

AGRICULTURAL EXTENSION SERVICE
NORTH CAROLINA STATE UNIVERSITY | AT RALEIGH

SCHOOL OF AGRICULTURE AND LIFE SCIENCES

October 23, 1969

OFFICE OF EXTENSION POULTRY SCIENCE
SCOTT HALL
Box 5307 ZIP 27607

I am enclosing the report of the growing period for the Eleventh 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. T. R. Burleson, Piedmont Research Station, Route #6, Box 420, Salisbury, N. C. 28144.

The design of this test 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 floor and about 63% concrete floor with shavings litter. Floor space allowance is about one and $1\frac{1}{2}$ square feet per bird, respectively. At 150 days, two pens of 50 birds are placed on hardwood slats at one square foot, two pens of 50 birds are housed in half slat-half litter pens at $1\frac{1}{2}$ sq. ft., and four blocks of 26 birds are placed in 10"x18" cages at two birds per cage.

Very truly yours,



Grady A. Martin
Extension Poultry Specialist

GAM dj

ELEVENTH NORTH CAROLINA RANDOM SAMPLE LAYING TEST
Growing Report
March 28, 1969, through August 24, 1969

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. T. R. Burleson 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 four 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 56 days and a growing ration for the last 94 days of the period.



All birds were debeaked early, vaccinated for Newcastle and bronchitis in water at 4 days, 4 weeks and 16 weeks, vaccinated for Pox via wing web at 12 weeks and vaccinated for Avian encephalomyelitis at 14 weeks. Birds having shavings litter were vaccinated for coccidiosis at 5 days and low level tri-thiodol was added to the feed to 9 weeks. Average losses from Marek's disease were 7.3% in the slat pens and 2.4% in the litter pens with losses by pens ranging from 0 to 27.9%.

The tables list the combined data for the entry (Table 11G-C) and the data for each type of housing (Tables 11G-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 against survivors the feed consumed by birds that died. 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. Dept. of Agriculture. Chick prices are the 3-year average of prices quoted by distributors. Average eggs per pullet at 150 days indicates general maturity level of the entry at housing.

Entry No.	COMBINED DATA		GROWING PERIOD - TABLE 11G-C				
	Breeder	Net Pullets at 1 week	Mortality 8-150 days %	Av. lbs of Feed/pullet 150 days	Av. Body Wt. at 150 days	Feed & Chick Cost/Pullet Housed	Av. Eggs per Pullet to 150 days
1	Hy-Line (934)	344	8.1	15.8	2.9	1.16	0.09
2	Welp's (937)	335	6.3	16.1	2.9	1.08	0.60
3	Cashman (Hi-Cash)	301	7.2	17.5	3.3	1.12	0.04
4	Garber (GX-291)	326	3.6	18.4	3.6	1.11	0.54
5	Kimber (K-155)	343	8.2	17.0	3.1	1.12	0.48
6	Tatum (T-100)	344	18.6	16.5	3.0	1.29	0.97
7	Ideal (236)	338	5.2	17.0	3.1	1.10	0.16
8	Davis (Red)	347	3.5	19.9	4.1	1.19	0.09
9	NCRPB (CxKRB)	236	8.8	17.6	3.1	1.12	0.04
10	Anthony	327	3.6	17.1	3.1	1.10	0.10
11	Babcock (B-305)	335	8.7	16.5	3.0	1.09	0.74
12	NCRPB (CRB)	236	15.6	16.7	3.3	1.30	0.10
13	Hubbard (Gld.Comet)	352	1.1	19.7	3.8	1.17	0.26
14	Shaver (*X-288)	341	2.3	17.5	3.2	1.07	0.06
15	Babcock (B-300)	342	16.7	16.1	3.0	1.19	0.90
16	Kimber (K-137)	344	10.3	16.8	3.0	1.13	0.27
17	Stone's (H-56-E)	316	8.1	18.2	2.9	1.13	0.23
18	Ind.Fm.Bu. (Pr-55)	326	8.5	14.7	2.9	1.03	0.04
19	Parks (Key.B-1)	280	6.1	17.1	3.3	1.12	0.12
20	Lawton (Buff SL)	341	6.8	20.7	4.2	1.26	0.05
	Average	323	7.9	17.3	3.2	1.09	0.29

GROWING PERIOD - TABLE 11G - S&L

Entry No.	Breeder	Net Pullets at 1 week	Mortality 8-150 da. %	Av. lbs of Feed/pullet 150 days	Av. Body Wt. at 150 days	Feed & Chick Cost/Pullet Housed	Av. Eggs per Pullet to 150 days
<u>Slats</u>							
1	Hy-Line (934)	172	13.4	15.8	3.0	1.22	0.00
2	Welp's (937)	166	9.0	16.0	2.8	1.09	0.43
3	Cashman (Hi-Cash)	154	11.0	17.3	3.2	1.16	0.01
4	Garber (GX-291)	162	3.6	18.9	3.6	1.13	0.37
5	Kimber (K-155)	171	11.7	17.0	3.1	1.16	0.41
6	Tatum (T-100)	172	26.7	16.7	3.1	1.42	0.97
7	Ideal (236)	171	7.5	16.6	3.1	1.12	0.11
8	Davis (RIR)	173	2.9	20.3	4.0	1.20	0.01
9	NCRPB (CxKRB)	117	15.9	17.3	3.1	1.20	0.03
10	Anthony	164	6.1	17.3	3.1	1.13	0.06
11	Babcock (B-305)	168	11.3	16.8	3.0	1.13	0.78
12	NCRPB (CRB)	120	24.2	16.1	3.2	1.39	0.10
13	Hubbard (Gld. Comet)	176	1.7	20.2	3.8	1.20	0.16
14	Shaver (*X-288)	172	2.9	17.5	3.2	1.08	0.07
15	Babcock (B-300)	171	23.9	16.0	3.0	1.30	1.16
16	Kimber (K-137)	169	14.2	17.3	3.0	1.20	0.32
17	Stone's (H-56-E)	161	9.9	19.0	3.1	1.18	0.18
18	Ind.Fm.Bu. (P-55)	166	9.0	15.3	2.9	1.06	0.05
19	Parks (Key.B-1)	138	3.6	17.3	3.3	1.10	0.10
20	Lawton (Buff SL)	171	4.7	20.5	4.1	1.22	0.02
Average		162	10.7	17.4	3.2	1.18	0.27

Litter-Slats

1	Hy-Line (934)	172	2.9	15.8	2.8	1.10	0.17
2	Welp's (937)	169	3.6	16.3	2.9	1.07	0.77
3	Cashman (Hi-Cash)	147	3.4	17.6	3.4	1.09	0.07
4	Garber (GX-291)	164	3.7	17.8	3.7	1.08	0.71
5	Kimber (K-155)	172	4.7	17.1	3.2	1.08	0.56
6	Tatum (T-100)	172	10.5	16.5	2.8	1.17	0.98
7	Ideal (236)	167	3.0	17.3	3.1	1.09	0.22
8	Davis (RIR)	174	4.0	19.6	4.2	1.19	0.16
9	NCRPB (CxKRB)	119	1.6	17.8	3.1	1.05	0.04
10	Anthony	163	0.6	16.8	3.2	1.07	0.13
11	Babcock (B-205)	167	6.0	16.2	3.0	1.05	0.70
12	NCRPB (CRB)	116	7.1	17.3	3.3	1.21	0.10
13	Hubbard (Gld. Comet)	176	0.6	19.1	3.7	1.14	0.37
14	Shaver (*X-288)	169	1.8	17.4	3.3	1.06	0.06
15	Babcock (B-300)	171	9.4	16.1	3.0	1.09	0.64
16	Kimber (K-137)	175	6.3	16.3	2.9	1.07	0.21
17	Stone's (H-56-E)	155	6.3	17.5	2.7	1.07	0.29
18	Ind.Fm.Bu (P-55)	160	8.1	14.0	2.9	1.01	0.03
19	Parks (Key B-1)	142	8.7	16.8	3.3	1.13	0.15
20	Lawton (Buff SL)	170	8.9	20.8	4.2	1.29	0.09
Average		161	5.1	17.2	3.2	1.11	0.32

Breeder	Stock Identification	# Birds & List	Sampling Procedure*	Source of Sample
Geo.M.Anthony & Sons Ply.Fm. Strausstown, Pa. 19559	Anthony W.Leg WL SX	20,000 Yes	B	Geo. M. Anthony & Sons Ply. Fm. Strausstown, Pa. 19559
Babcock Poultry Farm, Inc. P.O.Box 280, Ithaca, N.Y.14850	Babcock B-300 WL 4wIN	8,000 Yes	A	Beamsdale Farm Lawndale, N. C. 28090
Babcock Poultry Farm, Inc. P.O.Box 280,Ithaca,N.Y. 14850	Babcock B-305 WL 4wIN	11,000 Yes	A	Hodges Ply. Fm. & Hatchery Callahan, Fl 32011
Cashman Leghorn Farms Webster, Ky. 40176	Cashman Hi-Cash WL IN	3,200 Yes	A	Cashman Leghorn Farms Webster, Ky. 40176
Joe K. Davis Hatchery Box 27, Earl, N.C. 28038	Davis Reds RIR 3wX	8,000 Yes	A	Joe K. Davis Hatchery Box 27, Earl, N. C. 28038
Garber Ply.Br.Fm., 4255 Hammet Rd., Modesto, Ca. 95351	Garber GX-291 CGxWL BX	10,000 Yes	B	Garber Poultry Breeding Farm Modesto, Ca. 95351
Hubbard Farms, Inc. Walpole, N.H. 03608	Hubbard Golden Comet NHxSyn BX	4,000 Yes	A	Hubbard Farms, Inc. Statesville, N. C. 28677
Hy-Line Ply.Fms., 1206 Mulberry, Des Moines, Io. 50309	Hy-Line 934 4wX INX	15,000 Yes	B	Wallace Hty.,Inc.,Box 20004 St. Petersburg, Fa. 33702
Ideal Ply.Br.Fms.,Inc., Box 591, Cameron, Tx. 76520	Ideal 236 SynxWL 4wBX	12,000 Yes	B	Ideal Poultry Breeding Farm,Inc Box 591, Cameron, Texas 76520
Ind.Fm.Bu.Coop.Assn.,Inc. Indianapolis, In. 46204	Princess 55 WL SX	3,000 Yes	B	Co-op Breeding & Research Farm R#2, Lafayette, In. 47901
Kimber Farms, Inc., Box 2008 Fremont, Ca. 99536	Kimber K-137 WL SX	23,158 Yes	C	Nichols Ply. Fm.,Inc., R#2 Jefferson City, Tn. 37760
Kimber Farms, Inc., Box 2008 Fremont, Ca. 94536	Kimber K-155 WL SX	9,300 Yes	C	Nichols Ply. Fm., Inc., R#2 Jefferson City, Tn. 37760
A. C. Lawton & Sons, 70 N St. Foxboro, Ma. 02035	Lawton's Buff Sx.Lk RIRxWPR BX	3,000 Yes	B	A. C. Lawton & Sons Foxboro, Ma. 02035
North Central Ply. Br. Lab. Lafayette, In. 47900	Cornell RB (CRB) WL RB	-	-	Selected at Lafayette, Indiana
North Central Ply. Br. Lab. Lafayette, In. 47900	Cornell-Kentville WL RBX	- -	-	Selected at Lafayette, Indiana
Parks Poultry Farm, R#4, Box 118, Altoona, Pa. 16601	Keystone B-1 WL 4wX	6,000 No	B	Parks Poultry Farm Altoona, Pa. 16601
Shaver Ply.Br. Fm., Ltd. Box 400, Galt, Ont., CANADA	Starcross 288 WL SX	4,500 Yes	B	Shaver Poultry Breeding Farm,Ltd Galt, Ontario, CANADA
Stone's Ply. Br.,Fm., 4347 Ave. 400, Dinuba, Ca. 93618	Stone's H-56-E WL SX	33,200 Yes	B	Stone's Poultry Breeding Farm Dinuba, California 93618
Tatum Farms Dawsonville, Ga. 30534	Tatum's T-100 WL SX	3,000 No	A	Tatum Farms Dawsonville, Ga. 30534
Welp's Breeding Farm Bancroft Io. 50517	Welp Line 937 WL 3wX	15,000 Yes	B	Welp's Hatchery Bancroft, Iowa, 50517

omit these columns

* A = Nest sample; B = Egg room sample; C = Incubator tray sample