

Successful Male Management - Weight Control

Successfully managing male turkeys for semen production is largely dependent on three key areas: lighting, selection and weight control. This article details the techniques required to control male weight gain.

Control Feeding

Control feeding the turkey breeder male from selection through the breeding cycle may reduce feed costs and will also improve reproductive performance which allows better use of superior males.

The following procedures and requirements should produce excellent results:

1. **Select breeder males according to selection procedures.** Identify the selected males by marking them with food coloring or with colored wing tags.
2. **As soon after selection as possible, move the males to the conditioning barns.** Place no more than 25 males per pen with at least ten square feet per male.
3. **Using tags, identify at least 25 males (one or two at random from each pen) to be used for sample weighing.** Individually weigh males at weekly intervals. These males will serve as a monitor and allow adjustments in the feeding or lighting schedules to accomplish the target weights.
4. **For purposes of control feeding, the growing-breeding cycle may be divided into five phases, as shown in Table 1.**

Table 1. Five Phases of Growth for Control Fed Males

BEGIN CONTROL FEEDING AT 19 WEEKS		
PHASE	AGE INTERVAL	TARGET WEIGHT GAIN
I	19-30 weeks	1.31 lbs. (594 g) /week
II	31-36 weeks	0.80 lbs. (363 g) /week
III	37-40 weeks	0.70 lbs. (318 g) /week
IV	41-48 weeks	0.50 lbs. (227 g) /week
V	49 weeks - Market	0.20 lbs. (91 g) /week

5. **After the males have been moved into the conditioning barns, they should be full fed for a few days to allow them to adjust to their new surroundings.** Once this is accomplished, begin control feeding by adjusting the feed allotment to bring the weight and weight gain in line with the male line male breeder weight curve.

The actual caloric content of the diet is not critical, but the daily allotment must be adjusted to ensure the same weight gain as suggested in the table. In addition, the daily allotment must contain sufficient nutrients to satisfy the males' daily requirements.

6. **If there is a large spread in body weight, it is advisable to divide the flock into two or three weight groups.** Feed each group accordingly so that the weight of each group is similar to the weight suggested in the male line male breeder weight curve.

7. **Feed trough design is an important aspect of a controlled feeding program.** It is recommended that only long, deep, "V" troughs be used so the feed depth in the trough will be sufficient for beak trimmed birds to feed easily. An absolute minimum of 12 linear inches (25mm) of feeder space must be provided for each male.

8. **Some tips for best performance include:**

- a. Position troughs for control fed males considerably lower than normal. This will prevent males from scooping out feed and also prevent males from bruising their necks during vigorous feeding.
- b. Feed the males their entire allotment once daily, usually in the early morning or after semen collection.
- c. Be careful to calculate the correct feed allotment for each pen based on the actual number of males per pen and be sure that feed is not spilled as it is distributed in the troughs.

- d. Control fed males will sometimes play in the water. If this happens, it may be necessary to limit the birds' access to water. A suggested schedule is to turn water on one hour before and leave on until two hours after feeding. In hot weather, a second watering period should be provided.
- e. If the average barn temperature changes more than 10°F (5°C), it may be necessary to change the feed allotment accordingly to maintain the weight gains indicated in the table. As a general rule, increase the feed allotment 10% for each 10°F (5°C) decrease in average barn temperature.

9. The most critical aspect of control feeding males is to ensure the target weight is reached when semen is needed. Weekly sample weights taken are very important to ensure the control fed males are on schedule. Remember, sexual maturity is influenced by both body weight and lighting. A feed specification for control fed males is shown below in Table 2. Table 3 shows the amount of feed required to achieve target weight gains for Nicholas males.

Table 2. Feed Specifications for Nicholas Males

Control Fed Males Selection to End			
Protein	%	14-15	
Energy	Kcal/lb	1300	
	Kcal/kg	2866	
AMINO ACIDS		Total	Digestible
Lysine	%	0.65	0.58
Methionine.	%	0.29	0.26
M+C	%	0.52	0.47
Tryptophan	%	0.16	0.14
Threonine	%	0.42	0.38
Arginine	%	0.74	0.67
MINERALS			
Calcium (minimum)	%	1.10	
Available Phosphorus (min)	%	0.55	
Sodium (min.)	%	0.16	
Potassium (guide)	%	0.90	
Chloride (min)	%	0.18	
Linoleic Acid (18:2) (min)	%	1.00	

10. This controlled feeding program has been designed to slow the rate of sexual maturity in breeder males and assumes that the corresponding hens will be lit for production at 29-30 weeks of age.

To ensure that the males are producing adequate semen at 32-33 weeks of age, use the lighting program suggested in the technical bulletin titled Successful Male Management - Lighting. If semen is needed at an earlier age, adjustments will need to be made in both the male lighting and feeding programs.

11. Two weeks prior to marketing control fed males, they can be returned to full feed. During this period, they may gain as much as five to seven pounds and substantially increase their salvage value.

Table 3.

Amount of Feed Required to Achieve Target Weight Gains for Nicholas Males

Pounds of feed/bird/day to Achieve Target Weekly Body Weight Gain*

Age (wks)	Line 85 Target wt (lbs)	Gain lbs	Temperature °F				
			80	70	60	50	40
19	36.57	-	0.853	0.905	0.967	1.029	1.127
20	37.88	1.3	0.874	0.927	0.99	1.054	1.154
21	39.19	1.3	0.894	0.948	1.013	1.078	1.181
22	40.49	1.3	0.913	0.969	1.035	1.102	1.207
23	41.8	1.3	0.933	0.99	1.058	1.125	1.233
24	43.1	1.3	0.953	1.01	1.08	1.149	1.258
25	44.41	1.3	0.972	1.031	1.101	1.172	1.284
26	45.71	1.3	0.991	1.051	1.123	1.195	1.309
27	47.02	1.3	1.01	1.071	1.144	1.218	1.334
28	48.32	1.3	1.028	1.091	1.165	1.24	1.359
29	49.63	1.3	1.047	1.11	1.187	1.263	1.383
30	50.93	1.3	1.065	1.13	1.207	1.285	1.407
31	51.73	0.8	1.076	1.142	1.22	1.298	1.422
32	52.53	0.8	1.088	1.153	1.233	1.312	1.437
33	53.33	0.8	1.099	1.165	1.245	1.325	1.451
34	54.13	0.8	1.11	1.177	1.258	1.338	1.466
35	54.93	0.8	1.121	1.188	1.27	1.351	1.481
36	55.73	0.8	1.131	1.2	1.282	1.365	1.495
37	56.43	0.7	1.141	1.21	1.293	1.376	1.507
38	57.13	0.7	1.15	1.22	1.304	1.388	1.52
39	57.83	0.7	1.16	1.23	1.315	1.399	1.532
40	58.53	0.7	1.169	1.24	1.325	1.41	1.545
41	59.03	0.5	1.176	1.247	1.333	1.418	1.554
42	59.53	0.5	1.183	1.254	1.34	1.426	1.562
43	60.03	0.5	1.189	1.261	1.348	1.434	1.571
44	60.53	0.5	1.196	1.268	1.355	1.442	1.58
45	61.03	0.5	1.202	1.275	1.363	1.45	1.589
46	61.53	0.5	1.209	1.282	1.37	1.458	1.597
47	62.03	0.5	1.216	1.289	1.378	1.466	1.606
48	62.53	0.5	1.222	1.296	1.385	1.474	1.615
49	62.73	0.2	1.225	1.299	1.388	1.477	1.618
50	62.93	0.2	1.227	1.302	1.391	1.48	1.622
51	63.13	0.2	1.23	1.305	1.394	1.484	1.625
52	63.33	0.2	1.233	1.307	1.397	1.487	1.629
53	63.53	0.2	1.235	1.31	1.4	1.49	1.632
54	63.73	0.2	1.238	1.313	1.403	1.493	1.636
55	63.93	0.2	1.24	1.316	1.406	1.496	1.639
56	64.13	0.2	1.243	1.318	1.409	1.499	1.642
57	64.33	0.2	1.246	1.321	1.412	1.502	1.646
58	64.53	0.2	1.248	1.324	1.415	1.505	1.649
59	64.73	0.2	1.251	1.327	1.418	1.509	1.653
60	64.93	0.2	1.253	1.329	1.421	1.512	1.656
61	65.13	0.2	1.256	1.332	1.424	1.515	1.659
62	65.33	0.2	1.259	1.335	1.426	1.518	1.663
63	65.53	0.2	1.261	1.338	1.429	1.521	1.666
64	65.73	0.2	1.264	1.34	1.432	1.524	1.67
65	65.93	0.2	1.266	1.343	1.435	1.527	1.673
66	66.13	0.2	1.269	1.346	1.438	1.53	1.677
67	66.33	0.2	1.271	1.349	1.441	1.533	1.68
68	66.53	0.2	1.274	1.351	1.444	1.537	1.683
69	66.73	0.2	1.277	1.354	1.447	1.54	1.687
70	66.93	0.2	1.279	1.357	1.45	1.543	1.69

* Selection at 19 weeks, begin control feeding at 20 weeks.

Kilograms of feed/bird/day to Achieve Target Weekly Body Weight Gain*

Age (wks)	Line 85 Target wt (kgs)	Gain (g)	Temperature °C				
			25	20	15	10	5
19	16.62	593	388	411	440	468	512
20	17.22	593	397	421	450	479	525
21	17.81	593	406	431	460	490	537
22	18.40	593	415	440	470	501	549
23	19.00	593	424	450	481	511	560
24	19.59	593	433	459	491	522	572
25	20.19	593	442	469	500	533	584
26	20.78	593	450	478	510	543	595
27	21.37	593	459	487	520	554	606
28	21.96	593	467	496	530	564	618
29	22.56	593	476	505	540	574	629
30	23.15	593	484	514	549	584	640
31	23.51	364	489	519	555	590	646
32	23.88	364	495	524	560	596	653
33	24.24	364	500	530	566	602	660
34	24.60	364	505	535	572	608	666
35	24.97	364	510	540	577	614	673
36	25.33	364	514	545	583	620	680
37	25.65	318	519	550	588	625	685
38	25.97	318	523	555	593	631	691
39	26.29	318	527	559	598	636	696
40	26.60	318	531	564	602	641	702
41	26.83	227	535	567	606	645	706
42	27.06	227	538	570	609	648	710
43	27.29	227	540	573	613	652	714
44	27.51	227	544	576	616	655	718
45	27.74	227	546	580	620	659	722
46	27.97	227	550	583	623	663	726
47	28.20	227	553	586	626	666	730
48	28.42	227	555	589	630	670	734
49	28.51	91	557	590	631	671	735
50	28.60	91	558	592	632	673	737
51	28.70	91	559	593	634	675	739
52	28.79	91	560	594	635	676	740
53	28.88	91	561	595	636	677	742
54	28.97	91	563	597	638	679	744
55	29.06	91	564	598	639	680	745
56	29.15	91	565	599	640	681	746
57	29.24	91	566	600	642	683	748
58	29.33	91	567	602	643	684	750
59	29.42	91	569	603	645	686	751
60	29.51	91	570	604	646	687	753
61	29.60	91	571	605	647	689	754
62	29.70	91	572	607	648	690	756
63	29.79	91	573	608	650	691	757
64	29.88	91	575	609	651	693	759
65	29.97	91	575	610	652	694	760
66	30.06	91	577	612	654	695	762
67	30.15	91	578	613	655	697	764
68	30.24	91	579	614	656	699	765
69	30.33	91	580	615	658	700	767
70	30.42	91	581	617	659	701	768

* Selection at 16 to 18 weeks, begin control feeding at 19 weeks.

This not a guarantee of performance. Feed ingredients, pellet quality, equipment and management will influence actual feed consumption. It is the responsibility of the manager to adjust the feed allotment to attain the indicated weights and gains.

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