## AGRICULTURAL EXTENSION SERVICE NORTH CAROLINA STATE

OF THE UNIVERSITY OF NORTH CAROLINA
AT RALEIGH

AGRICULTURAL EXTENSION SERVICE OFFICE OF POULTRY EXTENSION SCOTT HALL

P. O. Box 5307 RALEIGH, N. C. 27607

I am enclosing the report of the growing period for the seventh North Carolina Random Sample Laying Test which you have requested. Please circulate it among your associates in order that maximum use of it may be made. If additional copies are needed, the request should be sent to Mr. S. J. Childs, Jr., Piedmont Research Station, Route #6, Salisbury, N. C.

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Grady A. Martin

Extension Poultry Specialist

## SEVENTH NORTH CAROLINA RANDOM SAMPLE LAYING TEST

Growing Report
March 12 through August 8, 1965

The North Carolina Random Sample Poultry Tests are conducted under the auspices of the Agricultural Extension Service of North Carolina State University and the North Carolina Department of Agriculture. Mr. S. J. Childs, Jr., is Resident Manager of the Tests and Dr. G. A. Martin is Project Leader. The Laying Test is designed to assist commercial poultrymen of North Carolina in evaluating the stocks of layers that are available to them in quantity. A committee representing the various poultry interests of the state advises the Steering Committee in establishing policies and practices which best serve this purpose.

The chicks were incubated at the test site from a 360-egg sample for each entry. The samples were taken from freshly gathered eggs at a randomly selected supply flock or by random procedure from at least 3,600 eggs when nest sampling was not feasible. Public employees in Agriculture served as sample takers. One hundred twenty sexed pullets (when available) were wing banded for growing in replicated pens of 60 pullets, with 175 sq. ft. of litter-covered concrete floor per pen. First week mortality, sexing errors, and accidental deaths were not charged against the entry.

All mash starting and growing rations were mixed at the test site by the formulae used in the sixth test. The starting mash was fed for eight weeks and the growing mash was fed during the remainder of the growing period. The vaccination schedule included intra-occular Newcastle-bronchitis at one day old with one bronchitis and two Newcastle booster vaccinations through the drinking water, fowl pox in the wing web, coccidiosis and encepholomyelitis in the drinking water.

In the data table, the entry number was drawn at random. The breeder is fully identified with stock and source of sample elsewhere in the report. Net pullets at one week excludes first week mortality, sexing errors, and accidental deaths. Mortality, 8 through 150 days is the average of accountable mortality in the two pens of the entry. Average feed per pullet - first 150 days is based upon bird-days and does not charge the feed consumed by birds that died against survivors. Average body weight at 150 days is the average weight of all survivors. Feed and Chick Cost per pullet at 150 days distributes total cost of the net pullets at one week and the feed which they consumed equally among the survivors and, therefore, includes the cost of mortality. Feed costs are based upon 3-year averages of monthly feed prices as reported by the North Carolina Department of Agriculture. Chick prices are the average of the current and preceding two years in 1,000 lots at hatch date as quoted by local distributors of the stock. Average eggs per pullet at 150 days indicates the general maturity level of the entry at housing.

No major disease problems were encountered during the growing period. The 1.8% average mortality was widely distributed as to time and cause. The pullets appeared to be in peak condition at housing.

Major changes in design of the test, flock management, sample size, and equipment are planned for initiation with the eighth test. We believe that these changes will make the test even more sensitive and useful in indicating stock differences.

- G. A. Martin, Project Leader

## GROWING PERIOD - TEST 7-G, 1965

Entry		Net Pullets at 1 wk.	Mortality 8-150 days (%)	Av. lbs. Feed/ Pullet (150 da.)	Av. Body Wt. at 150 da. (Lbs.)	Feed & Chick Cost/ Pullet Housed	Av. eggs/ Pullet to 150 days
No.	•		(10)	(,	<b>、</b> ,		,
1101			<del></del>		<del></del>		
1	Welp's	117	2.6	17.8	3.2	\$1.21	0.41
2	Babcock	120	0.8	19.2	3.6	1.24	2.00
3	Hy-Line	117	0.9	19.1	3.5	1.35	0.60
4	Colonial	119	2.5	18.5	3.4	1.28	0.78
5	Kimber	120	0.8	18.8	3.6	1.27	0.45
6	Pa-Ind. Farm Bu.	115	3.5	18.1	3.4	1.22	0.22
7	Erath	109	0.9	19.6	3.9	1.23	0.61
8	Ghostley	116	1.8	19.1	3.7	1.22	0.74
9	Hubbard	119	2.5	22.0	4.6	1.34	0.91
10	Cornell	119	0	18.6	3.5	1.24	0.07
11	Garber	117	1.7	20.3	4.1	1.23	1.41
12	Cashman	99	2.0	19.2	3.8	1.29	0.20
13	Shaver	1 20	1.7	19.3	3.8	1.23	0.36
14	Fox	117	2.6	19.6	3.8	1.23	0.18
15	Davis	119	0.8	23.2	4.8	1.37	0.60
16	Honegger	120	1.7	18.6	3.6	1.24	0.32
17	Garrison	97	1.0	18.5	3.5	1.18	0.02
18	Ideal	118	0.8	18.8	3.6	1.22	0.32
19	Arbor Acres	118	5.1	17.8	3.3	1.14	0.01
20	Heisdorf & Nelso	n 118	2.5	18.4	3.6	1.21	0.47
	Averages	116	1.8	19.2	3.7	1.25	0.53
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## LIST OF ENTRANTS IN SEVENTH N. C. RANDOM SAMPLE LAYING TEST

BREEDER AND ADDRESS Arbor Acres Farm, Inc. Glastonbury, Conn.	STOCK DESIGNATION WL StrX Queen	SOURCE OF SAMPLE Arbor Acres Southeast, Inc. Asheville, N. C.
Babcock Poultry Farms, Inc. Ithaca, N. C.	WL 3wX B-300	Harrolds Hatchery Winterville, Ga.
Cashman Leghorn Farms Webster, Ky.	WL 3INX Hi-Cash	Cashman Leghorn Farm Webster, Ky.
Colonial Poultry Farms, Inc. Pleasant Hill, Mo.	WL 4INX True-Line 365-B	Colonial Hatcheries, Inc. Cullman, Ala.
Joe K. Davis Hatchery Earl, N. C.	BX RIR x BPR Combiner Sex-Link	Joe K. Davis Hatchery Earl, N. C.
Erath Egg Farm Stephanville, Tex.	3IBX CG x WLX Mestiza	Erath Egg Farm Stephanville, Tex.
Fox-Den Farm Cary, N. C.	RIR StrX Little Red Hens	Fox-Den Farms Cary, N. C.
Garber Poultry Breeding Rarm Modesta, Calif.	BX CG x WL GX-291	Joe K. Davis Hatchery Earl, N. C.
Earl W. Garrison, Inc. Bridgeton, N. J.	WL StrX X300	Stever Poultry Farm Huntingdon, Pa.
Ghostley's Poultry Farms, Inc. Anoka, Minn.	WL StrX Pearl 63	Chick Haven Farm N. Wilkesboro, N. C.
Heisdorf & Nelson Farms, Inc. Kirkland, Wash.	WL StrX Nick Chick	J. C. Castlebury Poultry Farm, Apex, N. C.
Honegger Farms Co., Inc. Forrest, Ill.	WL 3wX Layers	Fred Haley Hatchery, Inc. Canton, Ga.
Hubbard Farms, Inc. Walpole, N. H.	BX NH x Syn. Golden Comet	*Hubbard Farms Statesville, N. C.
Hy-Line Poultry Farms Des Moines, Iowa	4IBX Syn x Syn 934-D	Tar Heel Chicks, Inc. Monroe, N. C.
Ideal Poultry Breeding Farms, Inc. Cameron, Texas	4BX Syn x WL #236	Jordan Bros. Hatchery, Inc Bridgewater, Va.
Kimber Farms, Inc. Fremont, Calif.	WL StrX K-137A **	*Hubbard Farms, Inc. Statesville, N. C.
N. Central Regional Poul. Br. Lab. Lafayette, Ind.	WL RB Cornell Control	N. Central Reg. Poul. Br. Lab., Lafayette, Inc.
Pa. Ind. Farm Bureau Grantville, Pa.	WL StrX Princess 55	Pa. Farm Bureau Harrisburg, Pa.
Shaver Poultry Breeding Farms, Ltd Galt, Ont. CANADA	. WL 3wX Starcross 288	Mid-Valley Hatchery, Inc. Dayton, Va.
Welp's Breeding Farm Bancroft, Iowa	WL StrX #937	Cowen Hatchery Hoschton, Ga.

<sup>\*</sup> Produced by Haven Little in N. Hampshire \*\*Produced by Henry Berg in Pa.