

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 Eighth 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. 28144.

Beginning with this test, the design provides each entry with two pens of 88 sexed pullets reared on hardwood slat floors and two pens of 88 sexed pullets reared in an area that has about 37% hardwood slat floors and about 63% concrete floor with shavings litter. Floor space allowance is about one and  $1\frac{1}{2}$  sq. ft. per bird, respectively. At 150 days, 2 pens of 50 birds are placed on hardwood slats at one sq. ft., 2 pens of 50 birds are housed in half slat-half litter pens at  $1\frac{1}{2}$  sq. ft. and 4 blocks of 26 birds are placed in 10"x18" cages at 2 birds per cage.

We believe that this change in design will greatly enhance the value of test data for commercial appraisal of the entries. You are invited to visit the test.

Very truly yours,

Grady A. Martin  
Extension Poultry Specialist

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EIGHTH NORTH CAROLINA RANDOM SAMPLE LAYING TEST  
Growing Report  
March 25, 1966, through August 21, 1966.

The North Carolina Random Sample Laying 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 purpose of the Tests is to assist poultrymen in evaluating stocks of commercial layers.

Samples of 1,080 freshly gathered eggs were taken at randomly selected supply flocks or by random sampling from egg rooms when nest sampling was not feasible. Public employees in Agriculture selected the samples, sealed the cases, and sent them to the test site where all eggs were incubated. 352 sexed pullets (when available) were placed in 4 pens as described above. First week mortality, sexing errors, and accidental deaths were not charged against the entry.



All-mash rations were mixed at the test site. A starting ration was fed for the first 60 days and a growing ration for the last 90 days of the period. All birds were vaccinated for Newcastle-Bronchitis and Encephalomyelitis in the water and for Pox via the wing web. All birds were debeaked and those housed on slats were dubbed. The pens having shavings litter were vaccinated for Coccidiosis.

The tables list the combined data for the entry (Table 8 G-C) and the data for each type of housing (Tables 8 G-S & L). The entry number was drawn at random. The breeder is fully identified later with stock identification, availability of flock list, number of birds in flocks sampled, sampling procedure, and source of sample. Net pullets at one week excludes first week mortality, sexing errors, and accidental deaths. Mortality, 8 through 150 days is the average of pen data. Average feed per pullet for 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 the survivors. Feed and chick cost per pullet housed distributes the 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 price quotations from the N. C. Department of Agriculture. Chick prices are the 3-year averages of prices quoted by the distributors. Average eggs per pullet at 150 days indicates the general maturity level of the entry at housing.

Combined data		GROWING PERIOD - TABLE 8 G-C					
Entry No.	Breeder	Net Pul-lets at one wk.	Mortality 8-150 da. %	Average lbs of Feed/pul-let 150 da.	Average Body Wt. at 150 days	Feed & Chick Cost/Pullet Housed	Average Eggs Per Pullet to 150 da.
1	Stone	318	6.2	17.7	3.2	1.13	0.27
2	Demler	290	4.1	17.7	3.2	1.12	0.04
3	Kimber	253	1.6	17.7	3.2	1.19	0.16
4	Shaver	348	1.4	18.2	3.4	1.17	0.18
5	Davis	338	2.7	21.9	4.6	1.32	0.16
6	Colonial	207	2.4	18.0	3.3	1.22	0.87
7	Welp's	328	1.8	16.9	3.0	1.14	0.16
8	Hy-Line	345	0.3	17.7	3.2	1.25	0.19
9	NCRPBL	295	7.6	17.3	3.2	1.26	0.03
10	Garrison	295	5.7	16.8	3.1	1.12	0.02
11	Honegger	336	2.4	17.5	3.2	1.17	0.19
12	Garber	347	1.7	19.3	3.8	1.17	0.48
13	Ideal	323	2.1	17.8	3.3	1.17	0.14
14	Hubbard	351	2.3	21.0	4.3	1.28	0.55
15	Cashman	302	4.9	18.1	3.4	1.22	0.06
16	Ind. Fm. Bu.	339	5.0	16.3	3.1	1.14	0.04
17	Heisdorf & N.	245	2.5	16.9	3.1	1.08	0.12
18	Babcock	347	4.3	17.8	3.3	1.20	0.70
19	Parks	325	7.7	18.3	3.6	1.23	0.28
Average		312	3.5	18.0	3.4	1.19	0.24

GROWING PERIOD - TABLE 8 G-S&amp;L

Litter Entry No.	Breeder	Net Pullets at 1 wk.	Mortality 8-150 days (%)	Av. lbs. Feed/Pullet (150 da.)	Av. Body Wt. at 150 da.	Feed & Chick Cost/Pullet Housed	Av. eggs/Pullet to 150 days
1	Stone	158	3.2	18.0	3.2	1.11	0.31
2	Demler	144	2.1	18.0	3.2	1.12	0.06
3	Kimber	125	0.8	17.9	3.2	1.19	0.21
4	Shaver	176	1.1	18.2	3.4	1.16	0.13
5	Davis	171	1.2	22.2	4.6	1.32	0.22
6	Colonial	104	1.9	18.1	3.4	1.22	1.25
7	Welp's	162	1.9	16.9	2.9	1.14	0.18
8	Hy-Line	171	0.0	18.1	3.2	1.27	0.18
9	NCRPBL	151	2.6	17.4	3.2	1.20	0.03
10	Garrison	146	3.4	17.0	3.0	1.10	0.05
11	Honegger	171	1.8	17.6	3.2	1.17	0.24
12	Garber	174	0.6	19.5	3.8	1.17	0.53
13	Ideal	164	3.7	17.7	3.3	1.18	0.14
14	Hubbard	175	2.9	21.0	4.3	1.28	0.88
15	Cashman	151	2.7	17.7	3.3	1.17	0.05
16	Ind.Fm.Bu.	172	4.7	16.5	3.1	1.15	0.05
17	Heindorf & N.	122	1.6	17.0	3.1	1.08	0.08
18	Babcock	172	1.2	17.8	3.2	1.16	0.88
19	Parks	163	4.4	18.2	3.6	1.20	0.23
	Average	156	2.2	18.1	3.4	1.18	0.30
Slats							
1	Stone	160	9.2	17.5	3.2	1.15	0.22
2	Demler	146	6.1	17.5	3.2	1.13	0.01
3	Kimber	128	2.3	17.5	3.2	1.18	0.11
4	Shaver	172	1.8	18.3	3.4	1.17	0.22
5	Davis	167	4.2	21.6	4.5	1.32	0.09
6	Colonial	103	2.9	18.0	3.2	1.23	0.49
7	Welp's	166	1.9	17.0	3.0	1.14	0.15
8	Hy-Line	174	0.6	17.4	3.2	1.24	0.20
9	NCRPBL	144	12.5	17.1	3.2	1.33	0.03
10	Garrison	149	8.0	16.6	3.1	1.15	0.00
11	Honegger	165	3.0	17.4	3.2	1.17	0.14
12	Garber	173	2.9	19.1	3.8	1.17	0.44
13	Ideal	159	0.6	17.9	3.3	1.16	0.13
14	Hubbard	176	1.7	21.0	4.4	1.28	0.22
15	Cashman	151	7.2	18.4	3.4	1.27	0.06
16	Ind.Fm.Bu.	167	5.4	16.1	3.0	1.13	0.04
17	Heisdorf & N.	123	3.3	17.0	3.0	1.09	0.15
18	Babcock	175	7.4	17.8	3.3	1.24	0.53
19	Parks	162	11.1	18.4	3.6	1.26	0.34
	Average	156	4.8	18.0	3.4	1.20	0.19

Breeder	Stock Identification	Flock List	No. Birds	Sample	Proced.	Source of Sample
Babcock Poultry Farm, Inc. Box 280, Ithaca, N. Y.	Babcock B 300 W.L. 3wX	Yes	12,743	A		Harrold's Hatchery Winterville, Ga.
Cashman Leghorn Farms Webster, Ky.	Cashmon Hi-Cash WL INX	Yes	4,000	A		Cashmon Leghorn Farms, Webster, Ky.
Colonial Poultry Farms, Inc. Pleasant Hill, Mo.	True-Line 365-B WL INX	Yes	21,000	A		Colonial Poultry Fm Inc., Cullman, Ala.
Joe K. Davis Hatchery Earl, N. C.	Combiner Sex-Link RIBxBPR	Yes	10,000	A		Joe Davis Hatchery Earl, N. C.
Demler Farms, Inc. Box 687, Anaheim, Calif.	Demler D-65 WL SX	Yes	35,000	C		Demler Farms, Inc. Anaheim, Calif.
Garber Poultry Breeding Farm Modesta, Calif.	Garber GX 291 CGxWL	Yes	7,000	A		Joe Davis Hatchery Earl, N. C.
Earl W. Garrison, Inc. Bridgetown, N. J.	Garrison X300 WL SX	Yes	3,000	A		Joe Stevers Poultry Farm, Huntingdon, Pa.
Heisdorf & Nelson Farms Kirkland, Wash.	H&N "Nick Chick" WL SX	Yes	14,932	B		Seven Oaks Farm Spartanburg, S. C.
Honegger Farms Co., Inc. Forrest, Ill.	Honegger Layers WL 3wX	Yes	2,400	A		FCX Hatchery Wallace, N. C.
Hubbard Farms, Inc. Walpole, N. H.	Hubbard Golden Comet NHxSynW	Yes	6,000	A&B		Hubbard Farms, Inc. Lancaster, Pa.
Hy-Line Poultry Farms Des Moines, Iowa	Hy-Line 934 IBX	Yes	12,000	B		Tar Heel Chicks, Inc. Monroe, N. C.
Ideal Poultry Breeding Farms, Inc., Box 710, Cameron, Tex.	Ideal 236 4wBX	Yes	4,400	A		Ideal Poultry Breed Fms., Cameron, Tex.
Ind. Farm Bureau Cooperative Indianapolis, Ind.	Princess 55	Yes	1,400	A		Coop. Breeding Res- earch Fm. Lafayette, Ind.
Kimber Farms, Inc. Fremont, California	Kimber K-137 WL SX	No	4,684	B		Hubbard Farms, Inc. Statesville, N.C.
N. Cent. Reg. Poul. Brdg. Lab. LaFayette, Ind.	Cornell Control WL Randombred	-	-	-		No. Cent. Reg. Poul. Lab. Lafayette, Ind.
Parks Poultry Farm Altoona, Pa.	Parks Keystones B-1 WL SX	Yes	3,000	A		Parks Poultry Farm Altoona, Pa.
Shaver Poul. Breeding Farms Ltd. Galt, Ontario, Canada	Shaver Starcross WL 3wX	Yes	10,500	B		Mid-Valley Hatchery Dayton, Va.
Stone's Poultry Breeding Farm Dinuba, California	Stone's H-56 WL SX	Yes	4,700	A		E. H. Underwood Bogart, Ga.
Welp's Breeding Farm Bancroft, Iowa	Welp Line 937 WL SX	Yes	5,500	A		Ga. Fresh Egg Farm Flowery Branch, Ga.