



An Aviagen Brand

Arbor Acres Plus

Parent Stock Performance Objectives

2016

Fast Feathering



- 2 Introduction
- 3 Performance Summary
- 4 Female In-Season Body Weight & Feeding Program
- 5 Female Out-of-Season Body Weight & Feeding Program
- 6 Feeding Into Lay
Nutrition Allocation at Peak
- 7 Male Body Weight Standard & Feeding Program
- 8 Weekly Egg Production
- 9 Weekly Hatchability and Chick Production
- 10 Weekly Egg Weight and Egg Mass

Arbor Acres Plus - *fast feathering*

Introduction

This booklet contains the performance objectives for Arbor Acres® Plus parent stock (fast feathering) and should be used in conjunction with the **Arbor Acres Parent Stock Management Handbook** and the **Arbor Acres Plus Management Supplement**.

Performance

Poultry production is a global activity, but across the world there are differing management strategies adapted to local conditions.

These performance objectives are for birds that receive the first light stimulation **after** 21 weeks (147 days) of age. This is the most common strategy used worldwide as it gives distinct advantages in early egg size, chick number and broiler chick quality. If flocks reach 5-10% production prior to 25 weeks of age early egg size will be reduced, resulting in smaller chicks. In managing this, the timing of photostimulation is key.

Achieving the genetic potential of the birds depends on:

- Management to provide birds with their required environment.
- A dietary regime that provides the appropriate nutrients.
- Effective biosecurity and disease control.

If any one of these elements is sub-optimal, performance will suffer. The three sectors, environment, nutrition and health, are also interdependent; a problem in any one will result in a negative response by the bird to the other factors.

Data contained within this booklet indicates the performance that can be achieved under good management and environmental conditions and when feeding the recommended nutrient levels. They should therefore be regarded as “Performance Objectives” and not specifications. In practice, variations in performance may occur for a wide variety of reasons. For example, feed consumption can be affected significantly by form of feed, energy level and house temperature.

While every attempt has been made to ensure the accuracy and relevance of the information presented, Aviagen® accepts no liability for the consequences of using this information to manage parent stock.

All weight measurements are shown in both metric and imperial to reflect the global nature of this publication. *All imperial measurements are shown in blue.*

In the tables, values are rounded. This may result in small inaccuracies when using the objectives to calculate other performance statistics.

For more information on the management of Arbor Acres stock, contact your local Arbor Acres representative.

www.aviagen.com

Performance Summary

The figures below are a summary for 40 weeks of production. The figures also refer to breeders that receive their first light increase **after** 21 weeks of age (147 days).

Age at depletion (days)	448	448
(weeks)	64	64
Total eggs (HHA*)	189	189
Hatching eggs (HHA*)	177	177
Chicks/female housed at 175 days (25 weeks)	152	152
% Hatchability	86.1	86.1
Age at 5% production (days)	175	175
(weeks)	25	25
% Peak production	88.2	88.2
Body weight at 175 days (25 weeks)	2960 g	6.5 lb
Body weight at depletion	3805-3905 g	8.4-8.6 lb
Mortality + culls (rearing period) %	4-5	4-5
Mortality (laying period) %	8	8
Feed/100 chicks day old - 448 days (0-64 weeks)**	36.0 kg	79.4 lb
Feed/100 hatching eggs day old - 448 days (0-64 weeks)**	31.0 kg	68.3 lb

NOTES

Flock performance will vary due to a number of reasons, including climate, health status, nutrition and husbandry.

* Hen-Housed Average.

**Male feed allocations not included in calculation.

All flocks grown in black-out housing are considered in-season.

Female In-Season Body Weight and Feeding Program

Age (days)	Age (weeks)	Body Weight (g)	Weekly Gain (g)	Feed (g/bird/day)	Body Weight (lb)	Weekly Gain (lb)	Feed (lb/100/day)	Energy Intake (kcal/bird/day)*
Day old	0	40		ad lib	0.09		ad lib	ad lib
7	1	100	60	22	0.22	0.13	4.9	62
14	2	200	100	27	0.44	0.22	6.0	77
21	3	320	120	30	0.70	0.26	6.6	84
28	4	420	100	32	0.93	0.23	7.1	91
35	5	515	95	36	1.13	0.20	7.9	101
42	6	610	95	39	1.34	0.21	8.6	109
49	7	705	95	43	1.55	0.21	9.4	119
56	8	800	95	46	1.76	0.21	10.1	128
63	9	895	95	48	1.97	0.21	10.5	134
70	10	990	95	51	2.18	0.21	11.1	141
77	11	1085	95	54	2.39	0.21	11.9	151
84	12	1180	95	58	2.60	0.21	12.7	161
91	13	1280	100	62	2.82	0.22	13.7	174
98	14	1390	110	66	3.06	0.24	14.6	185
105	15	1500	110	72	3.30	0.24	15.8	200
112	16	1630	130	77	3.59	0.29	16.9	215
119	17	1760	130	80	3.88	0.29	17.7	225
126	18	1890	130	86	4.16	0.28	19.0	241
133	19	2030	140	91	4.47	0.31	20.1	255
140	20	2170	140	97	4.78	0.31	21.3	270
147	21	2310	140	103	5.09	0.31	22.7	289
154	22	2460	150	110	5.42	0.33	24.2	308
161	23	2630	170	115	5.79	0.37	25.4	323
168	24	2810	180	123	6.19	0.40	27.0	344
175	25	2960	150	129	6.52	0.33	28.4	361
182	26	3110	150	136	6.85	0.33	30.0	381
189	27	3210	100	146	7.07	0.22	32.1	408
196	28	3270	60	162	7.20	0.13	35.7	453
203	29	3300	30	162	7.27	0.07	35.7	453
210	30	3325	25	162	7.32	0.05	35.7	453
217	31	3345	20	162	7.37	0.05	35.7	453
224	32	3365	20	162	7.41	0.04	35.7	453
231	33	3385	20	162	7.46	0.05	35.7	453
238	34	3405	20	162	7.50	0.04	35.7	453
245	35	3420	15	162	7.53	0.03	35.7	453
252	36	3435	15	162	7.57	0.04	35.6	452
259	37	3450	15	161	7.60	0.03	35.5	451
266	38	3465	15	161	7.63	0.03	35.4	450
273	39	3480	15	161	7.67	0.04	35.4	449
280	40	3495	15	160	7.70	0.03	35.3	448
287	41	3510	15	160	7.73	0.03	35.2	447
294	42	3525	15	159	7.76	0.03	35.1	447
301	43	3540	15	159	7.80	0.04	35.1	446
308	44	3555	15	159	7.83	0.03	35.0	445
315	45	3570	15	158	7.86	0.03	34.9	444
322	46	3585	15	158	7.90	0.04	34.8	443
329	47	3600	15	158	7.93	0.03	34.7	442
336	48	3615	15	157	7.96	0.03	34.7	441
343	49	3630	15	157	8.00	0.04	34.6	440
350	50	3645	15	157	8.03	0.03	34.5	439
357	51	3660	15	156	8.06	0.03	34.4	438
364	52	3675	15	156	8.09	0.03	34.4	437
371	53	3690	15	156	8.13	0.04	34.3	436
378	54	3705	15	155	8.16	0.03	34.2	435
385	55	3720	15	155	8.19	0.03	34.1	434
392	56	3735	15	155	8.23	0.04	34.1	433
399	57	3750	15	154	8.26	0.03	34.0	432
406	58	3765	15	154	8.29	0.03	33.9	431
413	59	3780	15	154	8.33	0.04	33.8	430
420	60	3795	15	153	8.36	0.03	33.8	429
427	61	3810	15	153	8.39	0.03	33.7	428
434	62	3825	15	153	8.43	0.04	33.6	427
441	63	3840	15	152	8.46	0.03	33.5	426
448	64	3855	15	152	8.49	0.03	33.5	425

North of Equator:
Flocks hatched August-December.

South of the Equator:
Flocks hatched February-June.

January and July are transitional months so lighting programs for placements during these two months should be based on individual experience and location.

*Based on recommend dietary energy levels of a 2- or 3-stage rearing program (2800 kcal ME/kg; 1270 kcal ME/lb). Adjustments must be made to reflect feeding differing energy levels.

NOTES
Weekly body-weight gain beyond 35 weeks (245 days) should average approximately 15 g (0.03-0.04 lb).

Body weights are based on a feed day, 4-6 hours after feeding.

Feed quantities are given as a guide. Birds should be fed the amount of feed they need to achieve the body-weight target curve.

Female Out-of-Season Body Weight and Feeding Program

Age (days)	Age (weeks)	Body Weight (g)	Weekly Gain (g)	Feed (g/bird/day)	Body Weight (lb)	Weekly Gain (lb)	Feed (lb/100/day)	Energy Intake (kcal/bird/day)*
Day old	0	40		ad lib	0.09		ad lib	ad lib
7	1	100	60	22	0.22	0.13	4.9	62
14	2	200	100	27	0.44	0.22	5.9	76
21	3	320	120	30	0.70	0.26	6.5	83
28	4	420	100	32	0.93	0.23	7.1	91
35	5	515	95	36	1.13	0.20	7.9	101
42	6	610	95	39	1.34	0.21	8.6	109
49	7	705	95	43	1.55	0.21	9.4	119
56	8	800	95	46	1.76	0.21	10.1	128
63	9	895	95	48	1.97	0.21	10.6	135
70	10	990	95	51	2.18	0.21	11.1	141
77	11	1085	95	54	2.39	0.21	11.9	151
84	12	1180	95	58	2.60	0.21	12.8	162
91	13	1280	100	62	2.82	0.22	13.8	175
98	14	1390	110	67	3.06	0.24	14.7	186
105	15	1500	110	72	3.30	0.24	15.8	201
112	16	1630	130	77	3.59	0.29	17.1	217
119	17	1770	140	82	3.90	0.31	18.0	228
126	18	1910	140	88	4.21	0.31	19.3	245
133	19	2050	140	94	4.52	0.31	20.6	262
140	20	2200	150	100	4.85	0.33	21.9	279
147	21	2360	160	107	5.20	0.35	23.6	300
154	22	2530	170	114	5.57	0.37	25.2	320
161	23	2700	170	120	5.95	0.38	26.4	336
168	24	2910	210	127	6.41	0.46	28.0	356
175	25	3075	165	133	6.77	0.36	29.3	372
182	26	3240	165	139	7.14	0.37	30.7	390
189	27	3350	110	149	7.38	0.24	32.7	416
196	28	3420	70	164	7.53	0.15	36.1	459
203	29	3450	30	164	7.60	0.07	36.1	459
210	30	3475	25	164	7.65	0.05	36.1	459
217	31	3500	25	164	7.71	0.06	36.1	459
224	32	3520	20	164	7.75	0.04	36.1	459
231	33	3540	20	164	7.80	0.05	36.1	459
238	34	3560	20	164	7.84	0.04	36.1	459
245	35	3580	20	164	7.89	0.05	36.1	459
252	36	3595	15	164	7.92	0.03	36.0	458
259	37	3610	15	163	7.95	0.03	36.0	457
266	38	3625	15	163	7.98	0.03	35.9	456
273	39	3640	15	162	8.02	0.04	35.7	454
280	40	3655	15	162	8.05	0.03	35.7	454
287	41	3670	15	162	8.08	0.03	35.7	453
294	42	3685	15	162	8.12	0.04	35.6	453
301	43	3700	15	161	8.15	0.03	35.5	452
308	44	3715	15	161	8.18	0.03	35.4	450
315	45	3730	15	161	8.22	0.04	35.4	450
322	46	3745	15	160	8.25	0.03	35.3	449
329	47	3760	15	160	8.28	0.03	35.1	447
336	48	3775	15	160	8.31	0.03	35.1	447
343	49	3790	15	159	8.35	0.04	35.1	446
350	50	3805	15	159	8.38	0.03	35.0	445
357	51	3820	15	159	8.41	0.03	34.9	444
364	52	3835	15	158	8.45	0.04	34.8	442
371	53	3850	15	158	8.48	0.03	34.8	442
378	54	3865	15	158	8.51	0.03	34.7	441
385	55	3880	15	157	8.55	0.04	34.5	439
392	56	3895	15	157	8.58	0.03	34.6	439
399	57	3910	15	156	8.61	0.03	34.4	437
406	58	3925	15	156	8.65	0.04	34.4	437
413	59	3940	15	156	8.68	0.03	34.3	436
420	60	3955	15	155	8.71	0.03	34.2	434
427	61	3970	15	155	8.74	0.03	34.2	434
434	62	3985	15	154	8.78	0.04	34.0	432
441	63	4000	15	154	8.81	0.03	33.9	432
448	64	4015	15	154	8.84	0.03	34.0	432

North of Equator: Flocks hatched February-June.

South of the Equator: Flocks hatched August-December.

January and July are transitional months so lighting programs for placements during these 2 months should be based on individual experience and location.

*Based on recommend dietary energy levels of a 2- or 3-stage rearing program (2800 kcal ME/kg; 1270 kcal ME/lb). Adjustments must be made to reflect feeding differing energy levels.

NOTES
Weekly body-weight gain beyond 36 weeks (252 days) should average approximately 15 g (0.03-0.04 lb).

Body weights are based on a feed day, 4-6 hours after feeding.

Feed quantities are given as a guide. Birds should be fed the amount of feed they need to achieve the body-weight target curve.

Female In-Season Feeding into Lay

Hen-Day (%)	Daily Energy Intake (kcal ME/bird/day)*	Feed Intake (g/bird/day)	Feed Increase (g/bird/day)
5	361	129	
10	366	131	2
15	372	133	2
20	377	135	2
25	381	136	1
30	386	138	2
35	390	139	1
40	395	141	2
45	399	143	2
50	404	144	1
55	408	146	2
60	418	149	3
65	429	153	4
70	439	157	4
peak	453	162	5

Female Out-of-Season Feeding into Lay

Hen-Day (%)	Daily Energy Intake (kcal ME/bird/day)*	Feed Intake (g/bird/day)	Feed Increase (g/bird/day)
5	372	133	
10	377	135	2
15	383	137	2
20	388	139	2
25	390	139	0
30	395	141	2
35	399	143	2
40	404	144	1
45	408	146	2
50	413	147	1
55	416	149	2
60	426	152	3
65	437	156	4
70	447	160	4
peak	459	164	4

*Daily energy and feed intakes are based on current recommended dietary levels of energy (2800 kcal ME/kg; 1270 kcal ME/lb) and assuming an ambient temperature of 20-21°C (68-70°F).

NOTES: Feeding programs should be adjusted according to actual feed intake at 5% hen-day production. It may be necessary to adjust feed amounts daily (rather than every 5% as given in the table), taking into account the rate of daily production. Adjustments to feed amounts will need to be made if dietary energy levels are different to those recommended or if environmental temperatures are warmer or cooler than assumed here.

Female In-Season Nutrient Allocation at Peak

Nutrient	Nutrient Allocation at Peak
Energy (kcal/bird/day)*	453
Digestible Amino Acids (mg/bird/day)	
Lysine	972
Methionine & Cystine	956
Methionine	599
Threonine	794
Valine	907
Isoleucine	810
Arginine	1280
Tryptophan	227
Minerals (mg/bird/day)	
Calcium	4860
Available Phosphorus	567

Female Out-of-Season Nutrient Allocation at Peak

Nutrient	Nutrient Allocation at Peak
Energy (kcal/bird/day)*	459
Digestible Amino Acids (mg/bird/day)	
Lysine	984
Methionine & Cystine	968
Methionine	607
Threonine	804
Valine	918
Isoleucine	820
Arginine	1296
Tryptophan	230
Minerals (mg/bird/day)	
Calcium	4920
Available Phosphorus	574

*Based on a recommended energy level of 2800 kcal ME/kg (1270 kcal ME/lb).

Male Body Weight and Feeding Program

Age (days)	Age (weeks)	Body Weight (g)	Weekly Gain (g)	Feed (g/bird/day)	Body Weight (lb)	Weekly Gain (lb)	Feed (lb/100/day)	Energy Intake (kcal/bird/day)*
Day old	0	40		ad lib	0.09		ad lib	ad lib
7	1	150	110	35	0.33	0.24	7.7	97
14	2	320	170	42	0.70	0.37	9.3	118
21	3	525	205	48	1.16	0.46	10.5	134
28	4	755	230	52	1.66	0.50	11.5	147
35	5	945	190	56	2.08	0.42	12.4	158
42	6	1130	185	60	2.49	0.41	13.2	168
49	7	1280	150	63	2.82	0.33	13.9	177
56	8	1420	140	66	3.13	0.31	14.6	185
63	9	1545	125	69	3.40	0.27	15.2	193
70	10	1670	125	72	3.68	0.28	15.9	202
77	11	1795	125	75	3.95	0.27	16.5	210
84	12	1920	125	78	4.23	0.28	17.2	218
91	13	2045	125	81	4.50	0.27	17.8	227
98	14	2170	125	84	4.78	0.28	18.6	236
105	15	2295	125	88	5.06	0.28	19.4	246
112	16	2420	125	92	5.33	0.27	20.2	257
119	17	2560	140	96	5.64	0.31	21.2	269
126	18	2715	155	101	5.98	0.34	22.2	282
133	19	2875	160	106	6.33	0.35	23.3	296
140	20	3035	160	111	6.69	0.36	24.4	310
147	21	3195	160	115	7.04	0.35	25.4	323
154	22	3355	160	119	7.39	0.35	26.3	334
161	23	3515	160	123	7.74	0.35	27.2	346
168	24	3675	160	127	8.09	0.35	27.9	355
175	25	3825	150	134	8.43	0.34	29.5	362
182	26	3960	135	136	8.72	0.29	29.9	367
189	27	4035	75	137	8.89	0.17	30.3	371
196	28	4090	55	139	9.01	0.12	30.6	375
203	29	4120	30	140	9.07	0.06	30.8	378
210	30	4150	30	141	9.14	0.07	31.0	380
217	31	4180	30	142	9.21	0.07	31.2	382
224	32	4210	30	142	9.27	0.06	31.3	384
231	33	4240	30	143	9.34	0.07	31.5	386
238	34	4270	30	144	9.41	0.07	31.6	388
245	35	4300	30	144	9.47	0.06	31.8	389
252	36	4330	30	145	9.54	0.07	31.9	391
259	37	4360	30	145	9.60	0.06	32.0	392
266	38	4390	30	146	9.67	0.07	32.1	394
273	39	4420	30	146	9.74	0.07	32.2	395
280	40	4450	30	147	9.80	0.06	32.3	396
287	41	4480	30	147	9.87	0.07	32.4	398
294	42	4510	30	148	9.93	0.06	32.5	399
301	43	4540	30	148	10.00	0.07	32.6	400
308	44	4570	30	149	10.07	0.07	32.7	401
315	45	4600	30	149	10.13	0.06	32.8	403
322	46	4630	30	150	10.20	0.07	32.9	404
329	47	4660	30	150	10.26	0.06	33.0	405
336	48	4690	30	150	10.33	0.07	33.1	406
343	49	4720	30	151	10.40	0.07	33.2	408
350	50	4750	30	151	10.46	0.06	33.3	409
357	51	4775	25	152	10.52	0.06	33.4	410
364	52	4800	25	152	10.57	0.05	33.5	411
371	53	4825	25	153	10.63	0.06	33.6	412
378	54	4850	25	153	10.68	0.05	33.7	414
385	55	4875	25	154	10.74	0.06	33.8	415
392	56	4900	25	154	10.79	0.05	33.9	416
399	57	4925	25	155	10.85	0.06	34.0	417
406	58	4950	25	155	10.90	0.05	34.1	419
413	59	4975	25	155	10.96	0.06	34.2	420
420	60	5000	25	156	11.01	0.05	34.3	421
427	61	5025	25	156	11.07	0.06	34.4	422
434	62	5050	25	157	11.12	0.05	34.5	423
441	63	5075	25	157	11.18	0.06	34.6	425
448	64	5100	25	158	11.23	0.05	34.7	426

*Based on recommended dietary energy levels of a 2- or 3-stage rearing program (2800 kcal ME/kg; 1270 kcal ME/lb) and a male diet in lay (2700 kcal ME/kg; 1225 kcal ME/lb). Adjustments must be made to reflect feeding differing energy levels.

NOTES
Weekly body-weight gain beyond 29 weeks (203 days) should average approximately 25-30 grams (0.05-0.07 lb). This profile allows the male to reach sexual maturity by first egg. Field performance has shown that this practice ensures that the body condition of the males is not compromised so they will maintain the best possible fertility levels.

Feed quantities are a guide only. Actual feed levels will depend on the energy value of individual rations. The feed allowance should increase in the lay period and never decrease.

Body weights are based on a feed day, 4-6 hours after feeding.

Arbor Acres Plus Parent Stock Performance Objectives

Weekly Egg Production

Week of Production	Age (days)	Age (weeks)	Hen-Housed (%)	Hen-Week (%)*	Eggs/Bird/Week Hen-Housed	Eggs/Bird/Cum. Hen-Housed	Hatching Eggs/Bird/Week**	Hatching Eggs/Bird/Cum.	Hatching Egg Utilization: Weekly	Hatching Egg Utilization Cum.
1	175	25	6.53	6.53	0.46	0.46				
2	182	26	24.67	24.77	1.73	2.19	1.16	1.16	67.17	53.04
3	189	27	54.67	55.00	3.83	6.01	3.28	4.44	85.71	73.83
4	196	28	76.10	76.71	5.33	11.34	4.77	9.21	89.55	81.21
5	203	29	84.67	85.53	5.93	17.27	5.46	14.67	92.12	84.96
6	210	30	87.53	88.59	6.13	23.39	5.76	20.43	94.01	87.33
7	217	31	88.24	89.49	6.18	29.57	5.86	26.29	94.87	88.90
8	224	32	87.53	88.95	6.13	35.70	5.86	32.15	95.64	90.06
9	231	33	86.38	87.97	6.05	41.75	5.78	37.93	95.59	90.86
10	238	34	85.24	86.98	5.97	47.71	5.70	43.63	95.53	91.44
11	245	35	84.10	85.99	5.89	53.60	5.62	49.25	95.47	91.89
12	252	36	82.96	85.00	5.81	59.41	5.54	54.79	95.40	92.23
13	259	37	81.81	84.00	5.73	65.13	5.46	60.25	95.33	92.50
14	266	38	80.67	82.99	5.65	70.78	5.38	65.63	95.25	92.72
15	273	39	79.53	81.99	5.57	76.35	5.30	70.93	95.17	92.90
16	280	40	78.24	80.83	5.48	81.82	5.21	76.13	95.09	93.05
17	287	41	77.10	79.81	5.40	87.22	5.13	81.26	95.02	93.17
18	294	42	75.96	78.79	5.32	92.54	5.05	86.31	94.94	93.27
19	301	43	74.81	77.77	5.24	97.77	4.97	91.28	94.86	93.36
20	308	44	73.67	76.74	5.16	102.93	4.89	96.17	94.78	93.43
21	315	45	72.53	75.71	5.08	108.01	4.81	100.97	94.70	93.49
22	322	46	71.38	74.67	5.00	113.01	4.73	105.70	94.62	93.54
23	329	47	70.24	73.63	4.92	117.92	4.65	110.35	94.54	93.58
24	336	48	68.96	72.43	4.83	122.75	4.56	114.91	94.45	93.61
25	343	49	67.81	71.38	4.75	127.50	4.48	119.39	94.37	93.64
26	350	50	66.67	70.33	4.67	132.16	4.40	123.79	94.28	93.66
27	357	51	65.53	69.27	4.59	136.75	4.32	128.11	94.20	93.68
28	364	52	64.38	68.20	4.51	141.26	4.24	132.35	94.11	93.69
29	371	53	63.24	67.14	4.43	145.68	4.16	136.51	94.02	93.70
30	378	54	62.10	66.06	4.35	150.03	4.08	140.60	93.93	93.71
31	385	55	60.96	64.99	4.27	154.30	4.00	144.60	93.85	93.72
32	392	56	59.67	63.75	4.18	158.47	3.92	148.52	93.75	93.72
33	399	57	58.53	62.66	4.10	162.57	3.84	152.35	93.66	93.71
34	406	58	57.38	61.57	4.02	166.59	3.76	156.11	93.57	93.71
35	413	59	56.24	60.48	3.94	170.53	3.68	159.79	93.47	93.71
36	420	60	55.10	59.37	3.86	174.38	3.60	163.39	93.37	93.70
37	427	61	53.96	58.27	3.78	178.16	3.52	166.92	93.28	93.69
38	434	62	52.81	57.16	3.70	181.86	3.44	170.36	93.18	93.68
39	441	63	51.67	56.04	3.62	185.47	3.37	173.73	93.08	93.67
40	448	64	50.38	54.77	3.53	189.00	3.28	177.01	92.97	93.65

NOTES

*Hen-week (%) is based on the assumption that mortality in lay is 8% with 0.2% mortality per week.

**A hatching egg is considered to be an egg which is 50 g (21.2 oz/dozen) or heavier.

Weekly Hatchability and Chick Production

Week of Production:	Age (days):	Age (weeks):	Hatch All Eggs (%)*	Cum. Hatchability (%)	Chicks/Week Hen-Housed:	Cum. Chicks Hen-Housed
1	175	25				
2	182	26	80.3	80.3	0.93	0.93
3	189	27	82.1	81.6	2.69	3.63
4	196	28	83.5	82.6	3.98	7.61
5	203	29	85.2	83.6	4.65	12.26
6	210	30	86.9	84.5	5.01	17.27
7	217	31	88.3	85.3	5.17	22.44
8	224	32	89.3	86.1	5.24	27.68
9	231	33	90.5	86.7	5.23	32.91
10	238	34	91.3	87.3	5.20	38.11
11	245	35	91.9	87.8	5.16	43.27
12	252	36	92.3	88.3	5.11	48.39
13	259	37	92.3	88.7	5.04	53.43
14	266	38	92.3	89.0	4.97	58.40
15	273	39	91.8	89.2	4.87	63.26
16	280	40	91.3	89.3	4.76	68.02
17	287	41	90.9	89.4	4.66	72.68
18	294	42	90.4	89.5	4.56	77.24
19	301	43	89.8	89.5	4.46	81.71
20	308	44	89.1	89.5	4.35	86.06
21	315	45	88.4	89.4	4.25	90.31
22	322	46	87.7	89.3	4.15	94.46
23	329	47	87.2	89.3	4.05	98.51
24	336	48	86.2	89.1	3.93	102.45
25	343	49	85.4	89.0	3.83	106.27
26	350	50	84.5	88.8	3.72	109.99
27	357	51	83.7	88.7	3.62	113.61
28	364	52	82.9	88.5	3.52	117.12
29	371	53	82.2	88.3	3.42	120.55
30	378	54	81.4	88.1	3.32	123.87
31	385	55	80.7	87.9	3.23	127.10
32	392	56	80.1	87.7	3.14	130.24
33	399	57	79.5	87.5	3.05	133.30
34	406	58	78.9	87.3	2.97	136.26
35	413	59	78.4	87.1	2.88	139.15
36	420	60	77.9	86.9	2.81	141.95
37	427	61	77.4	86.7	2.73	144.68
38	434	62	77.0	86.5	2.65	147.33
39	441	63	76.6	86.3	2.58	149.91
40	448	64	76.5	86.1	2.51	152.42

NOTES

*Hatchability is based on an average egg age of 3 days. Hatchability will drop by 0.5% per day of storage between 7 and 11 days.

Weekly Egg Weight and Egg Mass

Week of Production	Age (days)	Age (weeks)	Hen-Week (%)	Egg Weight (g)	Egg Weight (oz/dozen)	Egg Mass (g)
1	175	25	6.53	49.2	20.8	3.2
2	182	26	24.77	51.1	21.6	12.7
3	189	27	55.00	52.6	22.3	28.9
4	196	28	76.71	53.8	22.8	41.3
5	203	29	85.53	54.9	23.2	47.0
6	210	30	88.59	55.8	23.6	49.4
7	217	31	89.49	56.6	24.0	50.7
8	224	32	88.95	57.3	24.3	51.0
9	231	33	87.97	57.9	24.5	50.9
10	238	34	86.98	58.5	24.8	50.9
11	245	35	85.99	59.0	25.0	50.7
12	252	36	85.00	59.6	25.2	50.7
13	259	37	84.00	60.1	25.4	50.5
14	266	38	82.99	60.6	25.7	50.3
15	273	39	81.99	61.1	25.9	50.1
16	280	40	80.83	61.6	26.1	49.8
17	287	41	79.81	62.1	26.3	49.6
18	294	42	78.79	62.5	26.5	49.2
19	301	43	77.77	63.0	26.7	49.0
20	308	44	76.74	63.4	26.8	48.7
21	315	45	75.71	63.9	27.0	48.4
22	322	46	74.67	64.3	27.2	48.0
23	329	47	73.63	64.7	27.4	47.6
24	336	48	72.43	65.1	27.6	47.2
25	343	49	71.38	65.4	27.7	46.7
26	350	50	70.33	65.8	27.9	46.3
27	357	51	69.27	66.1	28.0	45.8
28	364	52	68.20	66.4	28.1	45.3
29	371	53	67.14	66.6	28.2	44.7
30	378	54	66.06	66.9	28.3	44.2
31	385	55	64.99	67.1	28.4	43.6
32	392	56	63.75	67.4	28.5	43.0
33	399	57	62.66	67.6	28.6	42.4
34	406	58	61.57	67.8	28.7	41.7
35	413	59	60.48	68.1	28.8	41.2
36	420	60	59.37	68.3	28.9	40.6
37	427	61	58.27	68.5	29.0	39.9
38	434	62	57.16	68.7	29.1	39.3
39	441	63	56.04	68.9	29.2	38.6
40	448	64	54.77	69.1	29.2	37.8

NOTE
 * Egg mass (g) = $\frac{\text{Hen-week (\%)} \times \text{Egg weight (g)}}{100}$



Aviagen and the Aviagen logo, and Arbor Acres and the Arbor Acres logo are registered trademarks of Aviagen in the US and other countries. All other trademarks or brands are registered by their respective owners.

© 2016 Aviagen.

0716-AVNAA-053