AGRICULTURAL
EXTENSION
SERVICE

North Carolina State University
School of Agriculture and Life Sciences

Office of Extension Poultry Science
Box 7608
Raleigh, N.C. 27695-7608
(919) 737-2621

March 3, 1987

M E M O R A N D U M

TO: North Carolina Layer Performance and Management Test Report Recipients

FROM: John B. Carey, Extension Poultry Specialist
Extension Poultry Science

SUBJECT: Final Report (140-728 Days) for the 26th North Carolina Layer Performance and Management Test

The final report of the 26th North Carolina Layer Performance and Management Test is divided into three sections. Tables 1-12 summarize performance in the first laying cycle (140-434 days); Tables 13-24 summarize performance in the molt period and the second laying cycle (435-728 days). Tables 25-37 summarize performance over both laying cycles (140-728 days). This flock was hatched April 14, 1984. Descriptions of the tabular headings and data are included immediately preceding the tables to which they pertain. The length of the test necessitates a rather lengthy report. Every effort has been made to provide concise information about the flock. Obviously, not all performance statistics could be included. The data presented represent only the strain differences and the two-way strain X management interactions, strain X cage type, strain X birds per cage, strain X house type. There are many more performance statistics within the data set generated by the flock. This information will be available in a supplementary booklet of approximately 100 pages. Performance is summarized in terms of the three-way interactions with strain, strain X cage X house type, strain X birds per cage X house type, etc. This publication is available for $8.00 to addresses inside the United States and $10.00 outside the United States. Please fill out the order form at the bottom of this page or provide like information to the indicated address. The publication will be available in May 1987 and will be shipped as soon as possible.

Send to: Dr. John B. Carey
Department of Poultry Science
North Carolina State University
Box 7608
Raleigh, NC 27695-7608

ORDER FORM FOR SUPPLEMENTARY PERFORMANCE DATA BOOKLET

26th North Carolina Layer Performance and Management Test

MAKE CHECK OR MONEY ORDER (US FUNDS) PAYABLE TO: POULTRY SCIENCE DEPT., NCSU

Name _____

Address _____

City _____ State _____ Zip _____

Country _____ Remittance: _____ copies X $ 8.00 (inside U.S.) = _____

_____ copies X $10.00 (outside U.S.) = _____

EXPLANATIONS OF DATA AND TABULAR HEADINGS

For Tables 1-12 referring to 140-434 days production.

Entry (Strain): The name of the breeder and the strain entered in the evaluation. See information following tables.

Cage Type: "S denoted performance in shallow (18" x 12") cages. "D" denotes performance in deep (12" x 18") cages.

Birds per cage "3" or "4" denotes performance with 3 or 4 birds housed per cage, respectively.

Housing type: "FL" denotes performance in a curtain-sided flush waste facility. "HR" denotes performance in a curtain-sided high rise facility. "LC" denotes performance in a light and air controlled facility.

Eggs per bird housed: The total number of eggs produced divided by the number of birds housed at 140 days.

Egg production (Hen Day): The average daily number of eggs per 100 hen days.

Mortality: The percentage of birds housed at 140 days which have died prior to 434 days of age.

Feed Consumption: The pounds of feed consumed daily per 100 hens.

Egg Weight: The average weight of eggs in ounces per dozen.

Specific Gravity Score: The average specific gravity of eggs expressed as follows:

Score Value	Spec. Gravity Range
0	<1.068
1	1.068 - 1.072
2	1.072 - 1.076
3	1.076 - 1.080
4	1.080 - 1.084
5	1.084 - 1.088
6	1.092 - 1.096
7	1.096 - 1.100
8	> 1.100

Haugh Units: The average Haugh Unit score of the eggs.

Grade Information: The average grade of eggs according to USDA grading standards.

Blood Spots: The percentage of blood spots in excess of 1/8 inch diameter, detected in broken out eggs.

Meat Spots: The percentage of meat spots in excess of 1/8 inch diameter, detected in broken out eggs.

Egg Size Distribution: The proportion of the eggs falling into the following size categories:

Size Category	Ounces/Dozen
Pee Wee	< 18
Small	18 - 21
Medium	21 - 23
Large	23 - 27
Extra Large	< 27

Egg Income: The calculated income per hen housed at 140 days from egg production, using three year regional average egg prices as follows:

Grade	Size	Cents/Dozen
A	Extra Large	63.79
A	Large	63.79
A	Medium	58.16
A	Small	47.33
A	Pee Wee	41.91
B	All	41.91
Cracks	All	32.15

Feed Cost: The calculated feed cost per hen housed at 140 days, using three year regional average prices, weighted average price of $191.33 per ton.

TABLE 1. AVERAGE PERFORMANCE OF ENTRIES, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	Eggs/ Bird Housed	Hen Day Production (%)	Mortality > 140 d of Age	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers							
Dekalb (XL Link)	220.8	79.3	9.1	24.0	24.4	2.4	80.8
ISA-Babcock (B300)	210.2	73.4	5.9	23.2	24.5	3.4	81.6
Hisex (White)	223.1	78.6	6.9	23.5	24.5	2.8	79.6
H & N (Nick Chick)	219.1	78.6	9.5	23.9	24.3	3.1	81.4
Hubbard (Leghorn)	224.2	78.0	4.3	24.7	24.7	2.5	81.5
HyLine (W-36)	218.4	77.0	8.0	22.5	24.1	2.3	78.3
Colonial (365-S)	201.4	71.5	7.6	19.7	23.5	2.8	79.3
Shaver (288-A)	216.6	76.0	5.9	23.0	24.2	2.8	79.7
White Egg Average	**216.6**	**76.6**	**7.1**	**23.1**	**24.3**	**2.8**	**80.3**
Brown Egg Layers							
Hisex (Brown)	199.8	71.3	11.1	25.1	26.7	2.0	80.7
Hubbard (Golden Comet)	203.0	73.0	12.0	25.1	26.3	1.7	81.9
Dekalb (Sex-Sal-Link G)	191.0	68.3	9.9	25.2	26.4	1.5	83.9
Brown Egg Average	**197.9**	**70.9**	**11.0**	**25.1**	**26.5**	**1.7**	**82.2**

TABLE 2. AVERAGE EGG QUALITY OF ENTRIES, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers	----------(%)----------					
Dekalb (XL-Link)	94.8	1.4	3.3	0.4	0.5	0.2
ISA-Babcock (B300)	96.1	1.4	2.2	0.3	1.1	0.0
Hisex (White)	92.8	2.0	4.8	0.4	1.9	0.0
H & N (Nick Chick)	96.1	1.9	1.9	0.1	0.7	0.1
Hubbard (Leghorn)	95.9	0.9	2.7	0.4	2.3	0.1
HyLine (W-36)	95.7	1.4	2.8	0.1	0.3	0.2
Colonial (365-S)	96.1	1.5	2.2	0.2	1.4	0.1
Shaver (288-A)	96.5	1.0	2.3	0.1	0.6	0.0
White Egg Average	**95.5**	**1.5**	**2.8**	**0.3**	**1.1**	**0.1**
Brown Egg Layers						
Hisex (Brown)	94.1	1.5	4.2	0.2	3.2	9.8
Hubbard (Golden Comet)	96.3	0.6	2.8	0.2	3.4	13.7
Dekalb (Sex-Sal-Link G)	95.7	0.8	3.2	0.3	3.5	10.0
Brown Egg Average	**95.4**	**1.0**	**3.4**	**0.2**	**3.4**	**11.1**

TABLE 3. AVERAGE EGG SIZE AND ECONOMIC DATA OF ENTRIES, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	Egg Size Distribution (%)					Egg Income	Feed Cost
	Pee Wee	Small	Medium	Large	Extra Large		
White Egg Layers							
Dekalb (XL-Link)	2.0	16.0	14.0	35.4	32.6	11.58	6.28
ISA-Babcock (B-300)	2.7	14.9	10.7	34.4	37.2	11.10	6.29
Hisex (White)	2.2	14.9	12.4	37.1	33.4	11.39	6.30
H & N (Nick Chick)	2.0	16.2	13.1	37.2	31.6	11.52	6.31
Hubbard (Leghorn)	1.9	14.3	10.7	34.6	38.4	11.87	6.72
HyLine (W-36)	1.8	17.9	14.9	35.3	30.0	11.48	6.10
Colonial (365-S)	2.8	21.5	19.0	34.4	22.1	10.25	5.50
Shaver (288-A)	2.3	15.7	15.4	36.2	30.5	11.43	6.26
White Egg Average	**2.2**	**16.4**	**13.8**	**35.6**	**32.0**	**11.32**	**6.21**
Brown Egg Layers							
Hisex (Brown)	0.4	8.7	5.4	21.2	64.2	10.82	6.65
Hubbard (Golden Comet)	0.6	10.8	5.8	22.1	60.7	10.99	6.60
Dekalb (Sex-Sal-Link G)	0.9	8.5	6.4	21.8	62.4	10.50	6.68
Brown Egg Average	**0.6**	**9.3**	**5.9**	**21.7**	**62.5**	**10.77**	**6.64**

TABLE 4. EFFECTS OF CAGE TYPE ON PERFORMANCE OF ENTRIES IN ALL HOUSING, 26th NCLPMT (140-434 DAYS)

Breeder (Strain)	Cage Type	Eggs/ Bird Housed	Hen Day Production (%)	Mortality 435-728 d of Age (%)	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb	S	224.3	79.6	6.5	24.3	24.5	2.5	79.7
(XL Link)	D	217.2	79.1	11.7	23.7	24.2	2.3	81.9
ISA-Babcock	S	211.0	73.7	5.3	23.3	24.7	3.5	81.1
(B300)	D	209.4	73.2	6.5	23.0	24.3	3.3	82.1
Hisex	S	223.4	79.5	8.7	23.6	24.5	2.8	79.1
(White)	D	222.8	77.8	5.1	23.5	24.5	2.8	80.1
H & N	S	222.2	79.6	9.4	23.8	24.2	3.3	82.0
(Nick Chick)	D	215.6	77.6	9.7	24.0	24.4	2.9	80.8
Hubbard	S	226.3	78.9	5.2	25.0	24.8	2.4	82.1
(Leghorn)	D	222.2	77.1	3.4	24.5	24.6	2.6	81.0
HyLine	S	221.4	77.6	7.2	22.8	24.2	2.4	79.5
(W-36)	D	215.5	76.4	8.7	22.2	24.1	2.2	77.1
Colonial	S	198.8	71.3	8.5	19.6	23.5	2.9	79.5
(365-S)	D	204.1	71.7	6.8	19.7	23.6	2.7	79.1
Shaver	S	216.5	75.9	6.1	22.8	24.3	2.7	78.6
(288-A)	D	216.6	76.2	5.8	23.2	24.2	2.8	80.7
White Egg Average	**S**	**217.8**	**77.0**	**7.1**	**23.2**	**24.3**	**2.8**	**80.2**
	D	**215.4**	**76.1**	**7.2**	**23.0**	**24.2**	**2.7**	**80.3**
Brown Egg Layers								
Hisex	S	207.3	73.3	10.0	25.6	26.5	2.1	80.8
(Brown)	D	192.4	69.3	12.2	24.6	26.9	1.9	80.6
Hubbard	S	204.7	73.7	12.2	25.0	26.5	1.7	81.4
(Golden Comet)	D	201.3	72.2	11.8	25.1	26.1	1.6	82.3
Dekalb	S	191.5	68.4	8.9	25.3	26.3	1.4	84.3
(Sex-Sal-Link G)	D	190.4	68.3	11.0	25.1	26.5	1.6	83.5
Brown Egg Average	**S**	**201.2**	**71.8**	**10.4**	**25.3**	**26.4**	**1.7**	**82.2**
	D	**194.7**	**70.0**	**11.7**	**25.0**	**26.5**	**1.7**	**82.1**

TABLE 5. EFFECTS OF CAGE TYPE ON EGG QUALITY OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	Cage Type	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers		----------(%)----------					
Dekalb (XL-Link)	S	94.7	1.5	3.2	0.6	0.3	0.1
	D	95.0	1.4	3.4	0.2	0.8	0.3
ISA-Babcock (B300)	S	97.0	0.8	2.0	0.2	1.0	0.0
	D	95.2	2.0	2.5	0.4	1.2	0.0
Hisex (White)	S	93.8	1.1	4.7	0.3	2.1	0.0
	D	91.7	3.0	4.8	0.5	1.6	0.0
H & N (Nick Chick)	S	96.2	1.5	2.2	0.1	1.0	0.0
	D	96.0	2.2	1.7	0.1	0.4	0.2
Hubbard (Leghorn)	S	96.0	0.8	2.8	0.4	2.4	0.0
	D	95.8	1.1	2.7	0.4	2.2	0.2
HyLine (W-36)	S	96.1	1.1	2.7	0.1	0.1	0.2
	D	95.3	1.8	2.9	0.1	0.4	0.1
Colonial (365-S)	S	96.3	1.1	2.4	0.2	1.4	0.0
	D	96.0	1.9	1.9	0.2	1.3	0.2
Shaver (288-A)	S	96.4	1.2	2.3	0.1	0.9	0.0
	D	96.6	0.9	2.3	0.2	0.3	0.0
White Egg Average	**S**	**95.8**	**1.1**	**2.8**	**0.3**	**1.2**	**0.0**
	D	**95.2**	**1.8**	**2.8**	**0.3**	**1.0**	**0.1**
Brown Egg Layers							
Hisex (Brown)	S	94.9	1.0	3.9	0.2	2.7	9.2
	D	93.3	1.9	4.5	0.2	3.7	10.3
Hubbard (Golden Comet)	S	96.0	0.7	3.1	0.2	4.0	13.5
	D	96.6	0.6	2.5	0.2	2.8	13.9
Dekalb (Sex-Sal-Link G)	S	97.2	0.4	2.3	0.1	2.8	8.2
	D	94.2	1.2	4.2	0.5	4.2	11.8
Brown Egg Average	**S**	**96.0**	**0.7**	**3.1**	**0.2**	**3.2**	**10.3**
	D	**94.7**	**1.2**	**3.7**	**0.3**	**3.6**	**12.0**

TABLE 6. EFFECTS OF CAGE TYPE ON EGG SIZE AND ECONOMIC DATA OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	Cage Type	Egg Size Distribution (%) Pee Wee	Small	Medium	Large	Extra Large	Egg Income	Feed Cost
White Egg Layers								
Dekalb (XL-Link)	S	1.8	15.6	12.8	34.0	35.9	11.79	6.43
	D	2.2	16.3	15.2	36.9	29.4	11.36	6.13
ISA-Babcock (B-300)	S	2.4	14.9	9.4	33.9	39.3	11.23	6.33
	D	3.1	14.9	12.0	34.9	35.1	10.98	6.25
Hisex (White)	S	2.2	15.2	12.4	37.1	33.1	11.43	6.26
	D	2.3	14.7	12.3	37.1	33.7	11.34	6.34
H & N (Nick Chick)	S	2.1	16.0	13.4	38.8	29.7	11.65	6.30
	D	1.9	16.3	12.7	35.5	33.6	11.38	6.32
Hubbard (Leghorn)	S	1.5	13.9	9.9	36.3	38.4	12.05	6.76
	D	2.3	14.7	11.5	32.9	38.4	11.68	6.68
HyLine (W-36)	S	1.5	17.7	15.9	34.5	30.4	11.64	6.25
	D	2.2	18.0	14.0	36.0	29.7	11.32	5.95
Colonial (365-S)	S	3.0	21.9	19.1	33.5	22.3	10.12	5.43
	D	2.6	21.2	18.9	35.3	22.0	10.38	5.56
Shaver (288-A)	S	2.2	15.6	16.3	35.4	30.7	11.39	6.21
	D	2.4	15.8	14.4	37.0	30.4	11.47	6.31
White Egg Average	**S**	**2.1**	**16.4**	**13.7**	**35.4**	**32.5**	**11.40**	**6.24**
	D	**2.4**	**16.5**	**13.9**	**35.7**	**31.5**	**11.23**	**6.19**
Brown Egg Layers								
Hisex (Brown)	S	0.5	9.4	5.2	22.6	62.2	11.24	6.82
	D	0.3	8.0	5.6	19.8	66.3	10.40	6.48
Hubbard (Golden Comet)	S	0.5	10.7	5.7	19.9	63.2	11.05	6.54
	D	0.7	10.9	5.9	24.3	58.2	10.94	6.65
Dekalb (Sex-Sal-Link G)	S	0.6	8.8	6.6	22.5	61.5	10.62	6.68
	D	1.1	8.1	6.2	21.2	63.4	10.39	6.67
Brown Egg Average	**S**	**0.5**	**9.7**	**5.8**	**21.7**	**62.3**	**10.97**	**6.68**
	D	**0.7**	**9.0**	**5.9**	**21.7**	**62.6**	**10.58**	**6.60**

TABLE 7. EFFECTS OF NUMBER OF BIRDS PER CAGE ON PERFORMANCE OF ENTRIES IN ALL HOUSING, 26th NCLPMT (140-434 DAYS)

Breeder (Strain)	Birds/ Cage	Eggs/ Bird Housed	Hen Day Production (%)	Mortality > 140 d of Age (%)	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb	3	228.7	80.6	6.6	24.3	24.4	2.4	81.3
(XL Link)	4	214.6	78.0	11.6	23.7	24.4	2.3	80.3
ISA-Babcock	3	214.6	74.3	5.6	23.6	24.6	3.4	81.7
(B300)	4	206.9	72.5	6.2	22.7	24.4	3.4	81.4
Hisex	3	231.3	80.3	3.9	24.1	24.5	2.7	79.1
(White)	4	217.0	76.9	10.0	23.0	24.5	2.9	80.0
H & N	3	230.9	80.3	5.7	24.2	24.4	3.3	81.3
(Nick Chick)	4	209.8	76.9	13.4	23.6	24.2	3.0	81.4
Hubbard	3	229.6	79.3	3.5	25.2	24.9	2.5	81.8
(Leghorn)	4	219.9	76.7	5.1	24.3	24.5	2.5	81.3
HyLine	3	220.2	78.0	8.9	22.7	24.1	2.3	77.7
(W-36)	4	217.1	76.1	7.1	22.3	24.1	2.3	78.8
Colonial	3	211.4	73.6	5.2	20.3	23.5	2.7	79.3
(365-S)	4	194.3	69.4	10.0	19.0	23.6	2.9	79.3
Shaver	3	219.7	77.1	6.1	23.1	24.1	2.7	79.6
(288-A)	4	214.2	75.0	5.8	22.9	24.3	2.8	79.7
White Egg Average	**3**	**223.2**	**78.0**	**5.7**	**23.4**	**24.3**	**2.8**	**80.2**
	4	**211.7**	**75.2**	**8.7**	**22.7**	**24.2**	**2.8**	**80.3**
Brown Egg Layers								
Hisex	3	208.6	74.2	12.2	25.7	26.7	1.9	80.6
(Brown)	4	193.3	68.5	10.0	24.6	26.7	2.1	80.8
Hubbard	3	209.5	74.5	9.4	25.6	26.6	1.7	81.7
(Golden Comet)	4	198.1	71.5	14.6	24.5	26.0	1.7	82.1
Dekalb	3	204.7	70.7	4.4	25.6	26.3	1.5	83.7
(Sex-Sal-Link G)	4	180.7	65.9	15.4	24.8	26.5	1.5	84.0
Brown Egg Average	**3**	**207.6**	**73.1**	**8.7**	**25.6**	**26.5**	**1.7**	**82.0**
	4	**190.7**	**68.6**	**13.3**	**24.6**	**26.4**	**1.8**	**82.3**

TABLE 8. EFFECTS OF NUMBER OF BIRDS PER CAGE ON EGG QUALITY OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	Birds Cage	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers		----------(%)----------					
Dekalb (XL-Link)	3	94.8	1.6	3.0	0.5	0.8	0.1
	4	94.8	1.2	3.6	0.3	0.3	0.2
ISA-Babcock (B300)	3	97.2	0.9	1.5	0.4	1.4	0.0
	4	95.0	1.8	3.0	0.1	0.9	0.0
Hisex (White)	3	92.3	2.1	5.1	0.5	2.6	0.0
	4	93.2	2.0	4.4	0.4	1.2	0.0
H & N (Nick Chick)	3	96.2	1.6	2.1	0.1	0.5	0.0
	4	96.0	2.1	1.8	0.1	0.9	0.2
Hubbard (Leghorn)	3	95.5	1.0	3.0	0.5	3.2	0.2
	4	96.2	0.9	2.5	0.4	1.4	0.0
HyLine (W-36)	3	95.8	1.4	2.7	0.0	0.3	0.0
	4	95.5	1.4	2.9	0.2	0.2	0.3
Colonial (365-S)	3	96.3	1.1	2.3	0.2	1.5	0.2
	4	95.9	1.9	2.0	0.2	1.3	0.0
Shaver (288-A)	3	97.7	0.6	1.6	0.1	0.5	0.0
	4	95.3	1.5	3.0	0.2	0.7	0.0
White Egg Average	**3**	**95.7**	**1.3**	**2.6**	**0.3**	**1.3**	**0.1**
	4	**95.2**	**1.6**	**2.9**	**0.2**	**0.8**	**0.1**
Brown Egg Layers							
Hisex (Brown)	3	94.6	1.1	4.2	0.1	3.5	11.0
	4	93.6	1.8	4.2	0.4	2.9	8.5
Hubbard (Golden Comet)	3	97.0	0.4	2.5	0.2	3.9	13.3
	4	95.6	0.9	3.1	0.3	2.9	14.1
Dekalb (Sex-Sal-Link G)	3	95.6	1.0	3.1	0.3	3.5	11.1
	4	95.8	0.6	3.4	0.2	3.6	8.9
Brown Egg Average	**3**	**95.7**	**0.8**	**3.3**	**0.2**	**3.6**	**11.8**
	4	**95.0**	**1.1**	**3.6**	**0.3**	**3.1**	**10.5**

TABLE 9. EFFECTS OF NUMBER OF BIRDS PER CAGE ON EGG SIZE AND ECONOMIC DATA OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	Birds/ Type	Egg Size Distribution (%) Pee Wee	Small	Medium	Large	Extra Large	Egg Income	Feed Cost
White Egg Layers								
Dekalb	3	2.4	15.4	13.6	35.7	33.1	12.02	6.46
(XL-Link)	4	1.6	16.5	14.3	35.2	32.1	11.24	6.15
ISA-Babcock	3	2.8	14.6	10.2	34.4	38.1	11.43	6.47
(B-300)	4	2.7	15.3	11.2	34.5	36.4	10.86	6.15
Hisex	3	2.2	14.5	12.3	37.2	33.8	11.82	6.56
(White)	4	2.3	15.3	12.4	37.0	32.9	11.07	6.11
H & N	3	1.9	16.0	12.1	36.4	33.5	12.19	6.61
(Nick Chick)	4	2.0	16.3	14.0	37.9	29.8	11.01	6.07
Hubbard	3	1.7	13.2	8.9	35.0	41.3	12.22	6.88
(Leghorn)	4	2.2	15.4	12.5	34.2	35.5	11.58	6.59
HyLine	3	2.4	16.8	15.2	35.1	30.5	11.63	6.14
(W-36)	4	1.3	18.9	14.7	35.5	29.6	11.37	6.07
Colonial	3	2.7	20.8	19.2	35.4	21.6	10.78	5.82
(365-S)	4	2.9	22.3	18.8	33.4	22.6	9.88	5.26
Shaver	3	2.2	16.5	15.8	36.7	29.1	11.62	6.30
(288-A)	4	2.4	14.9	15.0	35.8	31.9	11.29	6.24
White Egg Average	**3**	**2.3**	**16.0**	**13.4**	**35.7**	**32.6**	**11.71**	**6.40**
	4	**2.2**	**16.9**	**14.1**	**35.4**	**31.4**	**11.03**	**6.07**
Brown Egg Layers								
Hisex	3	0.5	8.6	5.2	20.4	65.3	11.28	6.83
(Brown)	4	0.4	8.8	5.6	22.0	63.2	10.48	6.51
Hubbard	3	0.5	10.4	4.5	19.5	65.1	11.43	6.86
(Golden Comet)	4	0.7	11.2	7.2	24.6	56.3	10.66	6.40
Dekalb	3	1.2	9.2	5.6	22.3	61.7	11.29	6.99
(Sex-Sal-Link G)	4	0.5	7.7	7.2	21.4	63.2	9.91	6.44
Brown Egg Average	**3**	**0.7**	**9.4**	**5.1**	**20.7**	**64.0**	**11.33**	**6.89**
	4	**0.5**	**9.3**	**6.7**	**22.7**	**60.9**	**10.35**	**6.45**

TABLE 10. EFFECTS OF HOUSING ON PERFORMANCE OF ENTRIES, 26th NCLPMT (140-434 DAYS)

Breeder (Strain)	House* Type	Eggs/ Bird Housed	Hen Day Production (%)	Mortality > 140 d of Age (%)	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb (XL Link)	FL	220.6	77.6	6.5	23.4	24.6	2.5	78.8
	HR	221.6	80.4	10.2	24.8	24.8	2.6	81.7
	LC	220.2	79.9	10.6	23.7	23.7	2.0	81.9
ISA-Babcock (B300)	FL	211.7	73.0	4.8	23.3	24.8	3.3	81.1
	HR	215.1	74.0	1.2	23.3	24.7	3.8	82.4
	LC	203.8	73.2	11.7	23.0	24.1	3.2	81.3
Hisex (White)	FL	222.8	79.4	6.9	24.2	24.7	2.7	78.2
	HR	213.7	76.0	8.7	23.8	24.9	3.1	81.2
	LC	232.9	80.4	5.2	22.6	23.9	2.7	79.3
H & N (Nick Chick)	FL	223.4	79.9	10.7	24.4	24.6	3.1	79.7
	HR	226.0	79.6	6.9	24.7	24.6	3.3	83.0
	LC	207.4	76.3	11.0	22.7	23.7	3.0	81.4
Hubbard (Leghorn)	FL	224.1	77.5	4.7	24.5	24.9	2.4	80.8
	HR	213.4	74.8	5.0	25.0	25.0	2.7	81.8
	LC	236.5	81.6	3.2	24.8	24.2	2.3	82.0
HyLine (W-36)	FL	215.0	76.1	10.8	22.7	24.4	2.4	76.4
	HR	216.6	77.1	9.8	23.0	24.4	2.4	78.0
	LC	223.8	77.9	3.3	21.7	23.5	2.1	80.5
Colonial (365-S)	FL	205.7	72.3	5.7	20.1	24.0	2.6	77.6
	HR	198.0	71.0	9.1	19.9	23.8	3.3	80.3
	LC	200.8	71.2	8.1	18.9	22.8	2.5	79.9
Shaver (288-A)	FL	217.5	76.7	7.4	22.9	24.4	2.8	79.9
	HR	212.9	74.8	5.6	24.0	24.8	3.2	80.2
	LC	219.3	76.6	4.8	22.2	23.5	2.4	78.8
White Egg Average	**FL**	**217.5**	**76.6**	**7.2**	**23.2**	**24.6**	**2.7**	**79.1**
	HR	**214.6**	**76.0**	**7.1**	**23.6**	**24.6**	**3.0**	**81.1**
	LC	**217.9**	**77.1**	**7.2**	**22.5**	**23.7**	**2.5**	**80.6**
Brown Egg Layers								
Hisex (Brown)	FL	207.9	71.9	4.4	24.9	27.0	2.0	79.3
	HR	195.2	71.3	14.2	25.7	27.4	2.3	81.9
	LC	196.4	70.8	14.8	24.7	25.7	1.7	80.9
Hubbard (Golden Comet)	FL	200.6	72.1	11.2	24.5	26.7	1.5	81.2
	HR	205.8	74.0	11.7	25.7	26.6	2.0	82.5
	LC	202.6	72.7	13.1	24.9	25.5	1.6	82.0
Dekalb (Sex-Sal-Link G)	FL	187.6	66.6	10.0	24.4	27.0	1.5	84.1
	HR	189.0	67.4	7.9	25.8	27.1	1.8	85.7
	LC	196.3	71.1	11.9	25.4	25.1	1.3	81.9
Brown Egg Average	**FL**	**198.7**	**70.2**	**8.5**	**24.6**	**26.9**	**1.7**	**81.5**
	HR	**196.7**	**70.9**	**11.2**	**25.7**	**27.0**	**2.0**	**83.4**
	LC	**198.4**	**71.5**	**13.3**	**25.0**	**25.4**	**1.5**	**81.6**

*FL = Flush waste; HR = High Rise; LC = Light and Air Controlled

TABLE 11. EFFECTS OF HOUSING ON EGG QUALITY OF ENTRIES, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	House* Type	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers		----------(%)----------					
Dekalb (XL-Link)	FL	94.7	1.5	3.3	0.5	1.3	0.2
	HR	94.2	1.7	3.9	0.3	0.3	0.0
	LC	95.6	1.2	2.7	0.5	0.0	0.4
ISA-Babcock (B300)	FL	96.6	1.1	1.7	0.5	1.3	0.0
	HR	94.6	2.3	2.8	0.3	1.0	0.0
	LC	97.0	0.7	2.2	0.0	1.0	0.0
Hisex (White)	FL	91.1	2.3	5.8	0.8	1.7	0.0
	HR	93.7	2.5	3.6	0.2	2.4	0.0
	LC	93.5	1.2	4.9	0.3	1.6	0.0
H & N (Nick Chick)	FL	95.7	2.3	1.8	0.1	0.8	0.3
	HR	95.5	2.2	2.1	0.1	0.2	0.0
	LC	97.1	1.0	1.8	0.0	1.1	0.0
Hubbard (Leghorn)	FL	95.5	0.7	3.7	0.1	2.6	0.3
	HR	96.1	1.2	2.1	0.6	1.7	0.0
	LC	96.0	1.0	2.4	0.6	2.5	0.0
HyLine (W-36)	FL	94.3	1.3	4.3	0.1	0.1	0.1
	HR	95.7	2.1	2.1	0.1	0.5	0.3
	LC	97.1	0.9	2.0	0.1	0.1	0.0
Colonial (365-S)	FL	96.3	1.2	2.5	0.0	1.2	0.2
	HR	95.6	1.9	2.4	0.2	2.0	0.0
	LC	96.5	1.5	1.6	0.4	0.9	0.0
Shaver (288-A)	FL	96.2	1.0	2.8	0.0	0.6	0.0
	HR	96.9	1.2	1.7	0.2	0.5	0.0
	LC	96.4	1.0	2.4	0.2	0.6	0.0
White Egg Average	**FL**	**95.0**	**1.4**	**3.2**	**0.3**	**1.2**	**0.2**
	HR	**95.3**	**1.9**	**2.6**	**0.2**	**1.1**	**0.0**
	LC	**96.2**	**1.0**	**2.5**	**0.3**	**1.0**	**0.0**
Brown Egg Layers							
Hisex (Brown)	FL	91.2	2.0	6.8	0.0	4.5	10.0
	HR	95.5	1.1	3.2	0.2	1.8	7.8
	LC	95.6	1.3	2.6	0.5	3.2	11.4
Hubbard (Golden Comet)	FL	96.1	0.7	3.1	0.1	4.0	14.8
	HR	96.9	0.9	1.9	0.2	2.9	12.9
	LC	95.8	0.3	3.4	0.4	3.4	13.4
Dekalb (Sex-Sal-Link G)	FL	93.6	1.0	4.8	0.5	4.1	10.1
	HR	96.8	0.8	2.3	0.1	3.1	10.8
	LC	96.5	0.6	2.6	0.2	3.4	9.1
Brown Egg Average	**FL**	**93.6**	**1.2**	**4.9**	**0.2**	**4.2**	**11.7**
	HR	**96.4**	**0.9**	**2.5**	**0.2**	**2.6**	**10.5**
	LC	**96.0**	**0.7**	**2.9**	**0.4**	**3.3**	**11.3**

*FL = Flush Waste; HR = High Rise; LC = Light and Air Controlled

TABLE 12. EFFECTS OF HOUSING ON EGG SIZE AND FEED EFFICIENCY OF ENTRIES, 26TH NCLPMT (140-434 DAYS)

Breeder (Strain)	House Type	Egg Size Distribution (%) Pee Wee	Small	Medium	Large	Extra Large	Egg Income	Feed Cost
White Egg Layers								
Dekalb (XL-Link)	FL	1.9	14.8	12.0	36.1	35.3	11.60	6.32
	HR	1.3	13.9	10.2	36.5	38.2	11.72	6.38
	LC	2.9	19.2	19.8	33.8	24.4	11.41	6.14
ISA-Babcock (B300)	FL	2.3	14.2	10.1	35.3	38.1	11.24	6.39
	HR	2.3	14.1	9.2	32.1	42.4	11.41	6.41
	LC	3.6	16.5	12.8	35.9	31.2	10.66	6.06
Hisex (White)	FL	1.8	13.8	10.9	38.1	35.5	11.35	6.38
	HR	2.0	13.4	9.9	34.0	40.6	11.11	6.30
	LC	2.9	17.6	16.3	39.2	24.0	11.70	6.22
H & N (Nick Chick)	FL	1.6	13.3	11.5	37.4	36.2	11.88	6.45
	HR	1.5	14.7	10.7	37.5	35.6	12.02	6.63
	LC	2.8	20.6	17.0	36.6	23.0	10.65	5.83
Hubbard (Leghorn)	FL	1.5	14.4	10.4	32.7	41.0	11.90	6.67
	HR	2.1	13.3	8.0	32.9	43.5	11.38	6.72
	LC	2.2	15.2	13.8	38.2	30.6	12.38	6.76
HyLine (W-36)	FL	2.3	16.1	12.6	35.9	33.1	11.39	6.13
	HR	1.3	16.0	12.9	34.9	34.8	11.48	6.15
	LC	1.9	21.5	19.3	35.1	22.2	11.57	6.02
Colonial (365-S)	FL	1.8	18.2	15.9	37.5	26.2	10.68	5.63
	HR	2.0	20.9	17.4	34.8	24.8	10.19	5.52
	LC	4.5	25.5	23.7	30.9	15.4	9.91	5.34
Shaver (288-A)	FL	2.4	14.9	13.2	37.9	32.1	11.59	6.21
	HR	1.5	13.6	9.3	35.8	39.9	11.46	6.47
	LC	3.1	18.6	23.6	35.1	19.7	11.24	6.10
White Egg Average	**FL**	**2.0**	**15.0**	**12.1**	**36.4**	**34.7**	**11.44**	**6.27**
	HR	**1.8**	**15.0**	**10.9**	**34.8**	**37.5**	**11.34**	**6.32**
	LC	**3.0**	**19.3**	**18.3**	**35.6**	**23.8**	**11.17**	**6.05**
Brown Egg Layers								
Hisex (Brown)	FL	0.6	8.2	4.1	18.3	68.8	11.17	6.83
	HR	0.2	6.9	4.4	17.1	71.4	10.74	6.69
	LC	0.4	11.0	7.7	28.2	52.6	10.55	6.43
Hubbard (Golden Comet)	FL	0.5	10.6	4.5	18.6	65.8	10.91	6.48
	HR	0.5	9.5	4.5	19.9	65.6	11.30	6.77
	LC	0.8	12.3	8.5	27.7	50.7	10.77	6.54
Dekalb (Sex-Sal-Link G)	FL	0.1	7.7	4.5	18.6	69.1	10.33	6.50
	HR	0.9	6.3	4.1	17.2	71.5	10.62	6.83
	LC	1.6	11.3	10.4	29.5	47.1	10.55	6.69
Brown Egg Average	**FL**	**0.4**	**8.8**	**4.4**	**18.5**	**67.9**	**10.80**	**6.60**
	HR	**0.6**	**7.6**	**4.3**	**18.1**	**69.5**	**10.89**	**6.76**
	LC	**0.9**	**11.6**	**8.9**	**28.5**	**50.1**	**10.63**	**6.55**

*FL = Flush waste; HR = High Rise; LC = Light and Air Controlled

EXPLANATIONS OF DATA AND TABULAR HEADINGS

For Tables 13-24 referring to 435-728 days production.

Entry (Strain): The name of the breeder and the strain entered in the evaluation. See information following tables.

Cage Type: "S" denoted performance in shallow (18" x 12") cages . "D" denotes performance in deep (12" x 18") cages.

Birds per cage "3" or "4" denotes performance with 3 or 4 birds housed per cage, respectively.

Housing type: "FL" denotes performance in a curtain-sided flush waste facility. "HR" denotes performance in a curtain-sided high rise facility. "LC" denotes performance in a light and air controlled facility.

Eggs per bird housed: The total number of eggs produced divided by the number of birds housed at 140 days.

Egg production (Hen Day): The average daily number of eggs per 100 hen days.

Mortality: The percentage of birds housed at 140 days which have died from 435 to 728 days of age.

Feed Consumption: The pounds of feed consumed daily per 100 hens.

Egg Weight: The average weight of eggs in ounces per dozen.

Specific Gravity Score: The average specific gravity of eggs expressed as follows:

Score Value	Spec. Gravity Range
0	<1.068
1	1.068 - 1.072
2	1.072 - 1.076
3	1.076 - 1.080
4	1.080 - 1.084
5	1.084 - 1.088
6	1.092 - 1.096
7	1.096 - 1.100
8	> 1.100

Haugh Units: The average Haugh Unit score of the eggs.

Grade Information: The average grade of eggs according to USDA grading standards.

Blood Spots: The percentage of blood spots in excess of 1/8 inch diameter, detected in broken out eggs.

Meat Spots: The percentage of meat spots in excess of 1/8 inch diameter, detected in broken out eggs.

Egg Size Distribution: The proportion of the eggs falling into the following size categories:

Size Category	Ounces/Dozen
Pee Wee	> 18
Small	18 - 21
Medium	21 - 23
Large	23 - 27
Extra Large	> 27

Egg Income: The calculated income per hen housed at 140 days from egg production, using three year regional average egg prices as follows:

Grade	Size	Cents/Dozen
A	Extra Large	69.10
A	Large	69.10
A	Medium	60.50
A	Small	47.92
A	Pee Wee	44.65
B	All	44.65
Cracks	All	36.93

Feed Cost: The calculated feed cost per hen housed at 140 days, using three year regional average prices, weighted average price of $170.92 per ton.

TABLE 13. AVERAGE PERFORMANCE OF ENTRIES, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	Eggs/ Bird Housed	Hen Day Production (%)	Mortality 435-728 d of Age	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers							
Dekalb (XL Link)	161.1	63.6	8.0	21.2	26.7	2.3	80.5
ISA-Babcock (B300)	162.6	61.9	5.6	20.8	27.2	2.6	79.7
Hisex (White)	161.9	62.7	7.8	20.9	27.2	2.4	80.1
H & N (Nick Chick)	165.1	66.3	9.3	22.9	26.9	2.5	81.7
Hubbard (Leghorn)	176.1	66.9	8.6	23.2	27.2	2.3	79.4
HyLine (W-36)	165.7	63.8	7.4	20.7	27.0	2.3	75.9
Colonial (365-S)	138.6	55.9	11.4	18.7	26.4	2.2	78.8
Shaver (288-A)	160.8	59.0	2.7	19.6	26.8	2.4	78.9
White Egg Average	**161.3**	**62.5**	**7.6**	**21.0**	**26.9**	**2.4**	**79.4**
Brown Egg Layers							
Hisex (Brown)	137.3	57.0	9.8	23.2	29.0	2.1	79.4
Hubbard (Golden Comet)	139.8	60.9	12.1	23.8	28.8	2.1	81.6
Dekalb (Sex-Sal-Link G)	138.7	58.4	13.6	23.9	29.6	2.0	82.7
Brown Egg Average	**138.6**	**58.8**	**11.8**	**23.7**	**29.1**	**2.1**	**81.2**

TABLE 14. AVERAGE EGG QUALITY OF ENTRIES, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers	----------(%)----------					
Dekalb (XL-Link)	92.3	2.5	4.0	1.2	1.1	0.0
ISA-Babcock (B300)	93.4	2.5	2.7	1.4	2.9	0.0
Hisex (White)	90.5	3.4	4.6	1.5	1.9	0.3
H & N (Nick Chick)	90.8	5.6	2.8	0.9	0.8	0.1
Hubbard (Leghorn)	92.8	1.9	3.6	1.7	3.8	0.2
HyLine (W-36)	93.6	2.5	3.5	0.5	0.8	0.1
Colonial (365-S)	91.7	3.9	3.6	0.7	0.9	0.3
Shaver (288-A)	94.1	2.4	2.5	0.9	1.6	0.4
White Egg Average	**92.4**	**3.1**	**3.4**	**1.1**	**1.7**	**0.2**
Brown Egg Layers						
Hisex (Brown)	94.6	1.6	3.0	0.9	4.7	12.6
Hubbard (Golden Comet)	95.9	1.6	1.8	0.6	5.5	18.4
Dekalb (Sex-Sal-Link G)	94.5	1.2	3.1	1.1	5.4	14.5
Brown Egg Average	**95.0**	**1.5**	**2.6**	**0.9**	**5.2**	**15.2**

TABLE 15. AVERAGE EGG SIZE AND ECONOMIC DATA OF ENTRIES, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	Egg Size Distribution (%)					Egg Income	Feed Cost
	Pee Wee	Small	Medium	Large	Extra Large		
White Egg Layers							
Dekalb (XL-Link)	0.0	1.0	4.7	23.4	70.8	9.29	4.39
ISA-Babcock (B-300)	0.0	0.8	2.2	19.8	77.2	9.43	4.50
Hisex (White)	0.0	0.7	2.9	19.8	76.4	9.21	4.47
H & N (Nick Chick)	0.0	1.3	4.2	21.4	73.1	9.48	4.77
Hubbard (Leghorn)	0.0	0.6	3.2	16.4	79.8	10.17	5.06
HyLine (W-36)	0.0	0.4	2.2	21.9	75.4	9.73	4.40
Colonial (365-S)	0.0	1.2	5.7	30.8	62.3	7.89	3.94
Shaver (288-A)	0.0	0.7	4.4	25.8	69.1	9.37	4.38
White Egg Average	**0.0**	**0.8**	**3.7**	**22.4**	**73.0**	**9.31**	**4.48**
Brown Egg Layers							
Hisex (Brown)	0.0	0.1	1.3	7.8	90.7	8.04	4.62
Hubbard (Golden Comet)	0.0	0.3	0.7	7.5	91.4	8.27	4.52
Dekalb (Sex-Sal-Link G)	0,0	0.2	1.0	10.0	88.8	8.11	4.72
Brown Egg Average	**0.0**	**0.2**	**1.0**	**8.5**	**90.3**	**8.14**	**4.62**

TABLE 16. EFFECTS OF CAGE TYPE ON PERFORMANCE OF ENTRIES IN ALL HOUSING, 26th NCLPMT (435-728 DAYS)

Breeder (Strain)	Cage Type	Eggs/ Bird Housed	Hen Day Production (%)	Mortality 435-728 d of Age (%)	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb	S	171.7	65.4	7.9	21.4	27.0	2.3	80.3
(XL Link)	D	150.1	61.9	8.2	21.0	26.5	2.3	80.6
ISA-Babcock	S	166.3	62.2	4.9	21.2	27.3	2.5	80.5
(B300)	D	158.9	61.6	6.4	20.5	27.2	2.7	78.8
Hisex	S	164.0	63.1	5.3	21.2	27.1	2.4	79.8
(White)	D	159.9	62.3	10.3	20.5	27.2	2.3	80.4
H & N	S	167.3	66.9	6.3	23.2	27.0	2.5	82.2
(Nick Chick)	D	162.7	65.6	12.2	22.6	26.8	2.4	81.1
Hubbard	S	179.0	67.0	6.7	23.5	27.2	2.3	80.3
(Leghorn)	D	173.3	66.8	10.5	22.9	27.2	2.3	78.5
HyLine	S	167.4	64.6	9.6	21.2	27.1	2.2	75.0
(W-36)	D	164.1	63.0	5.3	20.2	27.0	2.3	76.8
Colonial	S	139.3	57.0	12.2	18.4	26.3	2.2	79.5
(365-S)	D	138.0	54.7	10.5	18.9	26.5	2.3	78.1
Shaver	S	158.8	58.9	3.7	19.9	26.8	2.3	78.5
(288-A)	D	162.9	59.1	1.7	19.3	26.7	2.4	79.3
White Egg Average	**S**	**164.0**	**63.1**	**7.1**	**21.2**	**27.0**	**2.3**	**79.5**
	D	**158.6**	**61.9**	**8.1**	**20.7**	**26.9**	**2.4**	**79.2**
Brown Egg Layers								
Hisex	S	148.1	58.6	6.2	23.4	28.7	2.1	79.1
(Brown)	D	126.5	55.4	13.3	23.1	29.3	2.1	79.6
Hubbard	S	146.1	60.0	7.9	23.7	28.9	2.1	81.6
(Golden Comet)	D	133.4	61.8	16.4	23.9	28.6	2.1	81.7
Dekalb	S	139.3	58.6	12.6	23.9	30.3	2.0	83.0
(Sex-Sal-Link G)	D	138.1	58.1	14.6	23.9	29.0	1.9	82.5
Brown Egg Average	**S**	**144.5**	**59.1**	**8.9**	**23.7**	**29.3**	**2.1**	**81.2**
	D	**132.7**	**58.4**	**14.8**	**23.6**	**29.0**	**2.1**	**81.3**

TABLE 17. EFFECTS OF CAGE TYPE ON EGG QUALITY OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	Cage Type	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers							
Dekalb (XL-Link)	S	93.2	2.3	3.8	0.7	1.0	0.0
	D	91.4	2.6	4.2	1.8	1.2	0.0
ISA-Babcock (B300)	S	93.4	2.6	2.5	1.5	1.9	0.0
	D	93.4	2.4	2.9	1.3	3.8	0.0
Hisex (White)	S	90.6	3.7	4.3	1.4	2.5	0.2
	D	90.4	3.0	5.0	1.6	1.2	0.4
H & N (Nick Chick)	S	91.4	5.8	2.1	0.8	1.3	0.2
	D	90.1	5.3	3.5	1.0	0.3	0.0
Hubbard (Leghorn)	S	93.5	1.3	3.7	1.4	3.1	0.5
	D	92.0	2.5	3.5	2.0	4.5	0.0
HyLine (W-36)	S	95.0	1.9	2.9	0.2	1.5	0.2
	D	92.1	3.0	4.0	0.8	0.0	0.0
Colonial (365-S)	S	93.3	3.6	2.7	0.4	0.5	0.3
	D	90.2	4.3	4.5	1.0	1.4	0.3
Shaver (288-A)	S	92.7	3.3	2.9	1.1	1.8	0.2
	D	95.6	1.6	2.2	0.6	1.4	0.5
White Egg Average	**S**	**92.9**	**3.1**	**3.1**	**0.9**	**1.7**	**0.2**
	D	**91.9**	**3.1**	**3.7**	**1.3**	**1.7**	**0.2**
Brown Egg Layers							
Hisex (Brown)	S	94.8	1.2	3.0	1.0	4.7	12.8
	D	94.4	1.9	3.0	0.8	4.7	12.3
Hubbard (Golden Comet)	S	95.1	2.0	2.2	0.7	4.8	15.8
	D	96.8	1.2	1.5	0.5	6.1	21.0
Dekalb (Sex-Sal-Link G)	S	94.7	1.3	3.0	0.9	6.0	13.7
	D	94.2	1.2	3.2	1.4	4.9	15.2
Brown Egg Average	**S**	**94.8**	**1.5**	**2.7**	**0.9**	**5.1**	**14.1**
	D	**95.1**	**1.4**	**2.6**	**0.9**	**5.2**	**16.2**

TABLE 18. EFFECTS OF CAGE TYPE ON EGG SIZE AND ECONOMIC DATA OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	Cage Type	Egg Size Distribution (%) Pee Wee	Small	Medium	Large	Extra Large	Egg Income	Feed Cost
White Egg Layers								
Dekalb	S	0.1	1.1	4.7	19.5	74.6	9.95	4.59
(XL-Link)	D	0.0	0.9	4.7	27.4	67.0	8.60	4.19
ISA-Babcock	S	0.0	1.3	2.2	17.1	79.4	9.66	4.65
(B-300)	D	0.0	0.3	2.1	22.5	75.0	9.21	4.34
Hisex	S	0.1	0.5	3.5	19.1	76.8	9.34	4.58
(White)	D	0.0	1.0	2.3	20.6	76.0	9.07	4.37
H & N	S	0.0	1.0	3.5	21.3	74.2	9.66	4.88
(Nick Chick)	D	0.0	1.6	4.9	21.5	72.0	9.30	4.66
Hubbard	S	0.0	0.8	2.9	17.1	79.2	10.38	5.21
(Leghorn)	D	0.0	0.4	3.4	15.6	80.5	9.95	4.92
HyLine	S	0.0	0.4	1.9	22.2	75.5	9.89	4.49
(W-36)	D	0.0	0.4	2.5	21.6	75.4	9.57	4.30
Colonial	S	0.0	1.6	6.6	31.2	60.6	7.97	3.82
(365-S)	D	0.0	0.9	4.7	30.3	64.0	7.80	4.06
Shaver	S	0.0	0.6	4.9	24.7	69.7	9.17	4.43
(288-A)	D	0.0	0.8	3.8	26.9	68.5	9.58	4.34
White Egg Average	**S**	**0.0**	**0.9**	**3.8**	**21.5**	**73.7**	**9.49**	**4.57**
	D	**0.0**	**0.8**	**3.6**	**23.3**	**72.3**	**9.13**	**4.39**
Brown Egg Layers								
Hisex	S	0.0	0.1	1.8	8.4	89.7	8.67	4.85
(Brown)	D	0.0	0.0	0.8	7.3	91.8	7.42	4.39
Hubbard	S	0.0	0.2	0.5	6.9	92.4	8.61	4.79
(Golden Comet)	D	0.0	0.4	1.0	8.2	90.4	7.94	4.26
Dekalb	S	0.0	0.2	1.0	12.5	86.2	8.17	4.69
(Sex-Sal-Link G)	D	0.0	0.1	1.0	7.5	91.4	8.06	4.75
Brown Egg Average	**S**	**0.0**	**0.2**	**1.1**	**9.2**	**89.5**	**8.48**	**4.78**
	D	**0.0**	**0.2**	**0.9**	**7.7**	**91.2**	**7.80**	**4.47**

TABLE 19. EFFECTS OF NUMBER OF BIRDS PER CAGE ON PERFORMANCE OF ENTRIES IN ALL HOUSING, 26th NCLPMT (435-728 DAYS)

Breeder (Strain)	Birds/ Cage	Eggs/ Bird Housed	Hen Day Production (%)	Mortality 435-728 d of Age (%)	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb	3	169.5	64.3	6.7	20.8	26.8	2.4	80.9
(XL Link)	4	154.6	63.0	9.4	21.6	26.7	2.2	80.0
ISA-Babcock	3	166.9	62.3	5.0	21.3	27.1	2.6	80.1
(B300)	4	159.3	61.5	6.2	20.4	27.3	2.6	79.3
Hisex	3	173.5	65.2	8.9	21.0	27.2	2.4	79.4
(White)	4	153.3	60.2	6.7	20.8	27.2	2.3	80.8
H & N	3	177.8	67.6	9.6	23.2	27.0	2.6	82.2
(Nick Chick)	4	155.2	64.9	9.0	22.7	26.9	2.4	81.2
Hubbard	3	180.5	66.6	7.2	23.5	27.5	2.2	79.5
(Leghorn)	4	172.6	67.2	10.0	22.8	26.9	2.3	79.4
HyLine	3	166.5	66.1	9.4	21.4	27.0	2.3	76.3
(W-36)	4	165.2	61.5	5.4	20.0	27.0	2.2	75.6
Colonial	3	148.7	58.2	11.9	19.2	26.5	2.2	78.6
(365-S)	4	131.5	53.5	10.8	18.1	26.3	2.3	78.9
Shaver	3	163.2	60.0	3.3	19.6	26.6	2.4	78.0
(288-A)	4	159.1	57.9	2.1	19.6	26.9	2.3	79.8
White Egg Average	**3**	**168.2**	**63.8**	**7.7**	**21.2**	**27.0**	**2.4**	**79.4**
	4	**156.1**	**61.2**	**7.4**	**20.7**	**26.9**	**2.3**	**79.4**
Brown Egg Layers								
Hisex	3	141.8	58.7	8.3	24.1	29.1	2.1	79.5
(Brown)	4	133.9	55.3	11.2	22.4	28.9	2.1	79.2
Hubbard	3	153.2	60.8	7.2	23.6	29.0	2.1	81.5
(Golden Comet)	4	129.7	61.1	17.1	24.1	28.5	2.1	81.8
Dekalb	3	157.2	60.7	13.9	23.1	28.8	1.9	82.8
(Sex-Sal-Link G)	4	124.8	56.0	13.3	24.6	30.5	2.0	82.6
Brown Egg Average	**3**	**150.7**	**60.1**	**9.8**	**23.6**	**28.9**	**2.1**	**81.3**
	4	**129.5**	**57.4**	**13.9**	**23.7**	**29.3**	**2.1**	**81.2**

TABLE 20. EFFECTS OF NUMBER OF BIRDS PER CAGE ON EGG QUALITY OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	Birds Cage	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers							
Dekalb	3	93.7	2.2	3.3	0.8	1.2	0.0
(XL-Link)	4	90.9	2.7	4.7	1.7	1.0	0.0
ISA-Babcock	3	93.8	1.8	2.5	1.9	3.7	0.0
(B300)	4	93.1	3.1	2.9	0.8	2.0	0.0
Hisex	3	89.5	4.1	4.7	1.7	1.4	0.0
(White)	4	91.5	2.7	4.5	1.3	2.3	0.6
H & N	3	90.8	5.6	2.4	1.1	0.7	0.0
(Nick Chick)	4	90.7	5.5	3.2	0.6	0.9	0.2
Hubbard	3	92.2	2.1	3.6	2.1	3.2	0.0
(Leghorn)	4	93.3	1.7	3.6	1.4	4.3	0.5
HyLine	3	94.2	2.4	3.1	0.3	0.7	0.0
(W-36)	4	92.9	2.6	3.9	0.7	0.8	0.2
Colonial	3	93.1	3.3	3.1	0.5	1.0	0.0
(365-S)	4	90.3	4.6	4.1	1.0	0.9	0.6
Shaver	3	94.3	2.6	2.3	0.8	2.8	0.5
(288-A)	4	94.0	2.3	2.7	1.0	0.5	0.2
White Egg Average	**3**	**92.7**	**3.0**	**3.1**	**1.2**	**1.8**	**0.1**
	4	**92.1**	**3.1**	**3.7**	**1.0**	**1.6**	**0.3**
Brown Egg Layers							
Hisex	3	94.8	1.8	2.2	1.2	4.0	12.0
(Brown)	4	94.3	1.3	3.7	0.6	5.9	13.1
Hubbard	3	95.2	2.0	2.1	0.7	6.0	17.3
(Golden Comet)	4	96.7	1.2	1.6	0.5	4.9	19.6
Dekalb	3	94.0	1.2	2.9	1.9	5.4	14.4
(Sex-Sal-Link G)	4	94.9	1.3	3.3	0.4	5.5	14.5
Brown Egg Average	**3**	**94.7**	**1.7**	**2.4**	**1.2**	**5.1**	**14.6**
	4	**95.3**	**1.3**	**2.9**	**0.5**	**5.3**	**15.7**

TABLE 21. EFFECTS OF NUMBER OF BIRDS PER CAGE ON EGG SIZE AND ECONOMIC DATA OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	Birds/ Type	Egg Size Distribution (%) Pee Wee	Small	Medium	Large	Extra Large	Egg Income	Feed Cost
White Egg Layers								
Dekalb	3	0.1	0.9	4.7	23.0	71.4	9.89	4.48
(XL-Link)	4	0.0	1.1	4.8	23.9	70.2	8.83	4.33
ISA-Babcock	3	0.0	1.2	2.4	20.6	75.7	9.67	4.73
(B-300)	4	0.0	0.3	1.9	19.0	78.7	9.26	4.32
Hisex	3	0.0	0.8	3.1	20.3	75.7	9.82	4.60
(White)	4	0.0	0.7	2.7	19.3	77.1	8.75	4.38
H & N	3	0.0	1.3	4.3	20.7	73.6	10.21	5.08
(Nick Chick)	4	0.0	1.2	4.1	22.1	72.6	8.91	4.54
Hubbard	3	0.0	0.5	3.3	11.3	84.9	10.38	5.27
(Leghorn)	4	0.0	0.7	3.1	21.4	74.8	10.00	4.90
HyLine	3	0.0	0.3	1.6	20.8	77.3	9.78	4.42
(W-36)	4	0.0	0.5	2.9	23.1	73.5	9.70	4.38
Colonial	3	0.0	0.6	4.4	29.2	65.7	8.59	4.17
(365-S)	4	0.0	1.9	6.9	32.3	58.9	7.39	3.78
Shaver	3	0.0	0.8	4.6	27.2	67.4	9.54	4.39
(288-A)	4	0.0	0.6	4.2	24.4	70.8	9.25	4.38
White Egg Average	**3**	**0.0**	**0.8**	**3.5**	**21.6**	**74.0**	**9.73**	**4.63**
	4	**0.0**	**0.9**	**3.8**	**23.2**	**72.0**	**9.00**	**4.36**
Brown Egg Layers								
Hisex	3	0.0	0.1	0.8	7.5	91.5	8.29	4.83
(Brown)	4	0.0	0.1	1.9	8.1	89.9	7.85	4.46
Hubbard	3	0.0	0.2	0.3	5.8	93.5	9.02	4.85
(Golden Comet)	4	0.0	0.4	1.1	9.3	89.2	7.70	4.27
Dekalb	3	0.0	0.1	0.8	9.8	89.3	9.16	4.89
(Sex-Sal-Link G)	4	0.0	0.3	1.2	10.2	88.3	7.32	4.60
Brown Egg Average	**3**	**0.0**	**0.1**	**0.7**	**7.7**	**91.5**	**8.83**	**4.86**
	4	**0.0**	**0.2**	**1.4**	**9.2**	**89.1**	**7.63**	**4.44**

TABLE 22. EFFECTS OF HOUSING ON PERFORMANCE OF ENTRIES, 26th NCLPMT (435-728 DAYS)

Breeder (Strain)	House* Type	Eggs/ Bird Housed	Hen Day Production (%)	Mortality 435-728 d of Age	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb (XL Link)	FL	161.2	62.3	11.4	20.8	26.7	2.5	83.8
	HR	161.3	64.8	7.1	21.5	27.4	2.3	77.1
	LC	160.8	63.8	5.6	21.3	26.1	2.2	80.5
ISA-Babcock (B300)	FL	163.7	62.4	6.2	20.5	27.2	2.7	82.7
	HR	174.9	62.2	5.2	20.7	27.4	2.5	76.8
	LC	149.3	61.1	5.4	21.4	27.0	2.6	79.6
Hisex (White)	FL	165.0	62.4	4.2	20.9	27.4	2.5	84.0
	HR	154.9	62.0	9.8	21.7	27.5	2.4	77.2
	LC	165.9	63.7	9.4	20.0	26.7	2.2	79.2
H & N (Nick Chick)	FL	162.6	66.7	9.6	23.7	27.5	2.5	84.3
	HR	175.0	66.4	7.9	23.2	27.2	2.5	81.6
	LC	157.1	65.8	10.3	21.8	26.1	2.4	79.2
Hubbard (Leghorn)	FL	178.3	68.3	10.3	22.7	27.2	2.3	81.8
	HR	165.9	65.2	9.4	23.9	27.5	2.2	77.3
	LC	185.3	67.1	6.0	23.0	26.9	2.2	79.1
HyLine (W-36)	FL	162.3	64.3	9.2	21.8	27.2	2.3	79.5
	HR	164.2	64.1	5.0	21.2	27.3	2.3	73.4
	LC	170.7	62.9	8.1	19.1	26.6	2.1	74.8
Colonial (365-S)	FL	141.9	57.3	14.0	19.4	26.9	2.3	80.9
	HR	136.3	56.6	11.2	19.2	26.6	2.3	77.0
	LC	137.8	53.7	9.0	17.3	25.7	2.2	78.4
Shaver (288-A)	FL	162.9	60.9	2.3	20.3	26.9	2.5	82.1
	HR	157.7	57.5	2.9	20.2	27.6	2.3	76.7
	LC	161.9	58.5	2.9	18.3	25.8	2.3	77.9
White Egg Average	**FL**	**162.1**	**63.1**	**8.4**	**21.3**	**27.1**	**2.5**	**82.4**
	HR	**161.1**	**62.4**	**7.3**	**21.4**	**27.3**	**2.3**	**77.1**
	LC	**160.7**	**62.1**	**7.1**	**20.3**	**26.4**	**2.3**	**78.6**
Brown Egg Layers								
Hisex (Brown)	FL	142.5	57.9	14.8	23.3	29.1	2.2	81.1
	HR	142.3	58.7	5.2	24.3	29.5	2.1	78.7
	LC	127.1	54.4	9.4	22.1	28.3	2.0	78.3
Hubbard (Golden Comet)	FL	132.7	62.3	18.3	24.1	29.1	2.3	83.2
	HR	146.0	62.3	12.9	24.5	29.1	2.0	79.4
	LC	140.6	58.2	5.2	22.9	28.1	2.1	82.4
Dekalb (Sex-Sal-Link G)	FL	137.9	59.5	12.7	24.7	31.6	2.1	86.5
	HR	138.8	57.2	12.7	23.8	29.6	2.0	80.6
	LC	139.4	58.4	15.4	23.1	27.7	1.9	81.0
Brown Egg Average	**FL**	**137.7**	**59.9**	**15.3**	**24.1**	**29.9**	**2.2**	**83.6**
	HR	**142.4**	**59.4**	**10.3**	**24.2**	**29.4**	**2.1**	**79.6**
	LC	**135.7**	**57.0**	**10.0**	**22.7**	**28.1**	**2.0**	**80.6**

*FL = Flush waste; HR = High Rise; LC = Light and Air Controlled

TABLE 23. EFFECTS OF HOUSING ON EGG QUALITY OF ENTRIES, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	House* Type	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots
White Egg Layers							
Dekalb (XL-Link)	FL	92.6	1.7	4.6	1.0	2.7	0.0
	HR	92.4	2.7	3.6	1.3	0.0	0.0
	LC	91.8	3.1	3.7	1.4	0.6	0.0
ISA-Babcock (B300)	FL	93.8	2.5	2.9	0.7	1.6	0.0
	HR	94.8	2.5	1.4	1.3	2.3	0.0
	LC	91.6	2.3	3.9	2.1	4.8	0.0
Hisex (White)	FL	90.0	4.3	4.2	1.4	1.4	0.6
	HR	87.6	4.7	5.6	2.1	2.8	0.3
	LC	93.9	1.0	4.1	1.0	1.3	0.0
H & N (Nick Chick)	FL	88.3	7.0	3.3	1.5	0.7	0.0
	HR	92.5	4.7	2.7	0.1	1.1	0.0
	LC	91.4	5.0	2.4	1.1	0.6	0.3
Hubbard (Leghorn)	FL	93.6	1.5	3.3	1.6	2.9	0.0
	HR	92.3	2.5	2.8	2.4	3.8	0.7
	LC	92.4	1.7	4.7	1.2	4.6	0.0
HyLine (W-36)	FL	93.3	2.7	3.4	0.5	1.1	0.4
	HR	93.6	2.0	3.6	0.8	0.5	0.0
	LC	93.8	2.7	3.4	0.1	0.7	0.0
Colonial (365-S)	FL	88.1	6.0	5.2	0.7	0.7	0.5
	HR	92.7	3.3	3.3	0.7	0.7	0.4
	LC	94.4	2.5	2.2	0.9	1.4	0.0
Shaver (288-A)	FL	95.3	2.6	1.7	0.4	2.2	0.8
	HR	93.4	2.3	2.8	1.4	1.3	0.0
	LC	93.7	2.4	3.0	0.8	1.3	0.3
White Egg Average	**FL**	**91.9**	**3.5**	**3.6**	**1.0**	**1.7**	**0.3**
	HR	**92.4**	**3.1**	**3.2**	**1.3**	**1.6**	**0.2**
	LC	**92.9**	**2.6**	**3.4**	**1.1**	**1.9**	**0.1**
Brown Egg Layers							
Hisex (Brown)	FL	93.7	2.7	2.8	0.8	6.1	9.3
	HR	95.3	0.7	2.6	1.4	0.8	14.8
	LC	94.8	1.3	3.5	0.4	7.3	13.6
Hubbard (Golden Comet)	FL	95.8	1.3	2.0	0.9	2.8	21.2
	HR	96.1	2.1	1.1	0.6	3.4	15.7
	LC	95.9	1.5	2.4	0.3	10.2	18.4
Dekalb (Sex-Sal-Link G)	FL	94.7	0.8	3.5	1.0	5.9	14.5
	HR	93.8	1.0	3.3	1.8	3.1	12.2
	LC	94.8	2.0	2.6	0.5	7.3	16.7
Brown Egg Average	**FL**	**94.7**	**1.6**	**2.8**	**0.9**	**4.9**	**15.0**
	HR	**95.1**	**1.3**	**2.3**	**1.3**	**2.5**	**14.2**
	LC	**95.2**	**1.6**	**2.8**	**0.4**	**8.3**	**16.3**

*FL = Flush Waste; HR = High Rise; LC = Light and Air Controlled

TABLE 24. EFFECTS OF HOUSING ON EGG SIZE AND FEED EFFICIENCY OF ENTRIES, 26TH NCLPMT (435-728 DAYS)

Breeder (Strain)	House Type	Egg Size Distribution (%) Pee Wee	Small	Medium	Large	Extra Large	Egg Income	Feed Cost
White Egg Layers								
Dekalb (XL-Link)	FL	0.0	0.8	3.6	22.5	73.1	9.27	4.38
	HR	0.0	0.3	3.1	19.4	77.2	9.34	4.39
	LC	0.1	1.9	7.4	28.5	62.1	9.27	4.43
ISA-Babcock (B300)	FL	0.0	0.3	2.1	20.5	77.1	9.51	4.41
	HR	0.0	0.3	2.0	16.3	81.3	10.24	4.75
	LC	0.0	1.8	2.3	22.6	73.3	8.55	4.33
Hisex (White)	FL	0.0	0.7	2.7	19.5	77.1	9.34	4.58
	HR	0.1	0.8	2.1	14.3	82.7	8.69	4.51
	LC	0.0	0.7	4.0	25.8	69.5	9.59	4.33
H & N (Nick Chick)	FL	0.0	1.0	2.4	15.5	81.1	9.23	4.84
	HR	0.0	0.8	3.3	18.1	77.8	10.19	5.08
	LC	0.0	2.0	6.9	30.7	60.4	8.99	4.38
Hubbard (Leghorn)	FL	0.0	0.6	3.5	16.2	79.7	10.29	4.91
	HR	0.0	0.9	3.1	13.7	82.2	9.54	4.98
	LC	0.0	0.3	3.0	19.2	77.5	10.74	5.31
HyLine (W-36)	FL	0.0	0.3	1.6	19.5	78.5	9.47	4.44
	HR	0.0	0.2	1.3	19.3	79.2	9.68	4.52
	LC	0.0	0.7	3.8	26.9	68.6	10.04	4.23
Colonial (365-S)	FL	0.0	0.3	1.9	23.5	74.3	7.98	4.05
	HR	0.0	1.5	5.9	27.1	65.5	7.78	3.96
	LC	0.0	2.0	9.2	41.7	47.1	7.91	3.81
Shaver (288-A)	FL	0.0	0.7	4.8	22.5	72.0	9.54	4.41
	HR	0.0	0.3	1.1	15.4	83.2	9.16	4.55
	LC	0.0	1.1	7.2	39.2	52.4	9.43	4.20
White Egg Average	**FL**	**0.0**	**0.6**	**2.8**	**19.9**	**76.6**	**9.33**	**4.49**
	HR	**0.0**	**0.6**	**2.7**	**18.0**	**78.6**	**9.32**	**4.59**
	LC	**0.0**	**1.3**	**5.5**	**29.4**	**63.8**	**9.29**	**4.36**
Brown Egg Layers								
Hisex (Brown)	FL	0.0	0.0	0.6	8.5	90.9	8.32	4.70
	HR	0.0	0.1	0.5	4.4	95.1	8.32	4.89
	LC	0.0	0.1	3.0	10.8	86.1	7.48	4.27
Hubbard (Golden Comet)	FL	0.0	0.0	0.4	4.4	95.2	7.81	4.25
	HR	0.0	0.4	0.3	6.5	92.7	8.65	4.74
	LC	0.0	0.5	1.5	11.7	86.2	8.34	4.58
Dekalb (Sex-Sal-Link G)	FL	0.0	0.3	0.9	8.0	90.8	8.05	4.77
	HR	0.0	0.0	0.2	5.5	94.3	8.08	4.77
	LC	0.0	0.3	1.9	16.5	81.3	8.21	4.63
Brown Egg Average	**FL**	**0.0**	**0.1**	**0.6**	**6.9**	**92.3**	**8.06**	**4.58**
	HR	**0.0**	**0.2**	**0.3**	**5.4**	**94.0**	**8.35**	**4.80**
	LC	**0.0**	**0.3**	**2.1**	**13.0**	**84.6**	**8.01**	**4.49**

*FL = Flush waste; HR = High Rise; LC = Light and Air Controlled

EXPLANATIONS OF DATE AND TABULAR HEADINGS

For Tables 25-36 referring to 140-728 days production.

Entry Strain): The name of the breeder and the strain entered in the evaluation. See information following tables.

Cage Type: "S" denotes performance in shallow (18" x 12") cages. "D" denotes performance in deep (12" x 18") cages.

Birds per cage "3" or "4" denotes performance with 3 or 4 birds housed per cage, respectively.

Housing type: "FL" denotes performance in a curtain-sided flush waste facility. "HR" denotes performance in a curtain-sided high rise facility. "LC: denotes performance in a light and air controlled facility.

Eggs per bird housed: The total number of eggs produced divided by the number of birds housed at 140 days.

Egg production (Hen Day): The average daily number of eggs per 100 hen days.

Mortality: The percentage of birds housed at 140 days which have died prior to 728 days of age.

Feed Consumption: The pounds of feed consumed daily per 100 hens.

Egg Weight: The average weight of eggs in ounces per dozen.

Specific Gravity Score: The average specific gravity of eggs expressed as follows:

Score Value	Spec. Gravity Range
0	<1.068
1	1.068 - 1.072
2	1.072 - 1.076
3	1.076 - 1.080
4	1.080 - 1.084
5	1.084 - 1.088
6	1.092 - 1.096
7	1.096 - 1.100
8	> 1.100

Haugh Units: The average Haugh Unit score of the eggs.

Grade Information: The average grade of eggs according to USDA grading standards.

Blood Spots: The percentage of blood spots in excess of 1/8 inch diameter, detected in broken out eggs.

Meat Spots: The percentage of meat spots in excess of 1/8 inch diameter, detected in broken out eggs.

Body Weight (728 days(: The average weight of all birds alive at conclusion of the test.

Egg Size Distribution: The proportion of the eggs falling into the following size categories:

Size Category	Ounces/Dozen
Pee Wee	< 1b.
Small	18 - 21
Medium	21 - 23
Large	23 - 27
Extra Large	> 27

Egg Income: The calculated income per hen housed at 140 days from egg production, using three year regional average egg prices as follows:

Grade	Size	Cents/Dozen
A	Extra Large	67.71
A	Large	67.71
A	Medium	59.22
A	Small	47.60
A	Pee Wee	43.15
B	All	43.15
Cracks	All	34.31

Feed Cost: The calculated feed cost per hen housed at 140 days, using three year regional average prices, weighted average price of $182.27 per ton.

TABLE 25. AVERAGE PERFORMANCE OF ENTRIES, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	Eggs/ Bird Housed	Hen Day Production (%)	Mortality > 140 d of Age	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers							
Dekalb (XL Link)	382.0	71.5	17.1	22.6	25.5	2.3	80.6
ISA-Babcock (B300)	372.8	67.6	11.5	22.0	25.8	3.0	80.6
Hisex (White)	385.0	70.6	14.7	22.2	25.8	2.6	79.8
H & N (Nick Chick)	384.1	72.4	18.8	23.4	25.6	2.7	81.5
Hubbard (Leghorn)	400.4	72.4	12.9	24.0	25.9	2.4	80.4
HyLine (W-36)	384.2	70.4	15.4	21.6	25.5	2.3	77.1
Colonial (365-S)	340.1	63.7	19.0	19.2	24.9	2.5	79.0
Shaver (288-A)	377.4	67.5	8.6	21.3	25.4	2.5	79.3
White Egg Average	**378.0**	**69.5**	**14.7**	**22.0**	**25.6**	**2.5**	**79.8**
Brown Egg Layers							
Hisex (Brown)	337.1	64.2	20.9	24.2	27.8	2.1	80.0
Hubbard (Golden Comet)	342.8	66.9	24.1	24.4	27.5	1.9	81.7
Dekalb (Sex-Sal-Link G)	329.7	63.3	23.5	24.5	28.0	1.8	83.3
Brown Egg Average	**336.5**	**64.8**	**22.8**	**24.4**	**27.8**	**1.9**	**81.7**

TABLE 26. AVERAGE EGG QUALITY AND BODY WEIGHT OF ENTRIES, 26th NCLPMT (140-728 DAYS)

Breeder (Strain)	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots	Body Weight 728 days (lbs)
White Egg Layers	----------	----------	----------	(%) ----------	----------	----------	
Dekalb (XL-Link)	93.5	2.0	3.6	0.8	0.9	0.0	4.30
ISA-Babcock (B300)	94.7	1.9	2.5	0.8	2.2	0.0	4.13
Hisex (White)	91.6	2.7	4.7	1.0	1.8	0.2	3.96
H & N (Nick Chick)	93.4	3.7	2.4	0.5	0.8	0.1	4.08
Hubbard (Leghorn)	94.3	1.4	3.2	1.1	3.4	0.2	4.50
HyLine (W-36)	94.6	1.9	3.1	0.3	0.6	0.1	3.97
Colonial (365-S)	93.9	2.7	2.9	0.5	0.9	0.2	2.96
Shaver (288-A)	95.3	1.7	2.4	0.5	1.4	0.3	4.26
White Egg Average	**93.9**	**2.3**	**3.1**	**0.7**	**1.5**	**0.1**	**4.02**
Brown Egg Layers							
Hisex (Brown)	94.3	1.5	3.6	0.5	3.9	12.0	5.47
Hubbard (Golden Comet)	96.1	1.1	2.3	0.4	4.4	16.4	4.97
Dekalb (Sex-Sal-Link G)	95.1	1.0	3.2	0.7	4.6	13.3	5.49
Brown Egg Average	**95.2**	**1.2**	**3.0**	**0.6**	**4.3**	**13.9**	**5.31**

TABLE 27. AVERAGE EGG SIZE AND ECONOMIC DATA OF ENTRIES, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	Egg Size Distribution (%)					Egg Income	Feed Cost
	Pee Wee	Small	Medium	Large	Extra Large		
White Egg Layers							
Dekalb (XL-Link)	1.0	8.7	9.7	29.6	51.0	20.43	10.68
ISA-Babcock (B-300)	1.4	8.1	6.5	27.4	56.6	20.09	10.78
Hisex (White)	1.2	8.0	7.8	28.7	54.3	20.15	10.78
H & N (Nick Chick)	1.0	8.9	8.8	29.5	51.8	20.56	11.08
Hubbard (Leghorn)	1.0	7.6	7.2	25.7	58.5	21.55	11.78
HyLine (W-36)	0.9	9.3	8.8	28.8	52.2	20.75	10.49
Colonial (365-S)	1.4	11.6	12.7	32.6	41.7	17.77	9.43
Shaver (288-A)	1.2	8.4	10.0	31.1	49.3	20.36	10.65
White Egg Average	**1.1**	**8.8**	**9.0**	**29.2**	**51.9**	**20.19**	**10.71**
Brown Egg Layers							
Hisex (Brown)	0.2	4.5	3.6	14.7	77.0	18.48	11.27
Hubbard (Golden Comet)	0.3	5.7	3.4	15.0	75.6	18.87	11.12
Dekalb (Sex-Sal-Link G)	0.4	4.4	3.9	16.0	75.3	18.23	11.40
Brown Egg Average	**0.3**	**4.9**	**3.5**	**15.3**	**76.0**	**18.53**	**11.26**

TABLE 28. EFFECTS OF CAGE TYPE ON PERFORMANCE OF ENTRIES IN ALL HOUSING, 26th NCLPMT (140-728 DAYS)

Breeder (Strain)	Cage Type	Eggs/ Bird Housed	Hen Day Production (%)	Mortality > 140 d of Age (%)	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb	S	396.0	72.5	14.4	22.8	25.7	2.4	80.0
(XL Link)	D	367.3	70.5	19.9	22.3	25.3	2.3	81.2
ISA-Babcock	S	377.3	67.9	10.2	22.2	26.0	3.0	80.8
(B300)	D	368.3	67.4	12.9	21.8	25.7	2.9	80.4
Hisex	S	387.4	71.3	14.0	22.4	25.8	2.6	79.4
(White)	D	382.7	70.0	15.4	22.0	25.8	2.5	80.2
H & N	S	389.5	73.3	15.7	23.5	25.6	2.9	82.1
(Nick Chick)	D	378.3	71.6	21.9	23.3	25.6	2.6	80.9
Hubbard	S	405.2	72.9	11.9	24.2	26.0	2.3	81.2
(Leghorn)	D	395.5	71.9	13.9	23.7	25.9	2.4	79.7
HyLine	S	388.9	71.1	16.8	22.0	25.6	2.3	77.2
(W-36)	D	379.5	69.7	14.0	21.2	25.5	2.3	76.9
Colonial	S	338.1	64.2	20.7	19.0	24.9	2.5	79.5
(365-S)	D	342.1	63.2	17.3	19.3	25.0	2.5	78.6
Shaver	S	375.2	67.4	9.8	21.4	25.5	2.5	78.5
(288-A)	D	379.6	67.6	7.5	21.2	25.4	2.6	80.0
White Egg Average	**S**	**381.9**	**70.1**	**14.2**	**22.2**	**25.6**	**2.5**	**79.8**
	D	**374.0**	**69.0**	**15.3**	**21.9**	**25.5**	**2.5**	**79.7**
Brown Egg Layers								
Hisex	S	355.4	66.0	16.2	24.5	27.6	2.1	79.9
(Brown)	D	318.9	62.4	25.5	23.9	28.0	2.0	80.1
Hubbard	S	350.8	66.8	20.1	24.4	27.7	2.0	81.5
(Golden Comet)	D	334.7	67.0	28.2	24.5	27.3	1.9	82.0
Dekalb	S	330.8	63.5	21.5	24.6	28.3	1.8	83.6
(Sex-Sal-Link G)	D	328.5	63.2	25.6	24.5	27.7	1.8	83.0
Brown Egg Average	**S**	**345.7**	**65.4**	**19.3**	**24.5**	**27.8**	**1.9**	**81.7**
	D	**327.4**	**64.2**	**26.5**	**24.3**	**27.7**	**1.9**	**81.7**

TABLE 29. EFFECTS OF CAGE TYPE ON EGG QUALITY OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	Cage Type	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots	Body Weight 728 Days (lbs)
White Egg Layers		----------(%)----------						
Dekalb (XL-Link)	S	93.9	1.9	3.5	0.7	0.9	0.0	4.32
	D	93.2	2.0	3.8	1.0	0.9	0.0	4.28
ISA-Babcock (B300)	S	95.2	1.7	2.3	0.8	1.6	0.0	4.10
	D	94.3	2.2	2.7	0.8	2.8	0.0	4.17
Hisex (White)	S	92.2	2.4	4.5	0.9	2.3	0.1	3.98
	D	91.1	3.0	4.9	1.0	1.2	0.3	3.93
H & N (Nick Chick)	S	93.8	3.6	2.1	0.4	1.2	0.2	4.10
	D	93.1	3.8	2.6	0.5	0.4	0.0	4.07
Hubbard (Leghorn)	S	94.8	1.1	3.2	0.9	3.0	0.3	4.42
	D	93.9	1.8	3.1	1.2	3.8	0.0	4.58
HyLine (W-36)	S	95.5	1.5	2.8	0.1	1.2	0.2	4.12
	D	93.7	2.4	3.4	0.4	0.0	0.0	3.83
Colonial (365-S)	S	94.8	2.4	2.5	0.3	0.5	0.2	2.88
	D	93.1	3.1	3.2	0.6	1.3	0.2	3.03
Shaver (288-A)	S	94.5	2.2	2.6	0.6	1.4	0.2	4.37
	D	96.1	1.3	2.2	0.4	1.5	0.4	4.15
White Egg Average	**S**	**94.3**	**2.1**	**2.9**	**0.6**	**1.5**	**0.1**	**4.03**
	D	**93.5**	**2.4**	**3.2**	**0.8**	**1.5**	**0.1**	**4.01**
Brown Egg Layers								
Hisex (Brown)	S	94.8	1.1	3.4	0.6	4.0	12.0	5.45
	D	93.8	1.9	3.7	0.5	3.9	11.9	5.48
Hubbard (Golden Comet)	S	95.5	1.3	2.6	0.5	3.8	14.2	5.03
	D	96.7	0.9	2.0	0.4	5.0	18.6	4.92
Dekalb (Sex-Sal-Link G)	S	95.9	0.9	2.7	0.5	4.7	11.5	5.63
	D	94.2	1.2	3.7	0.9	4.4	15.1	5.35
Brown Egg Average	**S**	**95.4**	**1.1**	**2.9**	**0.5**	**4.1**	**12.6**	**5.37**
	D	**94.9**	**1.3**	**3.1**	**0.6**	**4.4**	**15.2**	**5.25**

TABLE 30. EFFECTS OF CAGE TYPE ON EGG SIZE AND ECONOMIC DATA OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	Cage Type	Egg Size Distribution					Egg Income	Feed Cost
		Pee Wee	Small	Medium	Large	Extra Large		
White Egg Layers		----------(%)----------						
Dekalb (XL-Link)	S	0.9	8.6	8.9	27.0	54.6	21.27	11.02
	D	1.2	8.9	10.1	32.3	47.5	19.55	10.33
ISA-Babcock (B300)	S	1.2	8.3	6.0	25.8	58.7	20.42	10.97
	D	1.6	7.9	7.2	28.9	54.4	19.75	10.59
Hisex (White)	S	1.2	8.0	8.1	28.3	54.4	20.33	10.85
	D	1.2	8.0	7.5	29.1	54.2	19.98	10.71
H & N (Nick Chick)	S	1.1	8.7	8.5	30.3	51.4	20.85	11.17
	D	1.0	9.1	8.9	28.7	52.3	20.24	10.98
Hubbard (Leghorn)	S	0.8	7.6	6.5	27.0	58.1	21.94	11.97
	D	1.2	7.7	7.7	24.5	58.9	21.16	11.59
HyLine (W-36)	S	0.8	9.2	9.1	28.5	52.4	21.06	10.73
	D	1.1	9.5	8.4	29.0	52.0	20.44	10.26
Colonial (365-S)	S	1.5	12.0	13.2	32.4	40.9	17.71	9.25
	D	1.3	11.3	12.0	32.9	42.5	17.82	9.62
Shaver (288-A)	S	1.1	8.3	10.7	30.2	49.7	20.12	10.64
	D	1.2	8.5	9.4	32.1	48.8	20.60	10.65
White Egg Average	**S**	**1.1**	**8.8**	**8.9**	**28.7**	**52.5**	**20.44**	**10.82**
	D	**1.2**	**8.9**	**8.9**	**29.7**	**51.3**	**19.93**	**10.59**
Brown Egg Layers								
Hisex (Brown)	S	0.3	4.9	3.5	15.7	75.6	19.50	11.67
	D	0.2	4.2	3.2	13.8	78.6	17.46	10.86
Hubbard (Golden Comet)	S	0.2	5.6	3.3	13.5	77.4	19.24	11.33
	D	0.4	5.8	3.6	16.5	73.7	18.50	10.91
Dekalb (Sex-Sal-Link G)	S	0.3	4.6	3.8	17.6	73.7	18.40	11.38
	D	0.6	4.2	3.7	14.5	77.0	18.06	11.42
Brown Egg Average	**S**	**0.3**	**5.0**	**3.5**	**15.6**	**75.6**	**19.05**	**11.46**
	D	**0.4**	**4.8**	**3.5**	**14.9**	**76.4**	**18.01**	**11.06**

TABLE 31. EFFECTS OF NUMBER OF BIRDS PER CAGE ON PERFORMANCE OF ENTRIES IN ALL HOUSING, 26th NCLPMT (140-728 DAYS)

Breeder (Strain)	Birds/ Cage	Eggs/ Bird Housed	Hen Day Production (%)	Mortality 435-728 d of Age (%)	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb	3	398.2	72.4	13.3	22.5	25.5	2.4	81.1
(XL Link)	4	369.3	70.5	21.0	22.6	25.5	2.2	80.1
ISA-Babcock	3	381.6	68.3	10.6	22.5	25.8	2.9	80.9
(B300)	4	366.2	67.0	12.4	21.5	25.8	3.0	80.3
Hisex	3	404.8	72.7	12.8	22.5	25.8	2.5	79.2
(White)	4	370.3	68.6	16.7	21.9	25.8	2.6	80.4
H & N	3	408.7	74.0	15.3	23.7	25.7	2.9	81.7
(Nick Chick)	4	365.0	70.9	22.4	23.1	25.5	2.6	81.3
Hubbard	3	410.1	72.9	10.7	24.3	26.2	2.3	80.6
(Leghorn)	4	392.6	71.9	15.1	23.6	25.6	2.4	80.3
HyLine	3	386.7	72.0	18.3	22.0	25.5	2.3	77.0
(W-36)	4	382.3	68.8	12.5	21.1	25.5	2.3	77.2
Colonial	3	360.1	65.9	17.1	19.7	25.0	2.4	78.9
(365-S)	4	325.8	61.5	20.8	18.6	24.9	2.6	79.1
Shaver	3	382.9	68.6	9.4	21.4	25.3	2.5	78.8
(288-A)	4	373.2	66.5	7.9	21.2	25.6	2.6	79.7
White Egg Average	**3**	**391.4**	**70.9**	**13.4**	**22.3**	**25.6**	**2.5**	**79.8**
	4	**367.7**	**68.2**	**16.1**	**21.7**	**25.5**	**2.5**	**79.8**
Brown Egg Layers								
Hisex	3	350.5	66.4	20.5	24.9	27.8	2.0	80.0
(Brown)	4	327.1	61.9	21.2	23.5	27.8	2.1	80.0
Hubbard	3	362.8	67.6	16.6	24.6	27.8	1.9	81.6
(Golden Comet)	4	327.8	66.3	31.7	24.3	27.2	2.0	81.9
Dekalb	3	361.9	65.7	18.3	24.3	27.5	1.8	83.2
(Sex-Sal-Link G)	4	305.5	61.0	28.7	24.7	28.5	1.8	83.3
Brown Egg Average	**3**	**358.4**	**66.6**	**18.5**	**24.6**	**27.7**	**1.9**	**81.6**
	4	**320.1**	**63.0**	**27.2**	**24.2**	**27.8**	**2.0**	**81.7**

TABLE 32. EFFECTS OF NUMBER OF BIRDS PER CAGE ON EGG QUALITY OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	Birds Cage	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots	Body Weight 728 Days (lbs)
White Egg Layers		(%)						
Dekalb	3	94.2	2.0	3.1	0.7	1.1	0.0	4.47
(XL-Link)	4	92.9	2.0	4.2	1.0	0.7	0.0	4.13
ISA-Babcock	3	95.5	1.4	2.0	1.2	2.9	0.0	4.20
(B300)	4	94.0	2.5	3.0	0.5	1.5	0.0	4.07
Hisex	3	90.9	3.1	4.9	1.1	1.6	0.0	4.02
(White)	4	92.4	2.3	4.5	0.8	2.0	0.4	3.90
H & N	3	93.5	3.6	2.2	0.6	0.7	0.0	4.08
(Nick Chick)	4	93.3	3.8	2.5	0.4	0.9	0.2	4.08
Hubbard	3	93.8	1.6	3.3	1.3	3.1	0.0	4.70
(Leghorn)	4	94.8	1.3	3.1	0.9	3.6	0.3	4.30
HyLine	3	95.0	1.9	2.9	0.1	0.6	0.0	4.10
(W-36)	4	94.2	2.0	3.4	0.4	0.6	0.2	3.85
Colonial	3	94.7	2.2	2.7	0.3	0.9	0.0	3.13
(365-S)	4	93.1	3.3	3.0	0.6	1.0	0.4	2.78
Shaver	3	96.0	1.6	1.9	0.5	2.1	0.4	4.28
(288-A)	4	94.7	1.9	2.9	0.6	0.8	0.2	4.23
White Egg Average	**3**	**94.2**	**2.2**	**2.9**	**0.7**	**1.6**	**0.0**	**4.12**
	4	**93.7**	**2.4**	**3.3**	**0.6**	**1.4**	**0.2**	**3.92**
Brown Egg Layers								
Hisex	3	94.7	1.5	3.2	0.6	3.2	11.8	5.75
(Brown)	4	94.0	1.6	4.0	0.5	4.7	12.1	5.18
Hubbard	3	96.1	1.2	2.3	0.4	5.0	14.9	5.15
(Golden Comet)	4	96.1	1.0	2.4	0.4	3.8	17.9	4.80
Dekalb	3	94.8	1.1	3.0	1.1	4.4	13.3	5.55
(Sex-Sal-Link G)	4	95.3	1.0	3.4	0.3	4.7	13.3	5.43
Brown Egg Average	**3**	**95.2**	**1.3**	**2.8**	**0.7**	**4.2**	**13.4**	**5.48**
	4	**95.2**	**1.2**	**3.2**	**0.4**	**4.4**	**14.4**	**5.14**

TABLE 33. EFFECTS OF NUMBER OF BIRDS PER CAGE ON EGG SIZE AND ECONOMIC DATA OF ENTRIES IN ALL HOUSING, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	Birds/ Cage	Egg Size Distribution					Egg Income	Feed Cost
		Pee Wee	Small	Medium	Large	Extra Large		
White Egg Layers		----------(%)----------						
Dekalb (XL-Link)	3	1.3	8.5	9.2	29.6	51.4	21.44	10.94
	4	0.8	9.0	9.8	29.7	50.7	19.64	10.48
ISA-Babcock (B300)	3	1.4	8.0	6.4	27.7	56.5	20.64	11.19
	4	1.4	8.1	6.8	27.0	56.7	19.68	10.48
Hisex (White)	3	1.1	7.8	7.9	29.0	54.2	21.17	11.16
	4	1.2	8.2	7.8	28.4	54.4	19.40	10.49
H & N (Nick Chick)	3	1.0	8.8	8.3	28.8	53.1	21.92	11.69
	4	1.0	9.0	9.2	30.2	50.6	19.50	10.61
Hubbard (Leghorn)	3	0.9	7.0	6.2	23.5	62.4	22.11	12.15
	4	1.1	8.3	8.0	28.0	54.6	21.10	11.49
HyLine (W-36)	3	1.2	8.7	8.7	28.1	53.3	20.95	10.56
	4	0.6	10.0	9.0	29.4	51.0	20.60	10.45
Colonial (365-S)	3	1.4	10.9	12.2	32.4	43.1	18.96	9.99
	4	1.5	12.4	13.0	32.8	40.3	16.92	9.04
Shaver (288-A)	3	1.1	8.9	10.3	32.1	47.6	20.70	10.68
	4	1.2	7.9	9.8	30.2	50.9	20.10	10.62
White Egg Average	**3**	**1.2**	**8.6**	**8.6**	**28.9**	**52.7**	**20.97**	**11.04**
	4	**1.1**	**9.1**	**9.2**	**29.5**	**51.1**	**19.59**	**10.46**
Brown Egg Layers								
Hisex (Brown)	3	0.2	4.5	3.2	14.2	77.9	19.18	11.67
	4	0.2	4.6	3.8	15.2	76.2	17.96	10.97
Hubbard (Golden Comet)	3	0.3	5.4	2.6	12.8	78.9	20.03	11.72
	4	0.3	6.0	4.3	17.2	72.2	18.00	10.67
Dekalb (Sex-Sal-Link G)	3	0.6	4.8	3.3	16.3	75.0	20.02	11.88
	4	0.3	4.0	4.3	15.8	75.6	16.89	11.04
Brown Egg Average	**3**	**0.4**	**4.9**	**3.0**	**14.4**	**77.3**	**19.74**	**11.76**
	4	**0.3**	**4.9**	**4.0**	**16.1**	**74.7**	**17.61**	**10.89**

TABLE 34. EFFECTS OF HOUSING ON PERFORMANCE OF ENTRIES, 26th NCLPMT (140-728 DAYS)

Breeder (Strain)	House* Type	Eggs/ Bird Housed	Hen Day Production (%)	Mortality 435-728 d of Age	Feed Cons. (lbs/100 hens/d)	Egg Weight (oz/dz)	Specific Gravity Score	Haugh Units
White Egg Layers								
Dekalb (XL Link)	FL	381.8	70.0	17.9	22.1	25.6	2.5	81.3
	HR	383.0	72.6	17.3	23.1	26.0	2.4	79.4
	LC	381.1	71.9	16.2	22.5	24.9	2.1	81.2
ISA-Babcock (B300)	FL	375.3	67.7	11.0	21.9	26.0	3.0	81.9
	HR	390.0	68.1	6.4	22.0	26.0	3.1	79.6
	LC	353.1	67.1	17.1	22.2	25.5	2.8	80.4
Hisex (White)	FL	387.7	70.9	11.1	22.5	26.0	2.6	81.1
	HR	368.6	69.0	18.5	22.8	26.2	2.7	79.2
	LC	398.8	72.0	14.6	21.3	25.2	2.4	79.2
H & N (Nick Chick)	FL	386.0	73.3	20.3	24.0	26.0	2.8	82.0
	HR	400.9	73.0	14.8	23.9	25.9	2.8	82.3
	LC	364.5	71.0	21.3	22.3	24.8	2.7	80.3
Hubbard (Leghorn)	FL	402.4	72.9	15.0	23.6	26.0	2.4	81.3
	HR	379.3	70.0	14.4	24.4	26.2	2.4	79.5
	LC	421.8	74.4	9.2	23.9	25.5	2.2	80.5
HyLine (W-36)	FL	377.3	70.2	20.0	22.3	25.8	2.3	77.9
	HR	380.8	70.6	14.8	22.1	25.8	2.4	75.7
	LC	394.5	70.4	11.4	20.4	25.0	2.1	77.6
Colonial (365-S)	FL	347.6	64.8	19.7	19.8	25.4	2.4	79.2
	HR	334.2	63.8	20.3	19.6	25.2	2.7	78.6
	LC	338.5	62.4	17.1	18.1	24.2	2.3	79.1
Shaver (288-A)	FL	380.4	68.8	9.7	21.6	25.6	2.6	81.0
	HR	370.6	66.2	8.5	22.1	26.2	2.7	78.4
	LC	381.2	67.5	7.7	20.3	24.6	2.3	78.3
White Egg Average	**FL**	**379.6**	**69.8**	**15.6**	**22.2**	**25.8**	**2.6**	**80.7**
	HR	**375.7**	**69.2**	**14.4**	**22.5**	**25.9**	**2.6**	**79.1**
	LC	**378.6**	**69.6**	**14.3**	**21.4**	**25.0**	**2.4**	**79.6**
Brown Egg Layers								
Hisex (Brown)	FL	350.3	64.9	19.2	24.1	28.0	2.1	80.2
	HR	337.5	65.0	19.4	25.0	28.4	2.2	80.3
	LC	323.6	62.6	24.2	23.4	26.9	1.9	79.6
Hubbard (Golden Comet)	FL	333.3	67.2	29.5	24.3	27.9	1.9	82.2
	HR	351.9	68.2	24.6	25.1	27.8	2.0	80.9
	LC	343.1	65.4	18.3	23.9	26.8	1.9	82.2
Dekalb (Sex-Sal-Link G)	FL	325.5	63.0	22.7	24.6	29.3	1.8	85.3
	HR	327.8	62.3	20.6	24.8	28.3	1.9	83.1
	LC	335.7	64.7	27.3	24.3	26.4	1.6	81.4
Brown Egg Average	**FL**	**336.4**	**65.0**	**23.8**	**24.3**	**28.4**	**2.0**	**82.5**
	HR	**339.1**	**65.2**	**21.5**	**24.9**	**28.2**	**2.1**	**81.5**
	LC	**334.1**	**64.2**	**23.3**	**23.9**	**26.7**	**1.8**	**81.1**

*FL = Flush Waste; HR = High Rise; LC = Light and Air Controlled

TABLE 35. EFFECTS OF HOUSING ON EGG QUALITY OF ENTRIES, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	House* Type	Grade A	Grade B	Cracks	Loss	Blood Spots	Meat Spots	Body Weight 728 Days (lbs)
White Egg Layers		----------(%)----------						
Dekalb (XL-Link)	FL	93.6	1.6	4.0	0.8	2.2	0.0	4.35
	HR	93.3	2.2	3.7	0.8	0.0	0.0	4.32
	LC	93.7	2.1	3.2	1.0	0.5	0.0	4.22
ISA-Babcock (B300)	FL	95.2	1.8	2.3	0.6	1.4	0.0	4.20
	HR	94.7	2.4	2.1	0.8	1.7	0.0	4.25
	LC	94.3	1.5	3.1	1.0	3.6	0.0	3.95
Hisex (White)	FL	90.6	3.3	5.0	1.1	1.5	0.4	4.12
	HR	90.6	3.6	4.6	1.2	2.3	0.2	3.95
	LC	93.7	1.1	4.5	0.6	1.5	0.0	3.80
H & N (Nick Chick)	FL	92.0	4.6	2.6	0.8	0.8	0.0	4.17
	HR	94.0	3.5	2.4	0.1	0.8	0.0	4.22
	LC	94.3	3.0	2.1	0.6	0.7	0.2	3.85
Hubbard (Leghorn)	FL	94.6	1.1	3.5	0.8	2.6	0.0	4.67
	HR	94.2	1.9	2.4	1.5	3.1	0.5	4.52
	LC	94.2	1.3	3.6	0.9	4.4	0.0	4.30
HyLine (W-36)	FL	93.8	2.0	3.9	0.3	0.8	0.3	4.00
	HR	94.6	2.0	2.9	0.5	0.4	0.0	4.15
	LC	95.4	1.8	2.7	0.1	0.5	0.0	3.77
Colonial (365-S)	FL	92.2	3.6	3.8	0.3	0.8	0.4	3.07
	HR	94.1	2.6	2.9	0.4	0.7	0.3	3.00
	LC	95.4	2.0	1.9	0.7	1.3	0.0	2.80
Shaver (288-A)	FL	95.8	1.8	2.2	0.2	1.7	0.6	4.40
	HR	95.2	1.8	2.2	0.8	1.2	0.0	4.40
	LC	95.1	1.7	2.7	0.5	1.4	0.3	3.97
White Egg Average	**FL**	**93.5**	**2.5**	**3.4**	**0.6**	**1.5**	**0.2**	**4.12**
	HR	**93.8**	**2.5**	**2.9**	**0.8**	**1.3**	**0.1**	**4.10**
	LC	**94.5**	**1.8**	**3.0**	**0.7**	**1.7**	**0.1**	**3.83**
Brown Egg Layers								
Hisex (Brown)	FL	92.4	2.3	4.8	0.4	4.6	11.6	5.67
	HR	95.4	0.9	2.9	0.8	1.0	12.5	5.52
	LC	95.2	1.3	3.0	0.4	6.2	11.8	5.20
Hubbard (Golden Comet)	FL	95.9	1.0	2.5	0.5	2.4	18.9	5.20
	HR	96.5	1.5	1.5	0.4	3.0	14.0	5.05
	LC	95.9	0.9	2.9	0.3	7.9	16.3	4.67
Dekalb (Sex-Sal-Link G)	FL	94.2	0.9	4.1	0.8	4.9	14.0	5.72
	HR	95.3	0.9	2.8	1.0	2.9	10.7	5.47
	LC	95.7	1.3	2.6	0.4	5.9	15.2	5.27
Brown Egg Average	**FL**	**94.2**	**1.4**	**3.8**	**0.6**	**3.9**	**14.8**	**5.53**
	HR	**95.7**	**1.1**	**2.4**	**0.7**	**2.3**	**12.4**	**5.35**
	LC	**95.6**	**1.2**	**2.9**	**0.4**	**6.7**	**14.4**	**5.05**

*FL = Flush Waste; HR = High Rise; LC = Light and Air Controlled

TABLE 36. EFFECTS OF HOUSING ON EGG SIZE AND FEED EFFICIENCY OF ENTRIES, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	House Type	Egg Size Distribution: Pee Wee	Small	Medium	Large	Extra Large	Egg Income	Feed Cost
White Egg Layers		----------(%)----------						
Dekalb (XL-Link)	FL	1.0	8.0	8.0	29.5	53.5	20.43	10.69
	HR	0.7	7.3	6.7	28.2	57.1	20.61	10.76
	LC	1.5	10.9	13.9	31.2	42.5	20.23	10.57
ISA-Babcock (B300)	FL	1.2	7.5	6.3	28.2	56.8	20.30	10.80
	HR	1.2	7.4	5.8	24.4	61.2	21.16	11.16
	LC	1.8	9.3	7.9	29.4	51.6	18.80	10.39
Hisex (White)	FL	0.9	7.4	6.9	29.0	55.8	20.25	10.96
	HR	1.1	7.2	6.2	24.4	61.1	19.38	10.81
	LC	1.5	9.4	10.4	32.7	46.0	20.83	10.56
H & N (Nick Chick)	FL	0.8	7.3	7.1	26.7	58.1	20.67	11.29
	HR	0.8	7.9	7.1	28.0	56.2	21.72	11.71
	LC	1.4	11.5	12.2	33.7	41.2	19.21	10.21
Hubbard (Leghorn)	FL	0.8	7.7	7.0	24.7	59.8	21.70	11.58
	HR	1.1	7.2	5.8	23.5	62.4	20.46	11.70
	LC	1.1	8.0	8.6	29.0	53.3	22.60	12.08
HyLine (W-36)	FL	1.2	8.4	7.3	27.9	55.2	20.41	10.57
	HR	0.7	8.3	7.2	27.3	56.5	20.70	10.67
	LC	1.0	11.4	11.7	31.1	44.8	21.14	10.25
Colonial (365-S)	FL	0.9	9.5	9.4	30.6	49.6	18.28	9.68
	HR	1.0	11.4	11.8	31.1	44.7	17.59	9.48
	LC	2.3	14.0	16.7	36.2	30.8	17.44	9.16
Shaver (288-A)	FL	1.2	8.0	9.0	30.4	51.4	20.67	10.62
	HR	0.8	7.1	5.3	25.9	60.9	20.18	11.01
	LC	1.6	10.1	15.6	37.1	35.6	20.22	10.30
White Egg Average	**FL**	**1.0**	**8.0**	**7.6**	**28.4**	**55.0**	**20.33**	**10.77**
	HR	**0.9**	**8.0**	**7.0**	**26.6**	**57.5**	**20.21**	**10.91**
	LC	**1.5**	**10.6**	**12.1**	**32.6**	**43.2**	**20.03**	**10.44**
Brown Egg Layers								
Hisex (Brown)	FL	0.3	4.2	2.4	13.5	79.6	19.10	11.53
	HR	0.1	3.6	2.5	10.9	82.9	18.67	11.58
	LC	0.2	5.8	5.5	19.9	68.6	17.68	10.70
Hubbard (Golden Comet)	FL	0.3	5.4	2.6	11.7	80.0	18.35	10.73
	HR	0.3	5.1	2.5	13.4	78.7	19.54	11.51
	LC	0.4	6.6	5.1	19.9	68.0	18.72	11.12
Dekalb (Sex-Sal-Link G)	FL	0.0	4.0	2.7	13.3	80.0	17.99	11.27
	HR	0.5	3.2	2.2	11.5	82.6	18.32	11.60
	LC	0.8	6.0	6.3	23.2	63.7	18.37	11.32
Brown Egg Average	**FL**	**0.2**	**4.6**	**2.6**	**12.8**	**79.8**	**18.48**	**11.18**
	HR	**0.3**	**4.0**	**2.4**	**11.9**	**81.4**	**18.84**	**11.56**
	LC	**0.5**	**6.1**	**5.6**	**21.0**	**66.8**	**18.26**	**11.05**

*FL = Flush Waste; HR = High Rise; LC = Light and Air Controlled

EXPLANATIONS OF DATA AND TABULAR HEADINGS

For Table 37 referring to mortalities from 140 to 728 days.

Entry (Strain): The name of the breeder and the strain entered in the evaluation. See information following tables.

Causes of mortality as indicated in the headings are expressed as percentage of the birds housed at 140 days. Percentage of the birds which were not submitted for necropsy are indicated in the far right-hand column.

TABLE 37. CAUSES OF MORTALITY FOR ALL ENTRIES, 26TH NCLPMT (140-728 DAYS)

Breeder (Strain)	Lymphoid Leukosis	Reproductive Disorders	Other Causes	No. Visible Lesions	No. Necropsy Report
White Egg Layers	----------(%)----------				
Dekalb (XL-Link)	1.0	10.2	1.0	1.2	4.1
ISA-Babcock (B300)	1.2	1.7	1.2	3.1	4.0
Hisex (White)	0.2	5.5	1.4	3.6	3.6
H & N (Nick Chick)	0.3	12.1	0.5	2.2	4.4
Hubbard (Leghorn)	0.5	6.1	0.3	2.6	2.9
HyLine (W-36)	3.1	4.0	3.1	1.4	2.4
Colonial (365-S)	1.9	6.3	3.6	0.7	1.7
Shaver (288-A)	0.7	4.0	0.9	0.7	1.7
White Egg Average	**1.1**	**6.2**	**1.5**	**1.9**	**3.7**
Brown Egg Layers					
Hisex (Brown)	0.5	7.6	3.6	4.7	2.8
Hubbard (Golden Comet)	0.9	9.0	3.3	1.6	9.8
Dekalb (Sex-Sal-Link G)	0.2	9.5	1.7	2.6	7.8
Brown Egg Average	**0.3**	**8.7**	**2.9**	**3.0**	**6.8**

STOCK SUPPLIERS AND CATEGORIES

Breeder	Stock	Category*	Source
DeKalb AgResearch, Inc. 3100 Sycamore Road DeKalb, IL 60115	DeKalb XL-Link	I-A YES	Clay's Hatchery Route 1 Blackstone, VA 23824
ISA-Babcock, Inc. P.O. Box 280 Ithaca, NY 14851	ISA-Babcock B300	I-A YES	Hodges Poultry Farm P.O. Drawer D Callahan, FL 32011
Hisex Division Pilch, Inc. Box 438 Troutman, NC 28166	Hisex White	I-A YES	Cleveland Farms Route 4, Box 173-A Shelby, NC 28150
Hisex Division Pilch, Inc. Box 438 Troutman, NC 28166	Hisex Brown	I-A YES	Cleveland Farms Route 4, Box 173-A Shelby, NC 28150
Hubbard Farms Walpole, NH 03608	Hubbard Golden Comet	I-A YES	Bowers Brothers Hatchery Route 4 Albemarle, NC 28001
H & N, Inc. 15305 N.E. 40th Street Redmond, WA 98052	H & N "Nick Chick"	I-A YES	Tatum Farms Route 3 Dawsonville, GA 30534
Hubbard Farms Walpole, NH 03608	Hubbard Leghorn	II YES	Hubbard Farms Walpole, NH 03608
DeKalb AgResearch, Inc. 3100 Sycamore Road DeKalb, IL 60115	DeKalb Sex-Sal-Link "G"	I-A YES	Pee Dee Hatchery P.O. Box 156 Hartsville, SC 29550
HyLine International Johnston, IA 50131	HyLine W-36	I-C	Not applicable
Colonial Poultry Farms, Inc., Pleasant Hill, MO 64080	Colonial True-Line 365-S	II YES	Colonial Poultry Farms, Inc. Pleasant Hill, MO 64080
Shaver Poultry Breeding Farms, Ltd., Box 400 Ontario, CANADA N14 5V9	Shaver Starcross 288-A	I-A YES	Silver Lake Hatchery, Inc. 209 Grove Street Silver Lake, MN 55381

*I = Extensive distribution in southeast United States.
II = Little or no distribution in southeast United States.
A = Entry requested.
C = Entry neither requested nor supported.
YES = Supporting and fully cooperating with test.