity	2768935	RH	5-9	14770	550
	" " " "	2659517	RH	7-1	10540	463
East Central	W. C. Cox, Richlands	558355	G	3-11	8910	439
	" " " "	1422003	RJ	9-6	8520	407
	James Foss, LaGrange					
	Hard Roller	C18306	H	5-0	12510	438
	Nerviene	558940	H	4-0	10080	434
	" " " "	558931	H	5-0	11830	410
	" " " "	559008	H	4-0	9960	403
	Slim	559013	H	5-0	10410	400
	Ring Teat					



(DHIA Lactation Records Cont.  
 (East Central cont.))

Jean Hood, Goldstoro					
Nancy	558360	GH	5-6	10960	438
J. W. Taylor, Richlands					
Frimrose	1724738	RJ	3-1	8250	421
Iredell					
Louis Bowles, Statesville					
Veeman Pontiac Goliah Gertrude	2663152	RH	6-10	13940	458
Ju Nipper Fergus Katie	2899822	RH	5-4	13820	433
	2775032	RH	5-10	12710	428
	3215441	RH	2-5	12200	415
Korndyke Kings Grant Ormsby	3215439	RH	2-4	10090	404
Frank Hamrick, Union Grove					
Lady Bessie Creamella Inka	3178018	RH	3-6	12620	402
J. F. Ingram, Jr., Statesville					
Klatz Dale Bonheur Prilly	2888159	RH	4-11	12710	419
H. C. Myers, Jr., Union Grove					
Grassy Meadows Model Melchoir	3044269	RH	3-9	12500	427
	3011823	RH	4-1	10550	404
Ralph Shuford, Statesville					
Reymann Douglas Zella	302351	RA	7-10	11250	432
Homer Williams, New Hope					
Pal-Mar Pattie, Imp.	366643	RA	4-11	11880	484
Macon					
George E. Doster, Franklin	55A3205	GH	2-5	10140	401
Miscellaneous					
B. R. Daniel & Son, Blanch	52H6403	GH	5-7	9749	473
M. F. Shore & Son, Hamptonville	1050863	RG	4-5	8380	455
G. G. Edwin's Greta	1278169	RG	2-3	7790	449*
Grassy Grove Edwin's Hazel	1278170	RG	2-2	8050	400*
Ray Hayne, Washington	1950622	J	4-4	10340	582
" " "	1950622	J	3-4	9150	506
" " "	1950625	J	4-1	9700	503
" " "	1950625	J	2-2	9800	497
" " "	1950623	J	4-3	10650	486
" " "	1950640	J	2-0	10040	480
" " "	1950638	J	2-2	9150	451
Fiedmont I-A					
C. I. Carlson, Greensboro					
Stronghearts Ruth	877313	RG	8-0	12680	570
Skuggek Comet Madeline	1139067	RG	3-10	11600	556
Skuggek Noble Hope	1157944	RG	3-7	10770	537
Skuggek Noble Etta	1145150	RG	4-4	10060	510
	1196855	RG	3-1	8010	448
W. A. Coble, Guilford College					
Segis Mary Pride	3025334	RH	4-1	11870	413
William D. Coble, Guilford College					
Minnie Ormsby Fobes Sensation	2764463	RH	6-0	13480	486
David C. Cummings, Guilford College	2868571	RH	6-1	11740	420
W. E. Cummings, Summerfield					
Colantha Rolling Acres Lilly	3388920	RH	4-0	12370	461
Janill Empress Kitty	3388922	RH	3-0	11120	425
T. G. Kivett, Jamestown					
Colantha Echo of Hardendale	3702849	RH	2-11	13300	485
Knight Bros., Guilford College					
Knightdale Ideal's Dasia	751839	RG	10-3	10110	484
Knightdale Count Marie	945299	RG	6-9	8980	478

\* 3x milking all or part lactation

(DHIA Lactation Records Con't.)  
(Piedmont I-A Con't.)

H. R. Sampson, Guilford					
Bessie	555655	GH	8-11	12350	448
Bessie	559655	GH	7-5	12120	441
Hodgin	557188	GH	3-11	10450	429
Hot Shot's Dream	1714842	RJ	3-6	8640	462
Piedmont I-B					
R. L. Bradsher, Reidsville					
Rosebud	398149	RA	4-8	10400	488
Jessie	382378	RA	4-7	10900	455
Gloire	388263	RA	6-6	10210	430
S. R. Clinard, High Point					
Maggie	2836654	RH	5-7	13560	409
Sam Thacker & Sons, Whitsett					
Emma # 2	559047	GH	6-0	12950	526
Piedmont 2					
George Hoover, Charlotte					
Noble Onyx Belle	1656767	RJ	5-7	9500	468
Gold Boy's Ethel	1556855	RJ	7-4	7140	432
M. A. Macaulay, Huntersville	55A0312	GH	5-0	10350	409
Piedmont 9					
R. S. Edmiston & Sons, Mooresville					
Edmiston Farm Snow White	398203	A	4-4	9530	403
W. C. London, Mooresville					
London's White Frosty	402369	A	4-11	11220	463
Pinehurst Merle's Willa	281360	A	9-2	10160	463
Piedmont 12					
J. B. Fearrington, Pittsboro					
J. B. Fearrington, Pittsboro	3232007	RH	4-7	14270	498
L. B. Kellogg, Pittsboro	1755279	RJ	3-11	9530	513
" " " "	1680745	RJ	4-2	7960	446
Lutterlok and Williams, Pittsboro	3107435	RH	3-5	10460	400
Charles Stanford, Chapel Hill	2421626	RH	8-6	12700	467
" " " "	2906459	RH	6-6	11550	414
" " " "	2708142	RH	7-7	12010	403
Edward Snarr Siler City					
Donna Polly	1037867	RG	7-8	9660	492
Molly Leak	1064958	RG	5-1	8560	415
Teer Bros., Chapel Hill					
Model	3169793	RH	5-0	12300	447
	3231340	RH	3-1	8910	403
Randolph					
R. L. Farlow, Archdale					
R. L. Farlow, Archdale	3171672	RF	2-11	12260	449
Dr. M. B. Leath, High Point					
Dr. M. B. Leath, High Point	8889666	RG	7-5	11000	522
Uwharrie Warrior's Pet	1157133	RG	4-2	9700	505
Longvalley Susanna Levity	1002896	IG	5-10	10400	461*
Floyd Steed, High Point					
Floyd Steed, High Point	Ch45869	GH	2-9	12455	482
" " " "	55A0028	GH	2-5	11680	439
" " " "	D177309	GH	2-2	11870	416
" " " "	K171281	GH	2-7	12905	410
Dr. R. P. Sykes, Asheboro					
Maudie Belle's Betsy Ann	973744	RG	6-5	7870	406
Southeastern					
Cottonade Farms, Fayetteville					
Cottonade Farms, Fayetteville	2523471	RH	7-8	15250	553
A. O. McEachern, Wilmington					
A. O. McEachern, Wilmington	2277225	RH	12-7	20530	660
Regina	2967437	RH	4-4	12740	429
Wilma II	3130901	RH	3-3	11680	402
Bonnie					
Southwestern 1					
Biltmore Farms, Biltmore					
Biltmore Farms, Biltmore	782692	RG	9-7	8091	459
" " "	880035	RG	7-11	8333	421

\* 3x milking all or part lactation

(DHIA Lactation Records Con't.)  
 (Southwestern 1 Con't.)

John R. Kimberly, Tryon	901771	RG	6-5	14777	692*
" " "	929371	RG	5-3	12564	622*
" " "	901771	RG	4-1	12545	614*
" " "	778492	RG	6-1	11860	613*
" " "	895123	RG	6-8	14325	607*
" " "	1090566	RG	2-10	11608	594*
" " "	812388	RG	4-7	10607	584*
" " "	969966	RG	4-4	11944	564*
" " "	825604	RG	9-0	11617	560*
" " "	1157980	RG	5-11	12781	553*
" " "	929371	RG	3-0	11296	553*
" " "	923727	RG	5-0	10148	553*
" " "	887369	RG	4-7	11473	535*
" " "	778492	RG	8-3	10522	532*
" " "	1122558	RG	2-5	9511	519*
" " "	955565	RG	6-1	12235	514*
" " "	1125649	RG	2-9	10397	511*
" " "	895123	RG	4-6	11781	507*
" " "	866437	RG	5-3	10898	496*
" " "	1067989	RG	2-7	10063	490*
" " "	1064997	RG	2-5	9676	485*
" " "	866437	RG	6-6	10266	473
" " "	812388	RG	8-8	8565	467
" " "	929371	RG	4-3	8813	464
" " "	1281767	RG	2-3	9807	458*
" " "	1122558	RG	3-7	8248	456
" " "	923727	RG	3-10	8168	450
" " "	1090565	RG	3-7	9216	448
" " "	979537	RG	2-6	7918	435*
" " "	1057386	RG	3-5	9520	417*
" " "	1064997	RG	2-5	8303	414
" " "	825604	RG	10-1	8073	406
" " "	980904	RG	3-4	8677	405
" " "	812388	RG	7-1	7960	401
Willie Russell, Andrews					
Riegeldale Maxim Daffy	1065554	RG	5-6	7460	410
Shoal Falls Farm, Inc., Hendersonville					
Beaver Creek Noble Lucky	931213	RG	6-10	10910	534
Archdale Design Alma	1342983	RG	3-4	8310	454
Randolph Shields, Culberson					
Notla Rose Glory	1128757	RG	4-3	9190	439
Notla Dordele	660478	RG	13-9	10290	427
Notla Scarlet's Mandy	1128758	RG	4-1	8150	419
	922114	RG	7-3	8450	407
Notla Rose Hetty	1128756	RG	4-2	7200	401
Eugene Waldroup, Hayesville					
N.C.S.D. Violet Jo	2550791	RH	8-2	15140	481
Max Waldroup					
Mitchell Farms Skylark	2899962	RH	4-11	15470	550
Mitchell Farms Ragapple Mercie	2918247	RH	4-9	12710	450

\* 3x milking all or part lactation

N. C. STATE COLLEGE OF AGRICULTURE AND ENGINEERING  
AGRICULTURAL EXTENSION SERVICE  
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*North Carolina*

# DAIRY EXTENSION *News*



PLEGGED TO THE DEVELOPMENT OF:

ECONOMICAL FEEDING  
HIGH PRODUCING COWS  
EVALUATING SIRES  
EFFICIENT HERD MANAGEMENT

COMPILED FROM SUPERVISORS' REPORTS BY  
DAIRY EXTENSION OFFICE, N. C. STATE COLLEGE, RALEIGH, N. C.  
MARVIN E. SENGER, EXTENSION DAIRY SPECIALIST, EDITOR



# A CHAT WITH THE TESTER



TO ALL TESTERS

Chat Sheet #1

August 14, 1953

## SOMETHING NEW

Rather than writing so many form letters on various subjects pertaining to testing work, I got the idea that a news letter to testers might be a better way of keeping you informed. This is the first news letter to you and we can refer to it as the "Chat Sheet". Please follow it carefully. It will include important information about the testing work as well as other information which I believe will be of interest to you. Each sheet will be numbered and dated and I suggest that you keep a file for them. There may be times you will want to refer to them about changes that have been made. I hope the "Chat Sheet" will be more convenient for both you and I.

\*\*\*\*\*

## SIMPLIFIED RULES FOR GUERNSEY HIR AND AR TESTING

Recently the American Guernsey Cattle Club prepared a leaflet describing HIR and AR testing as conducted by their association and explaining some of the more common rules in the supervision of these tests. These rules are the same as those found in the "Unified Rules for Official Testing" but are explained more fully for the benefit of breeders and testers. I am enclosing a copy of this leaflet for you.

I would like to call your attention to their explanation of identification, number of cows supervised daily, number of milkings to be supervised and number of cows to be milked at one time for both types of test. A few testers have been rather careless in following these regulations as interpreted by the Guernsey Cattle Club. Several days ago I received an unfavorable letter from one of the breed associations relative to the kind of supervision one of our testers was giving an AR herd. As supervisors of HIR and AR records it is your responsibility to follow these regulations. By following the regulations you are protecting the authenticity of HIR and AR records. It would be rather embarrassing to have some records rejected because of improper supervision.

\*\*\*\*\*

## CHANGE IN ENTERING GUERNSEY COWS ON HIR TEST

Effective July 1, 1953 the American Guernsey Cattle Club made a change in their system of entering cows on HIR test. Instead of the breeder sending in applications as the cows freshen the record will start automatically as cows are reported fresh on the monthly HIR test report and the owner will be billed for the application fees by the Cattle Club.

This will be helpful to the breeders and it will be absolutely necessary for testers to report all registered Guernsey cows and cows for which application has

been filed on the monthly HIR report and give the calving dates, service dates, change in number of daily milkings and dry dates for all cows correctly. The Guernsey Cattle Club has written to all Guernsey breeders doing HIR testing about this change suggesting that they check monthly HIR reports to see that all data is given and given correctly.

\* \* \* \* \*

#### HONOR ROLL CERTIFICATES HAVE BEEN SENT OUT

In the last Dairy Extension News we listed the Honor Roll DHIA herds; that is, herds that averaged over 350 pounds of butterfat per cow for the testing year ending in 1952. The certificates that had not been awarded have been mailed to the county agents of the county in which the herd is located. Some of the certificates had been awarded in DHIA meetings prior to this. I suggested that these certificates might be awarded in a dairy meeting which they might be holding in the near future. If they could not be presented in this way I asked the county agent to please see that the DHIA members received the certificates. They may ask you to take the certificates to your members and if your Honor Roll members have not yet received their certificate you might ask your county agent about it.

\* \* \* \* \*

#### 1952 YEARLY REPORTS HAVE BEEN SUMMARIZED

The 1952 yearly reports which you sent to my office have been summarized and more information will be released about our average production from time to time. You did a much better job in reporting yearly reports for 1952 than for 1951. We had a yearly summary reported for 86.2% of all the herds that were on test January 1, 1952, as compared to 70.9% for 1951. In some instances the yearly reports were slow getting to our office and one association report got to us too late for us to forward to the Bureau of Dairy Industry before their deadline.

We should have this summary information completed much earlier than we did this past year. I want to urge each of you to send in your yearly individual cow reports BDI-DHIA-46 or the supplemental report DE-19 within 60 days after the completion of the herd test year. Accumulate the data you need from these reports on the yearly association summary BDI-DHIA-780 so that it will be ready to send to me within 60 days following the end of the calendar year. In other words, I should have all yearly summaries for individual herds and your association report by March 1, 1954. Check your work to see if you are up to date. If you have questions about these reports please refer to the mimeographed leaflet DE-31.

\* \* \* \* \*

The 1952 average production for DHIA herds is 3,126 pounds of milk and 337 pounds of butterfat per cow. The average test was 4.1 per cent.

\* \* \* \* \*

Edward Rivenbark, tester in the Southeastern association is in the Veterans Hospital at Fayetteville with a fungus infection on his hands. He will likely be confined to the hospital for approximately 10 days. He will need some help to get all of his August testing done. If you could help him out a few days please let me know.

\* \* \* \* \*

Marvin E. Senger  
Extension Dairy Specialist



**ENTRY QUESTIONNAIRE**  
Efficient Dairy Production Contest  
1952

All DHIA members with 10 cows or more who have completed at least one year of DHIA testing are eligible to enter the N. C. Efficient Dairy Production Contest for 1952. This contest is sponsored by the National Dairy Products Corporation in co-operation with its member companies in North Carolina. Awards amounting to \$150 will be made as follows:

First prize \$30.00 and Bronze Plaque	Fourth Prize	\$25.00
Second Prize \$20.00 and Bronze Plaque	Fifth Prize	\$20.00
Third Prize \$30.00	Sixth Prize	\$15.00
Seventh Prize \$10.00		

The following questionnaire completed and mailed to the Dairy Extension Office, N. C. State College, Raleigh, N. C., will serve as your entry in this contest. Information requested is to include dairy operations from January 1 to December 31, 1952. All entries must be in the Dairy Extension Office by March 15, 1953.

Entries will be judged by a committee of three consisting of an Agronomy Specialist and two Dairy Specialists. Winners will be selected with emphasis on efficient and practical dairy management through the use of recommended dairy practices. In addition to the questionnaire, DHIA records will be studied and DHIA testers and county agents may be consulted if additional information is needed.

Review your dairy operations for 1952 on this questionnaire and enter the Efficient Dairy Production contest.

GENERAL INFORMATION

Farm Owner \_\_\_\_\_ Address \_\_\_\_\_

Member of \_\_\_\_\_ DHIA. Years of Continuous DHIA testing \_\_\_\_\_

Average Number of Dairy Cows \_\_\_\_\_ Dairy Heifers \_\_\_\_\_ Dairy Bulls \_\_\_\_\_

Total acres in farm \_\_\_\_\_ Acres Cleared \_\_\_\_\_ Acres of Pastures \_\_\_\_\_

Acres in grain for feed \_\_\_\_\_ Acres in crops used for silage \_\_\_\_\_

Labor on Farm - List kind of workers, such as owner or operator, hired man, wife, boys under 16, etc. and indicate approximate percentage of time devoted to raising feed and caring for dairy herd.

Kind of Worker	Time spent for Dairy herd	Kind of Worker	Time spent for Dairy herd
_____	_____	_____	_____
_____	_____	_____	_____

Is dairying the main source of farm income? \_\_\_\_\_

FEEDING PRACTICES

Get information from DHIA herd book whenever possible (period Jan. 1 to Dec. 31, 1952)

Total pounds grain fed \_\_\_\_\_ % protein in grain } On pasture \_\_\_\_\_  
milking herd for the year \_\_\_\_\_ mixture fed cows } Off pasture \_\_\_\_\_

Total pounds hay fed \_\_\_\_\_ Kind of \_\_\_\_\_  
to milking herd \_\_\_\_\_ hay fed \_\_\_\_\_

Total pounds of silage \_\_\_\_\_ Kind of \_\_\_\_\_  
fed milking herd \_\_\_\_\_ silage fed \_\_\_\_\_

Total feed cost \_\_\_\_\_ Total grain cost \_\_\_\_\_

Give kind and amounts of feed purchased during the year for dairy herd.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Outline pasture program, including crops used, fertilization, etc. as season progress-  
ed. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Approximate date cows \_\_\_\_\_ Approximate date cows \_\_\_\_\_  
were turned on pasture \_\_\_\_\_ were taken off pasture \_\_\_\_\_

MANAGEMENT AND EQUIPMENT

Kind of sire or sires used: (Check kinds used)

Desirably proved sire \_\_\_\_\_ Artificial breeding \_\_\_\_\_  
Purebred sire with production pedigree \_\_\_\_\_ Son of desirably proved sire \_\_\_\_\_  
Purebred sire with No production pedigree \_\_\_\_\_ Grade sire \_\_\_\_\_

Source of Herd Replacements:

No. cows \_\_\_\_\_ No. heifers (over 6 mo.) \_\_\_\_\_ No. heifer calves \_\_\_\_\_  
Purchased \_\_\_\_\_ purchased \_\_\_\_\_ under 6 mo. purchased \_\_\_\_\_

No. first calf heifers \_\_\_\_\_ No. calves \_\_\_\_\_ No. heifer \_\_\_\_\_  
freshening \_\_\_\_\_ born \_\_\_\_\_ calves raised \_\_\_\_\_

Number of cows sold from herd according to reason:

Mastitis or udder trouble \_\_\_\_\_ Low production \_\_\_\_\_  
Bang's disease and T. B. \_\_\_\_\_ Dairy purposes \_\_\_\_\_  
Sterility or non-breeders \_\_\_\_\_ Other reasons \_\_\_\_\_

No. heifer calves (under 6 mo.) \_\_\_\_\_ No. heifers (6 mo. to freshening) \_\_\_\_\_  
sold \_\_\_\_\_ sold \_\_\_\_\_

Average age of calves when weaned from whole milk \_\_\_\_\_



Is a milk substitute used for raising calves? \_\_\_\_\_

Average age of heifers at freshening \_\_\_\_\_ Average weight of heifers at freshening \_\_\_\_\_

Average number of days in milk per cow (use only cows in herd full year) \_\_\_\_\_

What type of housing is used (check those used):

Milking barn with stanchions for each cow \_\_\_\_\_.

Small milking barn with loafing shed \_\_\_\_\_.

Milking parlor with loafing shed \_\_\_\_\_.

Kind of silo used (check one): Upright \_\_\_\_\_ Trench \_\_\_\_\_ Silo Capacity \_\_\_\_\_ Tons

HERD HEALTH

Is herd accredited for Bang's Disease? \_\_\_\_\_ Give accredited number \_\_\_\_\_

If not, give last date your entire herd was tested for Bang's disease \_\_\_\_\_

Has each cow's milk been tested for Mastitis \_\_\_\_\_ type of test \_\_\_\_\_

Is the strip cup used? \_\_\_\_\_ How often? \_\_\_\_\_

Are Mastitis cows milked last? \_\_\_\_\_. Give other practices used to prevent mastitis \_\_\_\_\_

Number of calves that died \_\_\_\_\_ Give reasons for death \_\_\_\_\_

DISTRIBUTION OF PRODUCTION

Number of cows and heifers freshening by seasons. Take from DHIA herd book for period from January 1 to December 31, 1952.

	<u>No. cows</u>	<u>1st calf heifers</u>	<u>Total</u>
Winter (Dec., Jan., Feb.)	_____	_____	_____
Spring (Mar., April, May)	_____	_____	_____
Summer (June, July, Aug.)	_____	_____	_____
Fall (Sept., Oct., Nov.)	_____	_____	_____

Total pounds of milk produced during year \_\_\_\_\_

Total pounds of butterfat produced during year \_\_\_\_\_

Please accept my entry for the N. C. Dairy Production Contest for 1952. This questionnaire has been completed to the best of my ability and knowledge.

Date \_\_\_\_\_ Signed \_\_\_\_\_

(DHIA Member)

Give any additional remarks on extra sheet of paper, such as describing pasture program, calf raising plan, etc., more fully.

## D. H. I. A. Supervisor's Contest

The National Dairy Products Corporation, through the cooperation of its local member companies, has made available two bronze plaques and \$150 in prize money to be awarded to outstanding D. H. I. A. Supervisors in North Carolina in 1952. This contest will be for the purpose of encouraging D. H. I. A. Supervisors to keep neat, accurate and complete records and to promote an interest in better dairying among D. H. I. A. members. Awards will be presented for service performed during the calendar year of 1952.

Eligibility: To be eligible for an award a Supervisor must have been employed by an association in North Carolina at least 9 months prior to the close of the contest.

Awards will be as follows:

First prize - \$30 and Bronze Plaque	Fourth prize - \$25
Second prize - \$20 and Bronze Plaque	Fifth prize - \$20
Third prize - \$30	Sixth prize - \$15
Seventh prize - \$10	

## SCORE CARD

A. Herd Record Books and Barn Books 50 points

1. Herd Books - two or more to be judged at random for completeness, accuracy and neatness.
2. Barn Book - Completeness, accuracy and neatness.

B. Reports 35 points

1. Monthly Association Report, HDI-DHIA-4  
Deductions for late, missing and incomplete reports.
2. Yearly Individual Cow Reports, HDI-DHIA-46 & DE-19  
Deductions for late, missing and incomplete reports.
3. Yearly Association Herd Summary, HDI-DHIA-780  
Deductions for late and incomplete reports.
4. Lactation Records
  - a. Per cent reported
  - b. Records returned due to inaccurate and inconsistent data.

Neatness and accuracy will also be considered.

C. General Association Activities 15 points

1. Association meetings
2. Providing data for County or Association monthly news releases.
3. Assisting with Association business
4. Assistance and cooperation with County and State dairy program.
5. Progress of association toward more efficient production and use of improved practices.

DE-47

# BARN SHEET

## OWNER-SAMPLER TESTING

### Milk Weights and Samples Taken by Herd Owner

Owner: \_\_\_\_\_ Address: \_\_\_\_\_

Association: \_\_\_\_\_ Center: \_\_\_\_\_ Date: \_\_\_\_\_ Date Samples Taken: \_\_\_\_\_ 19\_\_

Box No: \_\_\_\_\_ Test Period from \_\_\_\_\_ 19\_\_ to \_\_\_\_\_ 19\_\_ No. Days in Period \_\_\_\_\_

Sample No.	Cow's Name or Number	Weight of Milk			Days in Milk	Yield During Test Period			Total to Date		REMARKS: Date Fresh, Dry Bought, Sold, etc.
		Eve.	Morn	Daily		Milk	Test %/o	B'Fat	Milk	B'Fat	
1											
2											
3											
4											
5											
6											
7											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Number Cows:	In Milk _____	Totals	<b>X</b>	Date Samples Tested _____
	Dry _____	Average		Notes:
	Total _____			

## GRAIN MIXTURE

If you want to know the per cent of total protein and the cost per 100 pounds of your grain mixture list each kind of feed in the mixture and give the amount of each. Also give the tester the price per 100 pounds of purchased feeds.

Amount in Pounds	Kinds of Feed	Protein		Cost	
		Per Cent	Pounds	Per Cwt	Total
<b>TOTALS</b>		<b>X</b>		<b>X</b>	

Per cent total protein in grain mixture .....  
 (Total pounds protein ÷ total pounds in mixture x 100)

Cost per 100 pounds of grain mixture \$.....  
 (Total cost of mixture ÷ total pounds in mixture x 100)

A good grain mixture should contain:

12 to 14% total protein when alfalfa or soybean hay with or without silage are fed or when excellent pasture is available.

14 to 16% total protein when lespedeza or clover hay with or without silage are fed or when pasture is classified good.

16 to 18% total protein when mixed hay (containing 30 to 50% legumes) with or without silage is fed or when pasture is only fair.

18 to 20% total protein when non-legume roughages with or without silage are fed or when pasture is poor.

AGRICULTURAL EXTENSION SERVICE, N. C. STATE COLLEGE  
 DAIRY EXTENSION SECTION  
 RALEIGH, NORTH CAROLINA



## BARN SHEET 10

## OWNER-SAMPLER TESTING

## Milk Weights and Samples Taken by Herd Owner

Owner: \_\_\_\_\_ Address: \_\_\_\_\_

Association: \_\_\_\_\_ Center Date: \_\_\_\_\_ Date Samples Taken: \_\_\_\_\_ 19\_\_

Box No: \_\_\_\_\_ Test Period from \_\_\_\_\_ 19\_\_ to \_\_\_\_\_ 19\_\_ No. Days in Period \_\_\_\_\_

Sample No.	Cow's Name or Number	Weight of Milk			Days in Milk	Yield During Test Period			Total to Date		REMARKS: Date Fresh, Dry Bought, Sold, etc.
		Eve.	Morn	Daily		Milk	Test %	B'Fat	Milk	B'Fat	
1											
2											
3											
4											
5											
6											
7											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

Number Cows: \_\_\_\_\_

In Milk \_\_\_\_\_

Totals \_\_\_\_\_

X

Date Samples Tested \_\_\_\_\_

Dry \_\_\_\_\_

Average \_\_\_\_\_

Notes: \_\_\_\_\_

Total \_\_\_\_\_

## GRAIN MIXTURE

If you want to know the per cent of total protein and the cost per 100 pounds of your grain mixture list each kind of feed in the mixture and give the amount of each. Also give the tester the price per 100 pounds of purchased feeds.

Amount in Pounds	Kinds of Feed	Protein		Cost	
		Per Cent	Pounds	Per Cwt	Total
<b>TOTALS</b>		<b>X</b>		<b>X</b>	

Per cent total protein in grain mixture .....  
 (Total pounds protein ÷ total pounds in mixture x 100)

Cost per 100 pounds of grain mixture \$.....  
 (Total cost of mixture ÷ total pounds in mixture x 100)

A good grain mixture should contain:

- 12 to 14% total protein when alfalfa or soybean hay with or without silage are fed or when excellent pasture is available.
- 14 to 16% total protein when lespedeza or clover hay with or without silage are fed or when pasture is classified good.
- 16 to 18% total protein when mixed hay (containing 30 to 50% legumes) with or without silage is fed or when pasture is only fair.
- 18 to 20% total protein when non-legume roughages with or without silage are fed or when pasture is poor.

AGRICULTURAL EXTENSION SERVICE, N. C. STATE COLLEGE  
 DAIRY EXTENSION SECTION  
 RALEIGH, NORTH CAROLINA



# Individual Cow Record (Cont.)

COW'S NAME: .....

EARTAG: .....

Testing Year 19..... to 19.....	Days in Herd	Days in Milk	Daily Milk	Monthly Production for Test Period			REMARKS (Dates Fresh, Dry, Bred, Purchased, Sold, Service Sire, etc.)
				Milk	Test	B/Fat	
Production Since Last Fresh						Date Last Fresh:	
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL TO DATE			X		X		
TOTAL FOR YEAR			X		X		

## CALVING RECORD

Date of Calving	Name and Registration Number of Sire	Sex of Calf	Calf's Name and Eartag Number	Remarks Disposal, etc.

AGRICULTURAL EXTENSION SERVICE, N. C. STATE COLLEGE  
Dairy Extension Section  
Raleigh, N. C.



PROJECT III - JUNIOR DAIRY PROGRAM

The primary objectives of this phase of the Dairy Extension Program are:

1. To stimulate interest in dairying among the boys and girls of the State.
2. To train those 4-H members who choose dairying as their projects in sound dairy principles.

All activities in this field of work are directed toward meeting these objectives. Since the county extension agents carry out this as well as all other phases of the 4-H Program, all efforts of the Dairy Extension Staff are directed toward assisting the county workers.

J. D. George, Dairy Extension Specialist, has devoted approximately seventy per cent of his time to this project. County extension agents devoted a total of 2085 days to 4-H Dairy work, made 8797 visits to Dairy projects, and held 774 4-H meetings at which dairying was the principle subject discussed. There were 4-H dairy projects conducted in ninety of the one hundred counties in the state during 1953. These figures include only white 4-H members. This information on negro 4-H members is covered in a separate report.

The 4-H Dairy Production Project *154* Anderson

As was indicated in the plan of work for 1953, the 4-H Dairy Production Project received major emphasis during the year. The project was revised late in 1952 and a concentrated effort was made to get wide-scale participation in the project. This is a project in which 4-H members keep production and feed records on their animals similar to DHIA records. Members send monthly reports to the local county agents as well as keep a complete record at home. The project starts September 1 and ends August 31 of the next year.

During the year ending August 31, 1953, approximately 150 4-H members in thirty counties conducted this project. Records on the county winners from

twenty counties were submitted for state awards.

State winners in this project were:

Woodrow Goodwin - Wake County  
Larry Payne - Alexander County  
Don Martin - Alamance County  
Joe Cansler - Iredell County  
Lowell Barber - Cumberland County  
Earl Davis - Wayne County  
Charles Graham - Davidson County  
Kenneth Howe - Gaston County  
Charles Bridges - Cleveland County  
Frances Emma Yates - Haywood County

Awards in this project were provided by National Dairies, Inc. through its member companies in North Carolina, Southern Dairies, Inc. and Krafts Food Company.

These prizes were:

1st-Bronze Plaque and \$50 Savings Bond  
2nd-Bronze Plaque and \$25 Savings Bond  
3rd-\$25 Savings Bond  
4th-\$25 Savings Bond  
5th-\$25 Savings Bond  
6th-10th-Fountain pen

It is believed that no other phase of the 4-H Dairy Program offers as much opportunity for training as does the Dairy Production Project. This fact is illustrated in the following story which was written by one of the 4-H members conducting the project in 1953.

My 4-H Dairy Production Project  
Frances Emma Yates  
(Haywood County)

"The Dairy Production Project which I took this year surely was a revealing project. I took the project on the whole herd. The project has meant much to our family, for with it we have been able to see in 'black and white' which cows are paying and which ones are boarding. There are some that we hadn't thought too much of that are making money for us; there are some which, for one reason or another--perhaps sentiment, we are attached to that have lost money for us in the year. The records had made us more conscious of the need for accurate breeding records; it has showed us which cows stay dry too long; it has showed us the ones that start off immediately after freshening with a bang and soon are just producing an average amount of milk. In other words, the record we have before

us is a picture--a picture of the dairy situation on our farm that is going to be cleared up but which probably would have been a long time being cleared had I not taken this project.

In summing up the project, I found that our herd did make some money; that our feeding program was not good until I began weighing and measuring feed; that breeding records need to be accurate; that we have some cows that need to go to the beef market, and that there is a lot of work to be done to successfully carry on the dairying industry.

However, I like it well enough that I am going to take the project again next year. I feel that the figures on the summary sheets next year will be far different from the ones on the sheets this year. I feel that the project is one of the best that I have taken in my seven years of 4-H work."

The 4-H Dairy Demonstration Program *underline*

After a lapse of two years the 4-H Dairy Demonstration Program was revived in 1953. In cooperation with members of the 4-H Club Staff, plans for conducting the Demonstration Contest were outlined. The Dairy Extension Staff assumed the leadership in conducting the contest including securing judges, arranging locations, informing agents, and providing sample demonstrations for agents to use in working with their 4-H members.

Six District Elimination Contests were held in which teams from thirty-three counties competed. The following is a brief summary of the District Contests:

<u>Districts</u>	<u>No. Counties Competing</u>	<u>Winners</u>
Western	4	Ronald Pinkerton (Buncombe) Colvin Pinkerton
Southwestern	8	Lee Cash (Cleveland)
Northwestern	9	Fleas McMichael (Rockingham) Wayne Gunn
Northeastern	4	Felton Davis (Wayne) Earl Davis
Southeastern	3	James Potter (Hoke) Clyde Leach
Eastern	5	Leon Brickhouse (Pasquotank) Nolan Bundy

The winners from each district contest then competed in the State event. In this contest Lee Cash of Cleveland County won first place. His subject was "Making a 16% Dairy Feed". The team from Pasquotank County, Leon Brickhouse and Nolan Bundy, won second place. Their subject was "Handling Milk on the Farm".

Not only is the Dairy Demonstration Program a valuable means of training those who compete, but it also provides an excellent opportunity to teach subject matter to those observing the demonstrations. The following subjects were all used by 4-H members in the contests in 1953:

"Making a 16% Dairy Feed"  
"Handling Milk on the Farm"  
"Dehorning Dairy Calves"  
"Raising Dairy Calves"  
"Fitting a Dairy Animal"  
"Training and Showing a Dairy Animal"  
"Clipping for Cleaner Milk Production"  
"Selecting a Good Dairy Cow"  
"Roughage in a Dairy Feeding Program"

The awards in the contest, consisting of expense-paid trips to 4-H Club week for District winners and a watch for the State winner, were provided by the North Carolina Milk Producers Federation.

#### 4-H Dairy Judging Program *W. K. ...*

Another important training medium is the 4-H Dairy Cattle Judging program. The Dairy Extension Staff assumes the leadership in conducting this program.

County Extension agents were supplied with teaching material for training and selecting county teams. Also assistance was given at the County level in holding dairy judging schools.

The State 4-H Dairy Judging contest was held on July 14, 1953 at the North Carolina State College Dairy Farm. Teams from twenty-eight counties participated. Two other counties, Catawba and Caldwell, had trained teams but could not participate due to a polio ban. Eight classes, involving a class each of cows and heifers in Jerseys, Guernseys, Ayrshires, and Holsteins, were judged.



Two sets of oral and two sets of written reasons were taken. The following is a brief summary of the results in this contest:

<u>Placing</u>	<u>County Team</u>	<u>Score</u>
1st	Gaston	1612
2nd	Wake	1555
3rd	Rowan	1543
4th	Alamance	1527

The above four teams, plus the teams from Catawba and Caldwell, then competed in a final contest held at the State College Dairy and surrounding farms on August 11 and 12. Sixteen classes were judged. Results in this contest are summarized below:

<u>Placing</u>	<u>Team</u>	<u>Coach</u>	<u>Score</u>
1st	Gaston	J. C. Barber	3286
2nd	Alamance	Tom Haislip	3133
3rd	Catawba	Frank Harris	3040
4th	Rowan	Glenn Tussey	3004
5th	Wake	H. L. Cruch	2972
6th	Caldwell	Price Brawley	2792

The top four highest scoring individuals in this contest were selected as the team to represent North Carolina in the National Dairy Judging Contest.

These team members were:

<u>Name</u>	<u>County</u>	<u>Score</u>
G. K. Davis	Gaston	1102
Jim Eaker	Gaston	1093
Kenneth Howe	Gaston	1091
Kent Mann	Alamance	1073

Mr. J. C. Barber, Assistant County Agent, Gastonia, who coached the first place county team, was chosen to accompany the team to the National Contest and assist with the additional training enroute to that event.

*W. Underline*

National 4-H Dairy Judging Contest

The above listed team members spent the week of August 24-28 at North Carolina State College and underwent extensive training under the supervision of Mr. J.D. George, Dairy Extension Specialist.

The team, along with Mr. Barber and Mr. George, departed on September 29 for Waterloo, Iowa, scene of the National Contest. Stops for practice sessions were made at Hoosierlea Farm, Franklin, Ind., P. V. Stock Farm, Lowell, Ind., Hoard's Dairyman Farm, Ft. Atkinson, Wisc., and Voegeli's Farm, Monticello, Wisc. The group arrived in Waterloo on October 4.

The National 4-H Dairy Judging contest was held at the National Dairy Cattle Congress in Waterloo, Iowa, on October 5, 1953.

The team from North Carolina consisting of G. K. Davis, Kenneth Howe, and Kent Mann, with Jim Eaker as alternate, placed fourth in the National Contest in which teams from thirty-one states competed. The team scored 1899 points, only eighteen points below the first place team, Maryland, which scored 1917 points. In the individual breeds North Carolina placed first in Guernseys, third in Ayrshires and Brown Swiss and fifth in Jerseys. G. K. Davis placed first in individual scoring in Guernseys and ninth in the overall contest.

The North Carolina Purebred Dairy Cattle Association sponsored the trip to the National event for the four team members and Mr. Barber.

*W. Underline*

4-H Dairy Judging Contest at the Atlantic Rural Exposition

North Carolina was represented at the Invitational 4-H Dairy Judging Contest at the Atlantic Rural Exposition held on September 28. Team members were Don Martin (Alamance), Judith Needham (Alamance), and Ira Cline (Catawba). These members are those who scored sixth through eighth as individuals in the final State contest. Mr. Tom Haislip, Assistant County Agent, Alamance County, accompanied

the team to Richmond. North Carolina placed second in this contest. Ira Gline was high-scoring individual among all contestants competing.

Junior Dairy Shows

A 4-H project must have a certain amount of glamour in it if large numbers of boys and girls are to be attracted. The show provides this glamour in the dairy project. Certainly there are other benefits to be derived from the shows such as teaching correct type, sportsmanship, proper fitting and showing procedure, etc. For these and other reasons the Junior Dairy Show program has received considerable attention in 1953.

The dairy shows in which boys and girls have shown their animals can be grouped in three classes: County Shows, District Shows, and a State Show.

County Shows

*Sub - No underline*

Perhaps the County Shows are the most important class of shows. More local people have the opportunity to see the event, and also a local event always creates more interest than does one far removed from the area.

The County Junior Dairy Shows are conducted by the local County Agents and other county workers. The Dairy Extension Staff has assisted by judging many of these shows and also has given advice concerning the operation of the shows.

A list of the county shows held in 1953 is shown in the table below.

<u>County</u>	<u>No. Animals Shown</u>	<u>County</u>	<u>No. Animals Shown</u>
Alamance	33	Caldwell	49
Alexander	39	Carteret	5
Ashe	20	Catawba	30
Buncombe	17	Cleveland	80
Burke	12	Craven	7
Cabarrus	21	Cumberland	20
		Davidson	35

<u>County</u>	<u>No. Animals Shown</u>	<u>County</u>	<u>No. Animals Shown</u>
Davis	18	Moore	18
Durham	8	Pender	2
Forsyth	23	Person	8
Gaston	44	Folk	28
Guilford	16	Randolph	65
Halifax	11	Rockingham	133
Harnett	6	Rowan	48
Haywood	5	Rutherford	20
Henderson	31	Sampson	25
Iredell	54	Stanly	35
Jones	2	Stokes	7
Lee	6	Surry	28
McDowell	37	Swain	4
Macon	27	Wake	31
Mecklenburg	15	Watauga	8
Mitchell	35	Warren	21
Wayne	26	Yadkin	24
		Yancey	22

Total No. Shows 48 - Total No. Animals 1259

The above information is also shown on a map (Page 47 of this report).  
 Approximately \$10,500 were awarded as premiums in this group of County Shows.  
 This prize money was provided in most cases by local business and civic groups.

District Junior Dairy Shows *no underline*

Eight District Junior Dairy Shows were held in 1953. The Dairy Extension Staff cooperated with the local county agents in planning and conducting these shows.

Shows were held at Murphy, Asheville, Statesville, Elkin, Greensboro, Dunn, New Bern and Wilmington. The Elkin show was a new one created to serve Northwestern North Carolina.

A summary of these shows is shown in the two tables which follow. Also a map (page 48) is included which shows the participation by counties.



Table I

## Summary of 1953 District Junior Dairy Cattle Shows

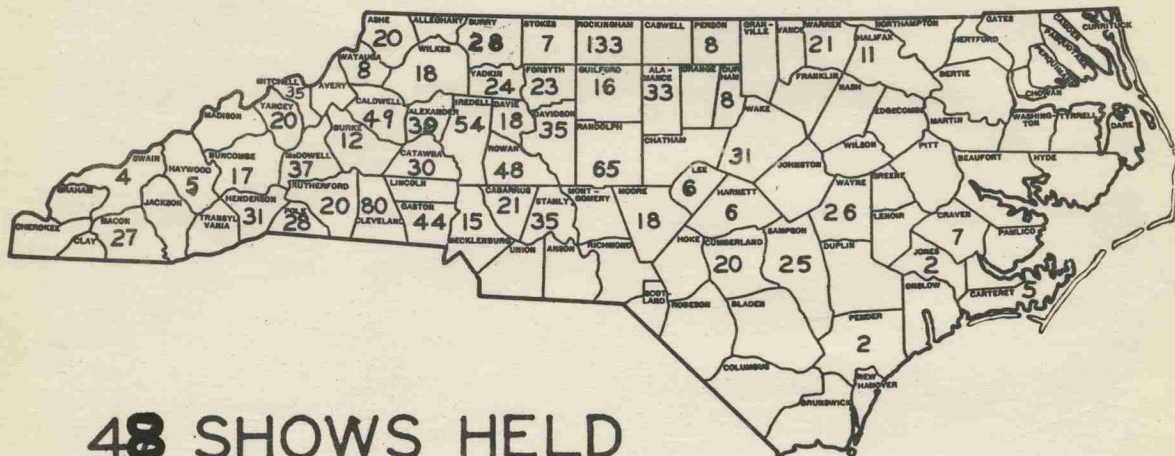
<u>Location</u>	<u>Blue</u>	<u>No. Animals</u>		<u>Total</u>	<u>No. Counties</u>	<u>Approx. Money Spent</u>
		<u>Red</u>	<u>White</u>			
Asheville	45	34	6	85	7	\$ 1,202.00
Dunn	64	77	19	160	15	2,145.00
Elkin	35	27	5	67	5	658.00
Greensboro	67	63	17	147	7	1,174.00
Murphy	25	43	21	89	6	918.00
New Bern	25	24	7	56	5	809.00
Statesville	142	149	7	298	12	2,868.00
<u>Wilmington</u>	<u>45</u>	<u>53</u>	<u>12</u>	<u>110</u>	<u>14</u>	<u>2,053.00</u>
Totals	448	470	94	1012	71	\$11,827.00
% of Totals	44	47	9			

Table II

## 1953 District Junior Dairy Shows by Breeds

<u>Breed</u>	<u>Blue</u>	<u>Red</u>	<u>White</u>	<u>Total</u>
Jerseys	178	154	17	349
Guernseys	134	175	33	342
Holsteins	76	65	14	155
Ayrshires	16	11	0	27
<u>Grades</u>	<u>44</u>	<u>65</u>	<u>30</u>	<u>139</u>
Totals	448	470	94	1012
% of Totals	44	47	9	

# COUNTY JUNIOR DAIRY SHOWS 1953

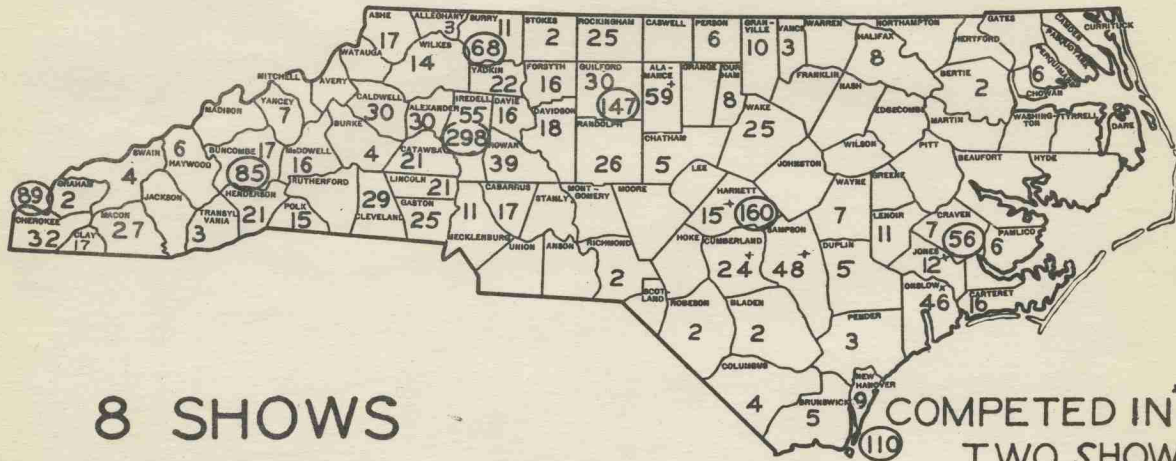


**48** SHOWS HELD

~~1202~~ ANIMALS SHOWN

**1259**

# PARTICIPATION IN DISTRICT DAIRY SHOWS 1953



8 SHOWS  
1012 ANIMALS

COMPETED IN  
TWO SHOWS

All premiums and other expenses connected with these District Shows were provided by business and civic groups within the State. Major sponsors were: Belk Stores (Statesville, Dunn, and Elkin), Asheville Agricultural Development Council (Asheville), Murphy Fair Association and Coble Dairy Products (Murphy), New Bern Chamber of Commerce (New Bern), Greensboro Chamber of Commerce (Greensboro), and Wilmington Chamber of Commerce (Wilmington).

Fitting and showmanship prizes were given by the various State Purebred Dairy Breed Associations at five of these shows (Asheville, Statesville, Greensboro, Dunn and Wilmington). Local prizes in fitting and showmanship were provided at the other three shows.

Junior Dairy Show at State Fair

*No underline*

Personnel on the Dairy Extension Staff again supervised the Junior Dairy Show at the State Fair. The Danish system of judging was employed for the first time. The 139 animals shown by boys and girls are almost double the number shown in 1952 (76). Also the quality was very outstanding as attested by the fact that blue ribbons were awarded on ninety animals, red ribbons on forty-five animals, and only four animals received white ribbons. Premiums totaling \$2,683 were provided by the North Carolina State Fair.

Junior Dairy Shows for Negroes

*No underline*

District Shows for Negroes were conducted in the same manner as the shows for whites. R. L. Wynn, Negro Dairy Specialist, worked with the local county agent in staging these shows. A very brief summary of the District Shows for Negroes follows. A more complete report is submitted under separate cover.

<u>No. of Shows</u>	<u>No. of Animals Shown</u>	<u>Ribbons</u>			<u>Money Spent</u>
		<u>Blue</u>	<u>Red</u>	<u>White</u>	
13	680	227	261	172	\$6,152



Summary of All Junior Dairy Shows

*no underline*

	<u>No. Shows</u>	<u>No. Animals</u>
County Shows	48	1259
District Shows (White)	8	1012
State Show (White)	1	139
District Shows (Negroes)	<u>13</u>	<u>680</u>
Totals	70	3090

Approximate amount spent on shows  
(cash and merchandise) ----- \$31,162

Regional Junior Dairy Show at the Atlantic Rural

North Carolina was represented at the Regional Junior Dairy Show at Richmond, Virginia, by State Junior Herds in Jerseys, Guernseys, and Holsteins. Participation in this event was under the sponsorship of the respective breed associations, but the Dairy Extension Staff served in an advisory capacity.

Placement of Dairy Calves

Since the starting point in a 4-H Dairy Project is getting calves into the hands of boys and girls, the Dairy Extension Staff has continued to assist local county agents in locating calves for members. Even though no calf sales were held exclusively for 4-H members, the Jersey, Guernsey and Holstein Associations included calves in the regular county and state sales suitable for 4-H projects.

The Dairy Calf Chains and Foundations continue to be important means of placing dairy calves. One new foundation was started in 1953 in Davidson County. The forty-five that were operating in 1952 were continued in 1953. Approximately 200 additional calves were placed during the year through these Foundations.

County Agents have been very successful in interesting banks in financing calves for 4-H members. An example is the program in Carteret County under the leadership of Mr. R. M. William, County Agent. Twelve calves were placed at one time in this County--all financed through the local bank.

Cooperation with Breed Associations on Junior Programs *underlined*

The Dairy Extension Staff was instrumental in getting each of the pure-bred Dairy Breed Associations to set up youth committees. Even though these committees have not been as active as they could have been, they have done considerable good in that the breed associations have become more conscious of the importance of youth work. The dairy specialists have worked with these breed committees in drawing up plans for promoting youth work. It is believed that the breed association youth committees will become useful tools in promoting not only the placement of more calves but also calves of better quality.

A member of the dairy extension staff attended five county Holstein meetings and five Jersey Parish meetings to present a plan for promoting youth work on the County or Parish level. This program was well received.

The following is a brief summary of what each breed association has done to assist the Youth program:

Guernsey Breeders Association--Provided fitting and showmanship awards in District Shows. Awarded Certificates of Merit to outstanding h-h Guernsey member from each county. Gave a plaque to each member and coach of highest scoring county h-h Dairy Judging Team in Guernseys in the State Contest.

Jersey Breeders Association--Provided fitting and showmanship awards in District Shows. Presented a certificate to the outstanding h-h Jersey member from each county. Sponsored a Junior Jersey show herd at the Atlantic Rural Exposition.

Holstein Breeders Association--Provided fitting and showmanship awards in District Shows. Presented a Certificate of Merit to each boy or girl exhibiting a blue ribbon Holstein at a District Junior Dairy Show. Presented a plaque to each team member and the coach of the highest scoring h-h Dairy Judging team in Holsteins in the State Contest. Awarded a model Holstein Cow to the first

place 4-H Holstein member in the 4-H Dairy Production Project.

Ayrshire Breeders Association--Provided fitting and showmanship awards in District Shows.

Miscellaneous Other Activities

*Underlined*

T.V. Programs--For the purpose of teaching 4-H members the correct procedure for fitting and showing a dairy animal, two T.V. programs were put on. The first, "Fitting a Dairy Animal" was on August 5 and the second "Showing a Dairy Animal", was on August 7. Both programs were on station WFMY-TV, Greensboro, N. C. and were put on by J. D. George of this office, and Betty Hardin and Larry Moore, 4-H members from Guilford County.

Fitting and Showing Demonstrations--Four method demonstration meetings on "Fitting and Showing a Dairy Animal" were conducted by J. D. George, Dairy Extension Specialist. These were held in Halifax, Harnett, and Pasquotank Counties and one at the College Dairy Farm for 4-H members from many Eastern North Carolina counties.

Panel Display--A panel display showing the steps in fitting and training a dairy animal was prepared. This exhibit was displayed at all District Junior Dairy Shows, the North Carolina State Fair, and several county fairs.

Teaching Aids Made Available for County Personnel to Use

*Underlined*

Since the County Extension Agents conduct the 4-H program on the county level, it is felt that the Dairy Extension Staff can best assist the county workers by preparing teaching aids, and materials for their use. During the year visual aids material, in the form of color slides and posters, has been made available to county workers on the following subjects:

1. "The 4-H Dairy Project"
2. "Clean Milk Production"
3. "Bacteria, Milk and Business"
4. "Dehorning Dairy Calves"
5. "Fitting and Showing Dairy Cattle"
6. "Judging Dairy Cattle"

Also, during the year approximately 2,000 leaflets on Fitting and Showing were sent to agents for distribution. A leaflet announcing the H-H Dairy Production Project was prepared and made available to county personnel.



JUNIOR DAIRY SHOW  
N. C. STATE FAIR, 1953

<u>COUNTY</u>	<u>NO. CATTLE SHOWN</u>	<u>JERSEY</u>	<u>HOLSTEIN</u>	<u>GUERNSEY</u>	<u>AYRSHIRE</u>
Alamance	17	8	1	8	0
Brunswick	2	2	0	0	0
Catawba	11	11	0	0	0
Davidson	7	0	7	0	0
Guilford	7	0	0	7	0
Harnett	4	0	3	1	0
Iredell	31	11	2	8	10
Onslow	8	8	0	0	0
Perquimans	6	0	0	6	0
Rockingham	11	0	1	5	5
Rowan	7	0	0	0	7
Rutherford	5	0	0	0	5
Sampson	2	0	0	2	0
Wake	12	6	4	2	0
Wayne	2	1	1	0	0
Wilson	<u>7</u>	<u>0</u>	<u>1</u>	<u>6</u>	<u>0</u>
Total	139	47	20	45	27

<u>BRED</u>	<u>BLUES</u>	<u>REDS</u>	<u>WHITES</u>	<u>TOTAL</u>
Jersey	28	17	2	47
Holstein	9	11	0	20
Guernsey	32	11	2	45
Ayrshire	<u>21</u>	<u>6</u>	<u>0</u>	<u>27</u>
Total	90	45	4	139

<u>FINANCES</u>	
Blue - 90 x 18 =	\$1620
Red - 45 x 15 =	675
White - 4 x 5 =	20
Total on	
Individuals	\$2315
County Herds	335
Herdsman	<u>33</u>

JUDGE: Dr. J. W. Pou, N. C. State College

Total \$2683

GRAND CHAMPIONS

Jersey:

Jimmy Talton (Wake) Dandy Basil Crown

Holstein:

Samuel Cecil (Davidson) Wheatmore Ragapple Ruth

Guernseys:

Cecil Temple (Wilson) Hillendale Cavalier's Gladys

Ayrshire:

Margaret Carpenter (Rutherford) Quiet Valley Clip's Nan

COUNTY HERDS

Jerseys:

1st - Catawba

Holsteins:

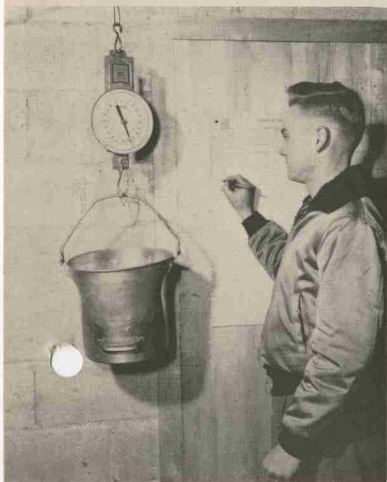
1st - Davidson

Guernseys:

1st - Iredell

Ayrshires:

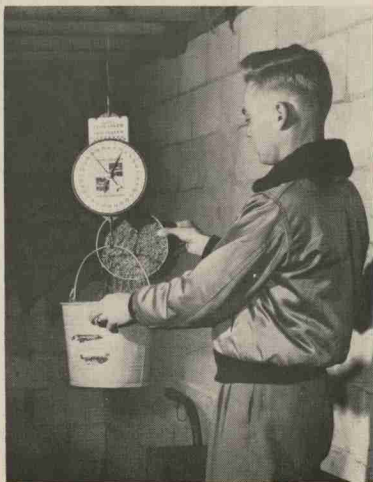
1st - Rowan



Weighing Milk

— Production And Feed  
Records On The Individual  
Cow Are Essential In A  
Sound Dairy Operation —

**North Carolina  
4-H  
Dairy Production  
Efficiency  
Awards**



Weighing Feed

# NORTH CAROLINA 4-H EFFICIENCY AWARD

## *Building For The Future*

Production records on the individual cow are a must in a sound dairy operation. Only by this method can a sound feeding, breeding, and selection program be carried out. The 4-H Dairy Production Project provides training in record keeping on the individual cow and at the same time teaches the importance of efficiency in milk production. Awards are provided by the National Dairy Products Corporation and its members in North Carolina.

## *Explanation Of Project*

1. Project begins September 1 and ends August 31.
2. Any 4-H member owning a dairy cow in production is eligible.
3. Cow may be purebred or grade. If a grade, she must carry definite characteristics of a breed.
4. Member weighs milk produced and feed fed on one day each month. A butterfat test is made if possible; if not, the average breed test is used for a butterfat computation. Monthly totals are computed based on these one-day weights. Monthly report is sent County Agent.
5. Each county selects a county winner. State winners selected from county champions.

# 4-H DAIRY PRODUCTION AWARDS PROGRAM

## *Purpose Of Awards*

1. To teach 4-H members owning milk cows the importance of feed and production records on the individual animal.
2. To teach sound feeding principles, with special emphasis on home grown feeds in lowering feed costs per 100 pounds of milk and per pound of butterfat.
3. To encourage 4-H dairy members to participate in shows, judging and demonstration events and other 4-H dairy activities.
4. To encourage 4-H members to build a high producing dairy herd.

## *Reports*

COUNTY: Members submit to County Agent their record book, plus any additional reports which the County Agent may require at a time designated by the agent.

STATE: Records on county winners submitted to State 4-H Office by October 1 each year. Records to include:

- (a) Production record folder(s) for current year
- (b) Story written by member
- (c) 4-H Dairy Production summary sheet



## Basis Of Awards

- A. Over-all 4-H Dairy work
- B. Dairy Production Record
- C. Over-all 4-H Club record
- D. Feed Program
- E. Story: "What I have learned from my Dairy Project"

## Awards

1st .....	\$50 savings bond and plaque
2nd .....	\$25 savings bond and plaque
3rd .....	\$25 savings bond
4th .....	\$25 savings bond
5th .....	\$25 savings bond
6th .....	Fountain Pen
7th .....	Fountain Pen
8th .....	Fountain Pen
9th .....	Fountain Pen
10th .....	Fountain Pen

AWARDS PROVIDED BY  
NATIONAL DAIRY PRODUCTS CORPORATION  
THROUGH ITS MEMBER COMPANIES IN  
NORTH CAROLINA

SOUTHERN DAIRIES, INC.

KRAFT FOODS COMPANY

In cooperation with  
EXTENSION SERVICE  
NORTH CAROLINA STATE COLLEGE  
RALEIGH, NORTH CAROLINA

## SUGGESTIONS FOR GIVING ORAL OR WRITING REASONS

### IN 4-H DAIRY CATTLE JUDGING CONTESTS

(Prepared by J. D. George, Extension Dairy Specialist)

1. Written or oral reasons should always be the comparative type; i.e., one animal is compared with another. Simple descriptive terms may be used to describe the last animal in the class if the contestant so desires.
2. It is permissible to throw in statements such as "2 and 3 are a close pair" or "We had an easy top and bottom and a close middle pair" so long as they are true.
3. Terms used should be simple and not "high sounding"; however, the terms should be those commonly used by good judges. A list of correct terms may be secured from the Dairy Extension Office.
4. As a means of teaching the members to visualize the class in their minds, it is sometimes helpful to ask them to describe each animal as to color markings, etc. before they start giving oral reasons.
5. Both in writing and giving oral reasons short complete statements are preferred to long sentences filled with many phrases.
6. The following outline represents the form which contestants will be expected to follow in writing or giving oral reasons in the state contest:

I placed 1 over 2---(most important reason first, followed by second most important reason and so on). Three or four strong reasons are usually enough. Then grant that 2 is superior to 1 in one or two respects.

I placed 2 over 3---(same outline as for first pair).

I placed 3 over 4---(same outline as for first pair).  
(Down to this point one cow is always compared with the other).

I placed 4 last in this class as she is---(simple descriptive terms may be used here).

7. The above points are illustrated in a sample set of reasons found on the opposite side of this sheet.

#### SAMPLE SET OF ORAL REASONS

ly placing on this class of 3 year old Jersey cows is 3-2-4-1.

I placed 3 first in this class and consider her an obvious top. I placed her over 2 mainly because of dairy character. 3 is showing much more dairy character than 2 in that she has a longer and thinner neck, sharper over the withers, and is thinner in the thighs. 3 is also carrying a much more desirable udder than 2. Her udder is larger, is more firmly attached at the front and the attachment is higher and wider in the rear than is that of 2. 3 is also standing on a straighter set of rear legs than is 2. I grant, however, that 2 has a little more body capacity than 3, having a wider spring of fore and rear ribs and being deeper in the body than is 3.

I placed 2 over 4 and consider this a close placing. I went to the No. 2 mainly because she is carrying more body capacity than 4. She is also straighter over the top than 4, is more nearly level from hooks to pins, and is stronger in the loin. 2 is also a more stylish cow than is 4, especially when standing. 4 tends to fall apart when stopped. I must grant, though, that 4 is sharper over the withers than 2.

I placed 4 over 1 since 4 is a larger cow showing much more stretch and depth of body than 1. 4 is a much more dairy looking cow than 1. She is more angular, is clearer cut about the head and neck and is thinner in the thighs. 4 is showing more breed type and character about the head. 4 also has more strength of foreudder attachment and the foreudder extends farther forward than does the udder of 1. We must admit, however, that 1's rear udder is more desirable than is that of 4. It is much higher and wider in rear attachment.

I criticize 1 and place her last in this class because she is very short and compact, entirely too beefy, and very weak in the heart girth. She is just a plain cow throughout and must go on the bottom.

4-H DAIRY DEMONSTRATION SCORE CARD

Name \_\_\_\_\_ Address \_\_\_\_\_

County \_\_\_\_\_ Member of team ( ) \* or individual ( )

Title of Demonstration \_\_\_\_\_ Date \_\_\_\_\_

\*Use separate score card for each member of team.  
Team score will be average of the two members.

POINTS TO CONSIDER	POSSIBLE SCORE	EXCEL- LENT	GOOD	FAIR	POOR	ACTUAL SCORE
<b>A. PRESENTATION</b>	40					
1. Ease, skill, and smoothness of procedure						
2. Posters and other visual aids adequate and properly used						
3. All steps clearly explained and demonstrated						
4. Neatness of demonstrator						
5. Voice clear and reasonably strong						
<b>B. SUBJECT MATTER</b>	20					
1. Organization of subject matter						
2. Completeness of information given						
3. Information accurate and up-to-date						
4. Replies to practical questions						
<b>C. PRACTICABILITY</b>	20					
1. Demonstration practical for present day farming operation						
2. Importance of subject being demonstrated						
<b>D. RESULTS</b>	20					
1. Effect on audience						
2. All points actually demonstrated are well done						
<b>TOTAL</b>	100					



NORTH CAROLINA 4-H CLUB DAIRY DEMONSTRATION PROGRAM  
(For Boys only)

SUBJECT OF DEMONSTRATIONS:

Members may choose any subject related to herd management, feeding or showing of dairy cattle.

ELIGIBILITY:

Any 4-H Club boy actively enrolled in a dairy project may enter the contest either as a member of a team of two boys or as an individual.

TIME ALLOTMENT:

A maximum of 15 minutes.

ORGANIZATION OF CONTESTS:

1. County Contests: It is suggested that County Contests be held to determine county winners each year. County Winner (team or individual) to represent county at District Contest. (Local prizes should be secured for the county contest where possible).
2. District Contests: A District Contest will be held in each of the six extension districts in which the county winners compete. Winner (team or individual) from each district competes in state finals. Date of District Contests each year to be set by District Agents, 4-H Club Staff, and Dairy Extension Staff. Winner in each district to receive expenses to attend State 4-H Club Week. (This may be either one boy or a team of two boys).
3. State Contest: The six district winners will compete in the state finals which will be held during 4-H Club Week each year. The winner (team or individual) will receive an appropriate award.

SCORE CARD:

Presentation.....	40 points
Subject matter.....	20 points
Practicability.....	20 points
Results.....	20 points
Total	100 points

## RULES FOR THE NORTH CAROLINA 4-H DAIRY CATTLE

### JUDGING CONTEST

1. A team shall consist of three members and an alternate. All four members may judge in the state contest and the one making the lowest total score is automatically the alternate.
2. The state contest will involve a class each of Jersey, Guernsey, Holstein and Ayrshire cows and a class each of Jersey, Guernsey, Holstein, and Ayrshire heifers. A class shall consist of four animals.
3. Contestants will be required to give oral reasons on two classes of cows, and they will be asked to write reasons on two other classes of cows.
4. Contestants may take notes for study on classes designated for oral reasons. These notes may not be used while giving the reasons.
5. Contestants will be allowed twelve minutes for placing a class. Eight additional minutes will be allowed for taking notes on classes designated for oral reasons and for writing reasons on classes designated for written reasons. The reasons are to be written during this eight minutes. A special sheet will be provided on which reasons will be written.
6. Two minutes will be allowed in giving oral reasons.
7. Numbers will be used to identify animals. Numbering will be from left to right standing behind the animals.
8. Coaches will not be allowed in the arena with the contestants at any time during the contest.
9. Contestants will be identified by number only. They shall not wear marked clothing which in any way shows from which county they come.
10. There shall be no talking among contestants during the contest.
11. **ELIGIBILITY:** College students who matriculate prior to September 1 of the current year or who have taken work beyond high school grades are not eligible. To be eligible to represent the state in the National Contest, a member must be at least fourteen years of age at the time of the national event (about October 1) and must not have passed his or her twenty-first birthday on January 1 of the current year.

A 4-H member who has represented North Carolina at the National Contest is not eligible to enter the State Contest again.

## 1953 4-H DAIRY PROGRAM

by

J. D. George, Extension Dairy Specialist

1. **DAIRY DEMONSTRATIONS:** The 4-H Dairy Demonstrations (for boys only) will be revived this year. These demonstrations may be put on by an individual or by a team of two boys. Any subject relating to management and feeding of dairy cows can be used. Some examples are: "Silage in a Dairy Feeding Program," "Production Records--A Must in Dairy Farming," "Feeding and Caring for A Dairy Calf," etc. Mimeographed copies of demonstrations will be made up in the Dairy Extension Office for distribution to counties. Plans are to hold District Contests with the District winners competing in the State Contest to be held probably during 4-H Club Week. Details will be sent out in a letter.
2. **4-H JUDGING CONTEST:** Two contests are planned. Four highest scoring teams will be selected at first contest. Second contest, involving these four teams, to be held 4-6 weeks after first contest. Second contest to be a two-day event with 16-20 classes judged. State team to consist of four highest scoring individuals in second contest. Coach of high county team (second contest) to be coach of State Team.
3. **4-H DAIRY PRODUCTION PROJECT:** This project, in which members keep records on a cow in milk, has been revised. Members weigh milk one day in month and have butterfat test made or use breed average for a butterfat computation. Monthly production is computed. Much valuable training can be given through this project and agents are urged to study this project and, if at all possible, give it emphasis. County winners will compete for State prizes. About ten cash awards will be offered at the State level.
4. **DAIRY SHOWS:** The show provides the glamour needed in a 4-H project. District Junior Shows are planned for all locations at which they were held in 1952. We hope to start one or two new ones. The County Show is a very valuable means of creating interest in 4-H Dairy Projects. Agents are urged to set up County Junior Dairy Shows, where feasible, if one is not already established. Fitting and Showing leaflets are available from the Dairy Extension Office. Assistance will be given in putting on Fitting and Showing Demonstrations in counties as time permits.
5. **PLACEMENT OF CALVES:**
  - A. **DAIRY CALF CHAINS AND FOUNDATIONS:** Calf chains (calf is returned in payment) or Foundations (boys pay for heifer at end of one or two years) provide excellent means of getting calves into the hands of boys who would not get one otherwise. Assistance from the Dairy Extension Office will be given if needed in setting up Chains and Foundations in counties.
  - B. **OTHER MEANS OF PLACING CALVES:** Many counties have gotten local banks to finance calves with 4-H members. In many cases a few words of encouragement will entice the parents to purchase a calf for the boy or girl. Creating an intense desire in the boy for a calf may do the job. Many parents are willing to give their children what they want.
6. **JUNIOR DAIRY SHOW AT STATE FAIR:** Efforts are being made to make the Junior Show at the State Fair a one-day show similar to our District Shows, using the Danish system of judging and allowing the animals to be taken home as soon as the show is over. Agents will be notified by letter if these recommendations are adopted.



TEACHING MATERIAL AVAILABLE FOR USE OF AGENTS  
AT 4-H MEETINGS AND OTHERWISE

The following visual aids material is available through the Visual Aids Department:

1. The 4-H Dairy Project (color slides): Designed to create interest in the Dairy Project, this set of slides contains cartoons, drawings, and color photos of different phases of the 4-H Dairy Project. Explains how project operates, how members may secure calves, records kept in project, and other things related to project.
2. Carolina Cows (movie with sound): A movie made in North Carolina depicting 4-H Dairy work.
3. Clean Milk Production (available in color slides or posters): This set of seven slides outlines the steps in the production of clean milk. Applies to family cow as well as commercial production.
4. Bacteria, Milk, and Business (slides): Explains the importance of bacteria control, how bacteria multiplies, importance of cooling milk rapidly, and why the milk must be of top quality when the plant receives it.
5. Dehorning Dairy Calves (color slides): Outlines through actual color pictures the steps in dehorning calves with electric dehorners and caustic paste. Designed to create interest in calfhood dehorning.
6. Fitting and Showing Dairy Cattle (color slides): Outlines, through color pictures, the steps in fitting and showing dairy cattle. Most boys are interested in how animals are fitted for a show even if they do not own dairy calves.
7. Judging Dairy Cattle (color slides): set of color slides designed to create interest in judging. Perhaps this set of slides could be used in a series of 4-H meetings during early spring as a kick-off for training a judging team.

NOTE: Teaching material will be prepared on other subjects as time permits. Please feel free to make suggestions as to what you need in the way of teaching material on dairying.

MANUALS AND RECORD BOOKS

1. THE 4-H DAIRY MANUAL (Revised 1951): Outlines the points in caring for dairy calves. Also covers fitting and showing. Order from Publications Office.
2. FITTING AND SHOWING DAIRY CATTLE: Order from Dairy Extension Office.
3. 4-H DAIRY PRODUCTION RECORD: Used when animal reaches production stage. Order from Dairy Extension Office.
4. 4-H DAIRY CALF RECORD: Used until animal reaches production stage. Order from 4-H Club Office.



SUGGESTED COUNTY PROGRAM FOR  
PROMOTING A GIVEN BREED AMONG JUNIORS

Objectives:

1. To get boys and girls to choose your breed when they start their dairy projects.
2. To insure that all boys and girls who want a calf of your breed can get one.
3. To follow up placement of calves and advise members on proper feeding and management.
4. To see that all calves placed in hands of boys and girls are of good quality.
5. To see that your breed is well represented at Junior Dairy Shows, including the State Fair.
6. To see that each boy or girl owning a purebred animal (of your breed) is a junior member of the National Association.

Reaching the Above Objectives:

1. Each adult breeder: Has a responsibility in carrying out the above points!
2. County Breed Association: Should, as an organization, include in its program a plan for meeting the above objectives. Perhaps the appointment of a Junior Committee might be a means of helping to promote this work.

Some things this committee might do:

- a. See that County Agents and Vocational Agriculture teachers have promotional literature on your breed to distribute to boys and girls.
  - b. If lack of finances on the boys' part is hindering the placement of calves, this committee might accept the responsibility of establishing a foundation to purchase calves and place them with boys--allowing them one or two years to repay.
  - c. Be responsible for locating and approving calves to be placed with boys and girls. (Perhaps the County Association may want to agree on prices that will be charged for calves going to club members.)
  - d. Make periodic visits to boys owning animals of your breed to see that members are caring for calves properly. Also see that members keep production records on animals.
  - e. Accept the responsibility of getting boys and girls owning your breed to show their animals. Also take the leadership in getting a Junior County Herd from your county to the Junior Show at the State Fair.
  - f. Work with County Agents in selecting county champion junior member in your breed to compete for state award. (Score card is available.)
  - g. See that each boy or girl owning a purebred animal of your breed is a junior member of the National Association (if junior memberships are offered).
3. The job of promoting any breed among juniors is the direct responsibility of the breed concerned. This refers to all breeders. The fieldman cannot do it either. The job is too big.

PROJECT IV - DAIRY FARM MANAGEMENT

We consider each of the approximately 450 farms on which DHEA testing is being conducted a demonstration in farm management and roughage production. Since a shortage of good roughage including pasture, silage, and hay is one of the greatest handicaps to profitable dairying in North Carolina, much emphasis is placed on this program.

The Agronomy, Farm Management, and Dairy Extension Sections, cooperate very closely in this phase of the project.

During 1953 fifty county-wide one-day dairy schools were held cooperatively with the Agronomy and Farm Management Departments. These schools attracted approximately 2700 farmers and agricultural leaders. At each, ways to produce more and better roughage was emphasized as well as other improved dairy practices. Farmers brought in samples of hay and silage from their own farms for the purpose of grading and discussion. The importance of silage as an economical means of storing roughage was greatly emphasized. Its importance during times of drought was stressed.

There is no accurate way to estimate the number of silos both trench and upright that have been constructed in North Carolina during 1953; however, in seventeen counties in the mountains there were 624 silos built. This is an actual count by a dairy specialist. Many counties in the Piedmont report as many as 200 silos per county having been built. Thus this program has gained tremendously and as a result more good roughage will be available for feeding in the future, even though another drought year follows the one in 1953.

During April and May, four forage field days were held at four of the branch experiment stations. These were held cooperatively with several departments and attracted well over 1000 people. The extension dairy specialist prepared an exhibit for each of these field days on the importance of high quality

roughage in the diet of a dairy cow.

In June a group of the younger county agents was brought into the College for further training. The dairy specialist participated in this program and especially stressed the newer scientific research in the field of dairy management.

Efficient dairy farm management requires that farms be properly equipped with labor-saving buildings and machinery. The dairy specialists cooperating with agricultural engineering specialists have developed a number of plans for milking, lounging, calf, and bull barns, and for silos. During 1953, <sup>4</sup> 2010, <sup>2438</sup> of these plans were mailed out on request to farmers and county agents. Among these plans were <sup>214</sup> 352 for milking parlors, <sup>540</sup> 564 for pole or lounging barns, <sup>3215</sup> 632 for six-cow stanchion and <sup>110</sup> 106 for twelve-cow stanchion barn plans, used for milking only. In addition the agricultural engineering specialist and the dairy specialist reviewed all the plans now available, reworking and remodeling them in the light of new research and findings in the field.

"Managed milking" was discussed and stressed at many meetings as a means of reducing and controlling mastitis. An extension folder entitled "Steps to Good Milking" was prepared on this subject. Over 10,000 copies of these have been distributed to farmers and agricultural leaders.

Much emphasis has been placed in 1953 on calf raising. Many North Carolina dairymen do a very poor job of raising replacements. An exhibit on this subject was prepared by the dairy specialists cooperatively with the State Department of Agriculture for use at fairs, farm shows, feed stores, etc. This subject has been the source of many talks at farm meetings. An extension folder entitled "Raise 'Em Right" has been prepared and over 10,000 copies distributed.

The dairy specialist has made a special effort in 1953 to work closer with state and local veterinarians in promoting a more comprehensive herd health program. He spoke at the state conference for veterinarians and has contacted

men in this field wherever possible. It is hoped in 1954 that a definite herd health program in dairy extension can be developed.

Other literature prepared during 1953 specifically related to this project is listed below.

The Phosphorus Content of Common Dairy Feeds; the Calcium Content of Common Dairy Feeds.

Silage From Pasture and Hay Crops

Silage and Hay in a Dairy Feeding Program

Use of Emergency Grains for Dairy Cattle Rations



PROJECT V - COOPERATION WITH BREED ASSOCIATIONS AND OTHER ORGANIZATIONS

Breed Associations

At the annual meetings of each of the dairy breed associations, Jersey, Guernsey, Holstein and Ayrshire, a plan of work for the year is developed. The specialists assist in developing these plans to better coordinate and enlarge the activities of these groups. These associations assist in developing the dairy industry in the state through the promotion of registered cattle and particularly through h-h dairy club work. Their activities in this latter field are described in the h-h section of this report. In addition these groups are composed of leaders in the dairy fields who assist in many ways to promote better dairy practices throughout the state.

During 1953 the dairy specialists assisted with twelve Parish and district Jersey meetings, eight County Holstein meetings and one state field day, one state Ayrshire field day and two Guernsey field days. These were attended by county agents, agricultural leaders, and dairymen. Total attendance 1300.

N. C. Purebred Dairy Cattle Association

The dairy specialists worked with the North Carolina Purebred Dairy Cattle Association on problems relating to the development of the dairy industry. Two meetings of this group were held during the year for planning purposes.

N. C. State Grange and Farm Bureau Federation

At the annual meetings of the State Grange and the Farm Bureau Federation, the dairy specialists have assisted in developing the dairy part of the program for each organization. These organizations have been helpful in sponsoring legislative bills helpful to the dairy industry.

#### N. C. Milk Commission ✓

In March of 1951 the N. C. legislature set up a milk commission to help develop a more orderly system of purchasing and selling Grade A milk in the state. The college has been instructed to furnish technical information on milk marketing problems to the commission. The dairy specialist is a member of the college committee charged with this responsibility. This has required a great deal of time.

#### N. C. Dairymen's Conference

This two-day conference was held in cooperation with the Department of Animal Industry, the state dairy cattle breed associations and the State Department of Agriculture. It attracted 350 county agents, dairy leaders and dairymen from eleven different states. The program stressed the need for greater efficiency in the production of milk. The dairy specialists assisted with this program through planning, publicizing and participating in it.

#### American Dairy Association

The N. C. branch of the American Dairy Association was organized in 1953. The specialists have cooperated closely with this organization in its establishment and development. The specialists have spoken at thirteen county and two state meetings emphasizing the importance of selling people on the need for more dairy products in the diet. Total attendance at these meetings was 1100.

In addition the dairy specialists have participated in a series of TV shows on this same topic.

#### Banks

The dairy specialists have cooperated with the bankers of the state in

order to work out a program whereby long-term loans may be made available to dairymen at a low rate of interest. Much progress has been made along these lines and an improved relationship between bank personnel and farmers is resulting.

#### Shows Judged

The dairy specialists judged seventy-five dairy shows, most of which were principally 4-H in nature. These events in the main were of an educational nature. Reasons on the placings were given at each show as was instruction on fitting and showing. Exhibits pointing up the importance of proper feeding, breeding and calf raising were on display at most of these shows. The estimated attendance at these events was 25,000.

## PROJECT VI - DAIRY MANUFACTURING

The Dairy Manufacturing Extension work for the year 1953 was carried on jointly by W. M. Roberts and R. B. Redfern.

The services rendered have included aid and assistance on technical plant control, quality control, dairy plant layouts, plant records, and equipment changes. In addition, advice and assistance have been given to secure managers and competent personnel. The most important problems encountered this year were:

1. Building expansion and equipment problems.
2. Record analysis and plant efficiency problems.
3. Quality control problems.

The dairy plants in North Carolina, particularly the small ones, are beginning to concentrate on plant efficiency. Instead of letting someone else check their records and books, more plant owners are beginning to check for themselves. This is probably due to the general feeling that a recession is due and in some instances, prices for materials, (glass bottles, equipment, etc.) have increased but the price of milk to the consumer has remained constant. This interest in records is overdue, however, because many plants have not been too interested in records as long as they were making a profit.

### Creamery Butter

There are approximately ten plants in the state that process butter. Seven of these make butter almost twelve months in the year. The other three process from two to five months. The latter probably process during the flush seasons of milk production. The estimated production for 1953 in these twelve plants is 1,756,000 lbs. This is an increase over 1952 and can be attributed to the increase in production of fluid milk. It is significant also that the largest increase in butter production has been mainly at one plant -- Yadkin Valley



Dairy Cooperative, located at Wilkesboro, North Carolina.

#### Cheese

The cheese situation is much the same as previous year, i.e., the cheese is processed mainly at one plant, the Kraft Foods Company located at West Jefferson. This plant has processed for the year 1953, approximately 2,307,871 pounds of cheese. This is an increase over the year 1952. This increase in cheese production is due to an increase in total milk production for North Carolina. It is believed that if the milk production in North Carolina continues to increase, there may be a need for another cheese plant.

#### Ice Cream

The production of ice cream for 1952 was 13,507,000 gallons. The estimated production in gallons for 1953 is 14,250,000. This is for both hard and soft ice cream. There seems to be a decrease in the number of soft ice cream establishments in the year 1953. For a period of a few years there was no end to the interest shown in these establishments. However, many plants that were installed hurriedly have gone out of business in the year 1953. The quality of all ice cream has steadily improved in recent years. Competition, better trained plant personnel, and efficient regulatory agencies have played major roles in this improvement. In the last two years there has been a trend toward a lower fat ice cream. Many organizations have manufactured a so-called economy package in which the fat content has been lowered, thereby allowing a reduction in price to the consumer. The fat content meets the state requirements but it is lower than regular ice cream.

#### Market Milk

The estimated Grade A milk production in North Carolina for 1953 is 602,390,000 pounds. The Class I sales are estimated to be 554,398,000 pounds.

The Grade A milk production for 1952 was 522,802,644 pounds and the Class I sales for this same year were 512,593,254. This is an estimated increase in production of Grade A milk of 79,587,356 pounds and in Class I sales of 41,605,000 pounds. These figures show that the increase in production of Grade A milk was almost double that of Class I sales. This fact supports the need for another cheese plant in North Carolina.

The consumption of milk has again increased. This is due probably to an increase in the number of people of milk drinking age, and is also a credit to the home demonstration agents, instruction personnel and to all the organizations now stressing the importance of using more milk and dairy products in the diet.

Fluid milk packaged in paper containers has increased in wholesale business but has not increased materially in retail sales. The ratio of paper to glass is approximately 66 to 33 per cent with a possible slight increase toward paper in 1953. This year more plants have installed dual operations, that is, bottling milk in both glass bottles and paper cartons.

The trend is still toward larger plants buying out smaller ones. One of the largest plants to be purchased in 1953 was the White Ice Cream and Milk Company, located at Wilmington, N. C. It was purchased by National Dairies, Incorporated. Others purchased during the year 1953 were:

Taylor's Dairy, Williamston, to Maola Milk & Ice Cream Company, New Bern, N. C.  
Terra Ceia Dairy, Pinetown, to Carolina Dairies, Greenville, N. C.  
Smith-Melville Dairy, Raleigh, to Long Meadow Farms, Durham, N. C.  
Rosedale Dairy, Elizabeth City, to Maola Milk & Ice Cream Co., New Bern, N. C.

#### Short Courses

The annual two-week short courses on Market Milk and Ice Cream were given in January and February. There were fourteen members who attended the Market

milk and nine who attended the ice cream. These men were instructed in the operation of dairy plant processing equipment, in laboratory technique, in record analysis, in quality control, and in how to prevent defects in the various dairy products. It is felt that through this medium many improvements can be made in the dairy processing industry. Lectures and demonstrations on Babcock Testing were given in the DHIA short course, to assist M. E. Senger with his program. Also, lectures on "Why Milk Tests Vary" were given.

#### State Fair Dairy Bar

The N. C. State Fair Dairy Bar was not operated for the year 1953. This project had been operated in the past under the supervision of R. B. Redfern. The bar had been operated using student labor from the College's Animal Industry Department. However, due to the lack of enthusiasm and the lack of definite location arrangements with the N. C. State Fair officials, the dairy bar was discontinued for the year 1953.

<u>Nature of Services Rendered in Dairy Manufacturing</u>	<u>No. Separate Contacts</u>
Creamery and Cheese Manufacturing Problems	6
Ice Cream Manufacturing Problems	14
Market Milk Problems	3
Quality Dairy Products Conference	1
Dairy Plant Remodeling Conference	3
Dairy Plant Equipment Advice	9
Dairy Plant Record Analysis	23
Dairy Refrigeration Problems	1
Dairy Retail Problems	1
Dairy Building Planning	16
Dairy Organization (new plants)	6
Dairy Plant Managerial Problems	10
Milk Supply	12
N. C. State Fair Conferences	2
Technical Plant Control	20
College Conferences, Dairy Work	24
General Dairy Industry Problems	23
Dairy Plant Efficiency Problems	30
N. C. Producers Association Meetings	5
Supervising and Instructing Short Courses	47

Promotion of Dairy Industry	26
Extension Staff Conferences	4
Dairy Short Course Planning Conferences	5
N. C. Dairy Products Association Meetings	12
American Dairy Science Meetings	1
N. C. Dairy Technology Society Meetings	8
Annual Meetings Dairy Plants	2
*Dairy Exposition (Boston)	1
Challenge Program	1
Judge Dairy Foods in Regional 4-H Contests	3

\* Out of State

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~~25/5~~  
25/5



COUNTIES WORKED IN DURING 1953 / 5

Alamance	Currituck	Lee	Richmond
Alexander	Dare	Lenoir	Robeson
Alleghany	Davidson	Lincoln	Rockingham
Anson	Davie	McDowell	Rowan
Ashe	Duplin	Macon	Rutherford
Avery	Durham	Madison	Sampson
Beaufort	Edgecombe	Martin	Scotland
Bertie	Forsyth	Mecklenburg	Stanly
Bladen	Franklin	Mitchell	Stokes
Brunswick	Gaston	Montgomery	Surry
Buncombe	<i>Hatteras</i> Graham	Moore	Swain
Burke	Granville	Nash	Transylvania
Cabarrus	<i>Greene</i> Guilford	New Hanover	Tyrrell
Caldwell	Halifax	Northampton	Union
<i>Camden</i> Carteret	Harnett	Onslow	Vance
Caswell	Haywood	Orange	Wake
Catawba	Henderson	Famlico	Warren
Chatham	Hertford	Fasquotank	Washington
Cherokee	Hoke	Fender	Watauga
<i>Chowan</i> Clay	Hyde	Perquimans	Wayne
Cleveland	Iredell	Person	Wilkes
Columbus	Jackson	Pitt	Wilson
Craven	Johnston	Folk	Yadkin
Cumberland	Jones	Randolph	Yancey

COMBINED STATISTICAL REPORT OF ENTIRE STAFF

Days in field	1386
Days in Office	1143
Days Sick Leave	11.5
Days Annual Leave	85
Farm and Other Visits	3839
Meetings Attended	1334
Attendance at Meetings	123,491
Correspondence	
First Class Letters Written	9293
Form Letters Send out	39,395
Miscellaneous Matter Mailed Out	1933
Office Conferences	2085
Articles Written	275
Visits to County Agents	1364

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