

EUROPEAN PARENT STOCK

ROSS 308 FF

Performance
Objectives

2021

Fast Feathering



Introduction

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

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.

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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)*	190.5
Hatching eggs (HHA)*	179.4
Chicks / female housed at 161 days (23 weeks)	151.8
Hatchability (%)	84.6
Age at 5% production (days)	161
(weeks)	23
Peak production (%)	88.7
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)	36.3 kg
Feed / 100 hatching eggs** day old - 434 days (0 - 62 weeks)	30.7 kg

* Hen-Housed Average.

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

ROSS 308 FF 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 FF 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	313
161	23	2840	155	125	350
168	24	2985	145	144	403
175	25	3125	140	158	443
182	26	3255	130	165	463
189	27	3365	110	165	463
196	28	3460	95	165	463
203	29	3510	50	165	463
210	30	3540	30	165	463
217	31	3560	20	165	463
224	32	3580	20	165	463
231	33	3600	20	165	463
238	34	3620	20	165	463
245	35	3640	20	164	460
252	36	3660	20	164	460
259	37	3680	20	164	460
266	38	3700	20	164	459
273	39	3720	20	164	459
280	40	3740	20	164	458
287	41	3760	20	163	457
294	42	3780	20	163	456
301	43	3800	20	163	456
308	44	3820	20	162	454
315	45	3840	20	162	454
322	46	3860	20	162	452
329	47	3880	20	161	451
336	48	3900	20	161	450
343	49	3920	20	160	449
350	50	3940	20	160	448
357	51	3960	20	160	447
364	52	3980	20	159	446
371	53	4000	20	159	445
378	54	4020	20	158	444
385	55	4040	20	158	443
392	56	4060	20	158	442
399	57	4080	20	158	441
406	58	4100	20	157	440
413	59	4120	20	157	439
420	60	4140	20	157	438
427	61	4160	20	156	438
434	62	4180	20	156	437

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 FF 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	350	125	
10	356	127	2
15	361	129	2
20	367	131	2
25	375	134	3
30	384	137	3
35	392	140	3
40	400	143	3
45	412	147	4
50	423	151	4
55	434	155	4
65	448	160	5
>75	463	165	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 FF 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	23.9	24.0	1.7	2.1	1.0	1.0	61.8	50.5
3	175	25	53.7	54.1	3.8	5.8	2.7	3.7	72.0	64.4
4	182	26	74.7	75.3	5.2	11.0	4.5	8.3	86.8	75.0
5	189	27	83.5	84.4	5.8	16.9	5.2	13.5	89.8	80.1
6	196	28	87.5	88.6	6.1	23.0	5.6	19.2	92.2	83.3
7	203	29	88.7	90.0	6.2	29.2	5.8	25.0	94.1	85.6
8	210	30	87.8	89.3	6.1	35.4	5.8	30.9	94.6	87.2
9	217	31	86.8	88.4	6.1	41.5	5.8	36.6	95.1	88.3
10	224	32	85.8	87.6	6.0	47.5	5.7	42.4	95.5	89.3
11	231	33	84.8	86.8	5.9	53.4	5.7	48.1	96.0	90.0
12	238	34	83.7	85.8	5.9	59.3	5.6	53.7	96.0	90.6
13	245	35	82.6	84.8	5.8	65.1	5.6	59.3	96.0	91.1
14	252	36	81.5	83.9	5.7	70.8	5.5	64.7	96.3	91.5
15	259	37	80.4	82.9	5.6	76.4	5.4	70.2	96.3	91.8
16	266	38	79.3	82.0	5.6	82.0	5.3	75.5	96.3	92.1
17	273	39	78.2	81.0	5.5	87.4	5.3	80.8	96.2	92.4
18	280	40	77.1	80.0	5.4	92.8	5.2	86.0	96.2	92.6
19	287	41	76.0	79.0	5.3	98.2	5.1	91.1	95.9	92.8
20	294	42	74.8	78.0	5.2	103.4	5.0	96.1	95.9	93.0
21	301	43	73.6	76.9	5.2	108.5	4.9	101.1	95.9	93.1
22	308	44	72.4	75.8	5.1	113.6	4.9	105.9	95.9	93.2
23	315	45	71.2	74.7	5.0	118.6	4.8	110.7	95.9	93.3
24	322	46	70.0	73.6	4.9	123.5	4.7	115.4	95.9	93.4
25	329	47	68.8	72.5	4.8	128.3	4.6	120.0	95.9	93.5
26	336	48	67.6	71.4	4.7	133.1	4.5	124.6	95.9	93.6
27	343	49	66.4	70.2	4.7	137.7	4.5	129.0	95.9	93.7
28	350	50	65.2	69.1	4.6	142.3	4.4	133.4	95.9	93.8
29	357	51	64.0	68.0	4.5	146.8	4.3	137.7	95.9	93.8
30	364	52	62.8	66.9	4.4	151.2	4.2	141.9	95.4	93.9
31	371	53	61.6	65.7	4.3	155.5	4.1	146.0	95.4	93.9
32	378	54	60.4	64.6	4.2	159.7	4.0	150.1	95.4	94.0
33	385	55	59.2	63.4	4.1	163.9	4.0	154.0	95.4	94.0
34	392	56	58.0	62.3	4.1	167.9	3.9	157.9	95.4	94.0
35	399	57	56.8	61.1	4.0	171.9	3.8	161.7	95.2	94.1
36	406	58	55.6	60.0	3.9	175.8	3.7	165.4	95.0	94.1
37	413	59	54.4	58.8	3.8	179.6	3.6	169.0	95.0	94.1
38	420	60	53.1	57.5	3.7	183.3	3.5	172.5	95.0	94.1
39	427	61	51.8	56.2	3.6	186.9	3.4	176.0	95.0	94.1
40	434	62	50.5	54.9	3.5	190.5	3.4	179.4	95.0	94.2

* 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 FF 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	71.5	71.5	0.7	0.7
3	175	25	78.7	76.7	2.1	2.9
4	182	26	81.6	79.4	3.7	6.6
5	189	27	84.2	81.2	4.4	11.0
6	196	28	86.3	82.7	4.9	15.9
7	203	29	88.1	84.0	5.1	21.0
8	210	30	89.2	85.0	5.2	26.2
9	217	31	90.1	85.8	5.2	31.4
10	224	32	90.4	86.4	5.2	36.6
11	231	33	90.9	86.9	5.2	41.8
12	238	34	91.3	87.4	5.1	46.9
13	245	35	91.1	87.7	5.1	52.0
14	252	36	90.9	88.0	5.0	57.0
15	259	37	90.6	88.2	4.9	61.9
16	266	38	90.3	88.4	4.8	66.7
17	273	39	90.0	88.5	4.7	71.5
18	280	40	89.5	88.5	4.7	76.1
19	287	41	89.0	88.6	4.5	80.7
20	294	42	88.5	88.6	4.4	85.1
21	301	43	88.0	88.5	4.4	89.5
22	308	44	87.3	88.5	4.2	93.7
23	315	45	86.6	88.4	4.1	97.9
24	322	46	85.9	88.3	4.0	101.9
25	329	47	85.2	88.2	3.9	105.8
26	336	48	84.3	88.0	3.8	109.7
27	343	49	83.4	87.9	3.7	113.4
28	350	50	82.5	87.7	3.6	117.0
29	357	51	81.6	87.5	3.5	120.5
30	364	52	80.7	87.3	3.4	123.9
31	371	53	79.6	87.1	3.3	127.2
32	378	54	78.6	86.9	3.2	130.3
33	385	55	77.5	86.6	3.1	133.4
34	392	56	76.4	86.4	3.0	136.4
35	399	57	75.1	86.1	2.8	139.2
36	406	58	73.8	85.8	2.7	142.0
37	413	59	72.5	85.5	2.6	144.6
38	420	60	71.2	85.2	2.5	147.1
39	427	61	69.8	84.9	2.4	149.5
40	434	62	68.5	84.6	2.3	151.8

**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 FF 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	47.2	2.6
2	168	24	24.0	49.0	11.8
3	175	25	54.1	50.6	27.4
4	182	26	75.3	52.1	39.4
5	189	27	84.4	53.3	45.1
6	196	28	88.6	54.3	48.2
7	203	29	90.0	55.2	49.8
8	210	30	89.3	56.0	50.0
9	217	31	88.4	56.8	50.2
10	224	32	87.6	57.5	50.3
11	231	33	86.8	57.9	50.3
12	238	34	85.8	58.5	50.2
13	245	35	84.8	59.1	50.2
14	252	36	83.9	59.6	50.0
15	259	37	82.9	60.1	49.9
16	266	38	82.0	60.5	49.6
17	273	39	81.0	61.0	49.4
18	280	40	80.0	61.4	49.2
19	287	41	79.0	61.7	48.8
20	294	42	78.0	62.1	48.4
21	301	43	76.9	62.5	48.1
22	308	44	75.8	62.9	47.7
23	315	45	74.7	63.2	47.2
24	322	46	73.6	63.6	46.8
25	329	47	72.5	63.9	46.3
26	336	48	71.4	64.3	45.9
27	343	49	70.2	64.6	45.3
28	350	50	69.1	65.0	44.9
29	357	51	68.0	65.2	44.3
30	364	52	66.9	65.5	43.8
31	371	53	65.7	65.8	43.3
32	378	54	64.6	66.1	42.7
33	385	55	63.4	66.4	42.1
34	392	56	62.3	66.7	41.6
35	399	57	61.1	67.1	41.1
36	406	58	60.0	67.4	40.4
37	413	59	58.8	67.6	39.8
38	420	60	57.5	67.9	39.1
39	427	61	56.2	68.2	38.4
40	434	62	54.9	68.4	37.6

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

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