

EUROPEAN PARENT STOCK

ROSS 308

Performance
Objectives

2021



Introduction

This booklet contains the performance objectives for the Ross® 308 parent stock and should be used in conjunction with the **Ross Parent Stock Management Handbook**.

Performance

The performance objectives included in this document are reflective of the economic drivers and stocking densities typical of parent stock production operations within Europe which influence flock cycle planning and management techniques. This typically involves adopting a breeder management strategy which provides first light increase **at** or **before** 21 weeks of age (up to 146 days of age).

Performance can be influenced by many factors including flock management, health status and climatic conditions. These objectives indicate the performance which can be achieved under good management and environmental conditions and when feeding recommended nutrient levels.

Variation in performance may occur for a variety of reasons. For example, feed consumption can be affected by form of feed, energy level and house temperature. Information in this booklet should not be regarded as a specification but as a 'Performance Objective'.

Performance levels given assume flocks are managed with separate-sex feeding.

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

For further information on the management of Ross stock, please contact your local Ross representative.

Contents

- 02 Performance Summary
- 03 Male Body Weight and Feeding Program
- 04 Female Body Weight and Feeding Program
- 05 Female Feeding into Lay
- 06 Weekly Egg Production
- 07 Weekly Hatchability and Chick Production
- 08 Weekly Egg Weight and Egg Mass

Performance Summary

The figures below are for birds light-stimulated **at** or **before** 21 weeks (up to 146 days of age).

Summary of 40 Weeks of Production

Age at depletion (days)	434
(weeks)	62
Total eggs (HHA)*	187.5
Hatching eggs (HHA)*	179.4
Chicks / female housed at 161 days (23 weeks)	150
Hatchability (%)	83.6
Age at 5% production (days)	161
(weeks)	23
Peak production (%)	87.6
Body weight at 161 days (23 weeks)	2840 g
Body weight at depletion	4180 g
Liveability (%) (Rearing period)	95-96
Liveability (%) (Laying period)	92
Feed / 100 chicks** day old - 434 days (0 - 62 weeks)	36.9 kg
Feed / 100 hatching eggs** day old - 434 days (0 - 62 weeks)	30.9 kg

* *Hen-Housed Average.*

** *Feed amounts expressed in the table do not include male feed allocations.*

ROSS 308 PARENT STOCK: Performance Objectives

Male Body Weight and Feeding Program

Age (days)	Age (weeks)	Body weight (g)	Weekly gain (g)	Feed (g/bird/day)	Energy intake (kcal/bird/day)*
Day old	0	40		ad lib	ad lib
7	1	165	125	35	99
14	2	340	175	45	125
21	3	550	210	51	142
28	4	780	230	55	154
35	5	980	200	58	163
42	6	1150	170	61	170
49	7	1300	150	68	176
56	8	1440	140	70	183
63	9	1570	130	73	189
70	10	1695	125	76	196
77	11	1820	125	78	204
84	12	1945	125	81	211
91	13	2070	125	84	219
98	14	2195	125	87	227
105	15	2320	125	90	235
112	16	2450	130	92	248
119	17	2595	145	94	253
126	18	2740	145	97	263
133	19	2890	150	101	274
140	20	3040	150	106	286
147	21	3195	155	107	300
154	22	3345	150	112	314
161	23	3490	145	116	324
168	24	3630	140	118	331
175	25	3750	120	120	336
182	26	3860	110	126	340
189	27	3920	60	127	342
196	28	3970	50	128	346
203	29	4010	40	129	348
210	30	4040	30	130	351
217	31	4070	30	131	353
224	32	4100	30	132	355
231	33	4130	30	132	358
238	34	4160	30	133	360
245	35	4190	30	134	363
252	36	4220	30	135	365
259	37	4250	30	136	368
266	38	4280	30	137	370
273	39	4310	30	138	372
280	40	4340	30	139	375
287	41	4370	30	139	377
294	42	4400	30	141	379
301	43	4430	30	141	382
308	44	4460	30	142	384
315	45	4490	30	143	387
322	46	4525	35	144	390
329	47	4560	35	145	392
336	48	4595	35	146	395
343	49	4630	35	147	397
350	50	4665	35	148	400
357	51	4700	35	149	402
364	52	4735	35	150	405
371	53	4770	35	151	407
378	54	4805	35	152	409
385	55	4840	35	152	412
392	56	4875	35	153	414
399	57	4910	35	154	416
406	58	4945	35	155	418
413	59	4980	35	156	420
420	60	5015	35	156	422
427	61	5050	35	157	424
434	62	5085	35	158	426

NOTES

Body weights are those 4-6 hours after feeding.

This profile allows the male to reach sexual maturity by female first egg. Weekly body-weight gain beyond 29 weeks (203 days) should average approximately 30-35 g.

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, based on a 5-stage rearing program and a male diet in lay. Adjustments must be made to reflect feeding differing energy levels.*

ROSS 308 PARENT STOCK: Performance Objectives

Female Body Weight and Feeding Program

Age (days)	Age (weeks)	Body weight (g)	Weekly gain (g)	Feed (g/bird/day)	Energy intake (kcal/bird/day)*
Day old	0	40		ad lib	ad lib
7	1	130	90	23	64
14	2	255	125	28	77
21	3	385	130	32	89
28	4	515	130	36	101
35	5	650	135	41	114
42	6	790	140	45	125
49	7	920	130	51	134
56	8	1040	120	55	142
63	9	1150	110	57	149
70	10	1250	100	61	158
77	11	1350	100	64	167
84	12	1450	100	68	177
91	13	1550	100	72	187
98	14	1650	100	76	197
105	15	1750	100	80	208
112	16	1855	105	82	221
119	17	1975	120	87	234
126	18	2100	125	92	247
133	19	2230	130	97	261
140	20	2370	140	103	277
147	21	2525	155	105	293
154	22	2685	160	112	314
161	23	2840	155	125	349
168	24	2985	145	144	403
175	25	3125	140	159	445
182	26	3255	130	167	468
189	27	3365	110	167	468
196	28	3460	95	167	468
203	29	3510	50	167	468
210	30	3540	30	167	468
217	31	3560	20	167	468
224	32	3580	20	167	468
231	33	3600	20	167	468
238	34	3620	20	167	468
245	35	3640	20	166	464
252	36	3660	20	166	464
259	37	3680	20	165	463
266	38	3700	20	165	463
273	39	3720	20	165	462
280	40	3740	20	165	461
287	41	3760	20	164	460
294	42	3780	20	164	459
301	43	3800	20	164	458
308	44	3820	20	163	457
315	45	3840	20	163	456
322	46	3860	20	162	455
329	47	3880	20	162	454
336	48	3900	20	162	452
343	49	3920	20	161	451
350	50	3940	20	161	450
357	51	3960	20	160	449
364	52	3980	20	160	448
371	53	4000	20	160	447
378	54	4020	20	159	446
385	55	4040	20	159	445
392	56	4060	20	158	444
399	57	4080	20	158	442
406	58	4100	20	158	441
413	59	4120	20	157	440
420	60	4140	20	157	439
427	61	4160	20	157	438
434	62	4180	20	156	438

NOTES

Body weights are those 4-6 hours after feeding.

Weekly body-weight gain beyond 30 weeks (210 days) should average approximately 20 g.

** Feed quantities are a guide only, based on a 5-stage rearing program. Adjustments must be made to reflect feeding differing energy levels.*

ROSS 308 PARENT STOCK: Performance Objectives

Female Feeding into Lay

Hen-day (%)	Daily energy intake (kcal/bird/day)*	Feed intake (g/bird/day)	Feed increase (g/bird/day)
5	349	125	
10	355	127	2
15	360	129	2
20	366	131	2
25	374	134	3
30	383	137	3
35	391	140	3
40	402	144	4
45	413	148	4
50	425	152	4
55	439	157	5
65	453	162	5
>75	468	167	5

*Daily energy and feed intakes assume an ambient temperature of 20 - 21°C.

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.

ROSS 308 PARENT STOCK: Performance Objectives

Weekly Egg Production

Week of production	Age (days)	Age (weeks)	Hen-housed (%)	Hen-week (%)*	Eggs/ birds/week	Eggs/ bird/cum.	Hatching eggs/bird/ week**	Hatching eggs/birds/ cum.	Hatching egg utilization weekly	Hatching egg utilization cum.
1	161	23	5.4	5.4	0.4	0.4				
2	168	24	22.8	22.9	1.6	2.0	1.0	1.0	64.9	52.5
3	175	25	52.6	53.0	3.7	5.7	2.7	3.7	73.5	66.2
4	182	26	73.6	74.2	5.2	10.8	4.5	8.3	88.2	76.7
5	189	27	82.4	83.3	5.8	16.6	5.3	13.5	91.0	81.6
6	196	28	86.4	87.5	6.1	22.6	5.7	19.2	93.4	84.8
7	203	29	87.6	88.9	6.1	28.8	5.8	25.0	95.3	87.0
8	210	30	86.7	88.1	6.1	34.8	5.8	30.9	95.8	88.6
9	217	31	85.7	87.3	6.0	40.8	5.8	36.6	96.3	89.7
10	224	32	84.7	86.5	5.9	46.8	5.7	42.4	96.8	90.6
11	231	33	83.7	85.6	5.9	52.6	5.7	48.1	97.3	91.3
12	238	34	82.6	84.7	5.8	58.4	5.6	53.7	97.3	91.9
13	245	35	81.5	83.7	5.7	64.1	5.6	59.3	97.3	92.4
14	252	36	80.4	82.8	5.6	69.8	5.5	64.8	97.6	92.8
15	259	37	79.3	81.8	5.6	75.3	5.4	70.2	97.6	93.2
16	266	38	78.2	80.8	5.5	80.8	5.3	75.5	97.6	93.5
17	273	39	77.1	79.9	5.4	86.2	5.3	80.8	97.6	93.7
18	280	40	76.0	78.9	5.3	91.5	5.2	86.0	97.7	94.0
19	287	41	74.9	77.9	5.2	96.8	5.1	91.1	97.4	94.1
20	294	42	73.7	76.8	5.2	101.9	5.0	96.1	97.4	94.3
21	301	43	72.5	75.7	5.1	107.0	4.9	101.1	97.4	94.5
22	308	44	71.3	74.6	5.0	112.0	4.9	105.9	97.4	94.6
23	315	45	70.1	73.5	4.9	116.9	4.8	110.7	97.5	94.7
24	322	46	68.9	72.4	4.8	121.7	4.7	115.4	97.5	94.8
25	329	47	67.7	71.3	4.7	126.5	4.6	120.1	97.5	94.9
26	336	48	66.5	70.2	4.7	131.1	4.5	124.6	97.5	95.0
27	343	49	65.3	69.1	4.6	135.7	4.5	129.1	97.6	95.1
28	350	50	64.1	67.9	4.5	140.2	4.4	133.4	97.6	95.2
29	357	51	62.9	66.8	4.4	144.6	4.3	137.7	97.6	95.3
30	364	52	61.7	65.7	4.3	148.9	4.2	141.9	97.2	95.3
31	371	53	60.5	64.5	4.2	153.2	4.1	146.1	97.2	95.4
32	378	54	59.3	63.4	4.2	157.3	4.0	150.1	97.2	95.4
33	385	55	58.1	62.2	4.1	161.4	4.0	154.1	97.3	95.5
34	392	56	56.9	61.1	4.0	165.4	3.9	157.9	97.3	95.5
35	399	57	55.7	59.9	3.9	169.3	3.8	161.7	97.2	95.5
36	406	58	54.5	58.8	3.8	173.1	3.7	165.4	96.9	95.6
37	413	59	53.3	57.6	3.7	176.8	3.6	169.0	97.0	95.6
38	420	60	52.0	56.3	3.6	180.5	3.5	172.6	97.0	95.6
39	427	61	50.7	55.0	3.6	184.0	3.4	176.0	97.1	95.7
40	434	62	49.4	53.7	3.5	187.5	3.4	179.4	97.1	95.7

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

** A hatching egg is considered to be an egg which is 50 g or heavier.

ROSS 308 PARENT STOCK: Performance Objectives

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	161	23				
2	168	24	70.5	70.5	0.7	0.7
3	175	25	77.7	75.7	2.1	2.8
4	182	26	80.6	78.4	3.7	6.5
5	189	27	83.2	80.2	4.4	10.9
6	196	28	85.3	81.7	4.8	15.7
7	203	29	87.1	83.0	5.1	20.8
8	210	30	88.2	84.0	5.1	25.9
9	217	31	89.1	84.8	5.2	31.1
10	224	32	89.4	85.4	5.1	36.2
11	231	33	89.9	85.9	5.1	41.3
12	238	34	90.3	86.4	5.1	46.4
13	245	35	90.1	86.7	5.0	51.4
14	252	36	89.9	87.0	4.9	56.3
15	259	37	89.6	87.2	4.9	61.2
16	266	38	89.3	87.4	4.8	66.0
17	273	39	89.0	87.5	4.7	70.7
18	280	40	88.5	87.5	4.6	75.3
19	287	41	88.0	87.6	4.5	79.8
20	294	42	87.5	87.6	4.4	84.2
21	301	43	87.0	87.5	4.3	88.5
22	308	44	86.3	87.5	4.2	92.7
23	315	45	85.6	87.4	4.1	96.8
24	322	46	84.9	87.3	4.0	100.8
25	329	47	84.2	87.2	3.9	104.7
26	336	48	83.3	87.0	3.8	108.4
27	343	49	82.4	86.9	3.7	112.1
28	350	50	81.5	86.7	3.6	115.7
29	357	51	80.6	86.5	3.5	119.2
30	364	52	79.7	86.3	3.3	122.5
31	371	53	78.6	86.1	3.2	125.7
32	378	54	77.6	85.9	3.1	128.9
33	385	55	76.5	85.6	3.0	131.9
34	392	56	75.4	85.4	2.9	134.8
35	399	57	74.1	85.1	2.8	137.6
36	406	58	72.8	84.8	2.7	140.3
37	413	59	71.5	84.5	2.6	142.9
38	420	60	70.2	84.2	2.5	145.4
39	427	61	68.8	83.9	2.4	147.8
40	434	62	67.5	83.6	2.3	150.0

*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.

ROSS 308 PARENT STOCK: Performance Objectives

Weekly Egg Weight and Egg Mass

Week of production	Age (days)	Age (weeks)	Hen-week (%)	Egg weight (g)	Egg mass (g)*
1	161	23	5.4	48.6	2.6
2	168	24	22.9	50.3	11.5
3	175	25	53.0	52.0	27.5
4	182	26	74.2	53.5	39.7
5	189	27	83.3	54.8	45.7
6	196	28	87.5	56.1	49.1
7	203	29	88.9	57.2	50.9
8	210	30	88.1	58.2	51.3
9	217	31	87.3	59.1	51.6
10	224	32	86.5	59.9	51.8
11	231	33	85.6	60.4	51.7
12	238	34	84.7	61.0	51.7
13	245	35	83.7	61.6	51.6
14	252	36	82.8	62.1	51.4
15	259	37	81.8	62.5	51.1
16	266	38	80.8	62.9	50.8
17	273	39	79.9	63.3	50.5
18	280	40	78.9	63.7	50.2
19	287	41	77.9	64.0	49.9
20	294	42	76.8	64.4	49.5
21	301	43	75.7	64.7	49.0
22	308	44	74.6	65.1	48.6
23	315	45	73.5	65.4	48.1
24	322	46	72.4	65.8	47.6
25	329	47	71.3	66.1	47.1
26	336	48	70.2	66.5	46.7
27	343	49	69.1	66.8	46.1
28	350	50	67.9	67.2	45.7
29	357	51	66.8	67.5	45.1
30	364	52	65.7	67.9	44.6
31	371	53	64.5	68.2	44.0
32	378	54	63.4	68.5	43.4
33	385	55	62.2	68.8	42.8
34	392	56	61.1	69.1	42.2
35	399	57	59.9	69.4	41.6
36	406	58	58.8	69.6	40.9
37	413	59	57.6	69.8	40.2
38	420	60	56.3	70.0	39.4
39	427	61	55.0	70.3	38.7
40	434	62	53.7	70.5	37.9

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

Notes

Handwriting practice area consisting of numerous horizontal dotted lines for notes.



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