Chick management

D F. Hessels
IMPORTANT DISCLAIMER

This document has been obtained from DAFWA's research library website (researchlibrary.agric.wa.gov.au) which hosts DAFWA's archival research publications. Although reasonable care was taken to make the information in the document accurate at the time it was first published, DAFWA does not make any representations or warranties about its accuracy, reliability, currency, completeness or suitability for any particular purpose. It may be out of date, inaccurate or misleading or conflict with current laws, polices or practices. DAFWA has not reviewed or revised the information before making the document available from its research library website. Before using the information, you should carefully evaluate its accuracy, currency, completeness and relevance for your purposes. We recommend you also search for more recent information on DAFWA's research library website, DAFWA's main website (https://www.agric.wa.gov.au) and other appropriate websites and sources.

Information in, or referred to in, documents on DAFWA's research library website is not tailored to the circumstances of individual farms, people or businesses, and does not constitute legal, business, scientific, agricultural or farm management advice. We recommend before making any significant decisions, you obtain advice from appropriate professionals who have taken into account your individual circumstances and objectives.

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia and their employees and agents (collectively and individually referred to below as DAFWA) accept no liability whatsoever, by reason of negligence or otherwise, arising from any use or release of information in, or referred to in, this document, or any error, inaccuracy or omission in the information.
AUGUST is the month when most poultry farmers get their chickens. Special attention will be needed in the coming weeks, with nutrition and disease prevention the main considerations.

The Ration:
Chicks require a balanced ration containing all the essential nutrients.

These three rations are successfully used in the industry for pullet chickens from 0 to 18 weeks:

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>0-8 Weeks</th>
<th>9-12 Weeks</th>
<th>13-18 Weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bran</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Pollard</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Finely gristled Oats or Barley</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Gristed Wheat</td>
<td>60</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Whale Meal (60% Protein)</td>
<td>6</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Meat Meal (50% Protein)</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Buttermilk Powder or Skim</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Milk Powder</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dried Brewers Yeast</td>
<td>3</td>
<td>3 4/5</td>
<td>4</td>
</tr>
<tr>
<td>Bone flour</td>
<td>3 4/5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Synthetic Riboflavin Mix-</td>
<td>(a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ture (a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamins A and D₃</td>
<td>(b)</td>
<td>(b)</td>
<td>(b)</td>
</tr>
<tr>
<td>Common Salt</td>
<td>1 level</td>
<td>1 level</td>
<td>1 level</td>
</tr>
<tr>
<td>Manganese Sulphate</td>
<td>1 level</td>
<td>1 level</td>
<td>1 level</td>
</tr>
<tr>
<td>Totals</td>
<td>126 lb.</td>
<td>122 4/5 lb.</td>
<td>119 lb.</td>
</tr>
</tbody>
</table>

(a) The synthetic riboflavin mixture is made by thoroughly mixing one four gramme packet into 16 lb. of pollard. Make a premix and then gradually break it down with the 16 lb. of pollard.

(b) As recommended by the manufacturer. After 18 weeks a layers' ration is recommended.

NOTE: Good quality greenfeed should be fed to the chickens at all ages, but a certain level of a Vitamin A feeding supplement should also be included in the mash at all times.

Vaccination After-Effects:
Where chicks have been vaccinated at one day old it is advisable to supplement the chicks' ration by:—
• Including a water soluble Vitamin A in the water at half the level recommended by the manufacturer in addition to the normal Vitamin A in the feed, from the second to the 20th day. Clean water is given for the first day as the slight film on top of the water, caused by the Vitamin A supplement, might prevent the chicks from finding the water.

• The systemic reaction from day old vaccination is sometimes quite severe and can be noticed from the eighth to the 20th day. The symptoms are drowsiness, ruffled feathers, loss of appetite, lesions on beaks, legs and around eyes and in severe cases some mortality. If these symptoms are noticed, a water soluble anti-biotic should be included in the drinking water at full strength for four days and at half strength for the next four days.

Where farmers allow the chicks to roam outside the brooder shed at an early age, it is advisable to keep the chicks inside until after the systemic stress period (20 days.)

Grit is Essential:

Some farmers tend to forget one of the most essential requirements of chicks reared under artificial conditions. Chicks are not capable of grinding their food without coarse clean sand and blue metal to assist the gizzard in grinding up the food particles. Chicks should therefore have access to clean coarse sand for the first week, 1/16 in. blue metal up to 10 weeks and 1/8 in. blue metal from 10 weeks of age onwards.

The absence of grinding material often leads to a high incidence of coccidiosis as the intestinal wall of the chicks is damaged by the undigested fibrous particles of the ration. Feed efficiency will also suffer as some of the feed is only partly digested.

Diseases:

Although some farmers are not troubled by coccidiosis it is a generally recommended practice to include a coccidiostat in the ration until the birds are 12 weeks of age.

Where farms have had outbreaks of uricaemia in the past, a one-half per cent. level of Potassium Sulphate or Potassium Citrate can be included in the ration.

De-worming:

All chicks should be de-wormed at 10 and 18 weeks of age, preferably through the drinking water.

12-Week Vaccination:

Fowl pox vaccination if not done at day old should be carried out at 12 weeks of age. The systemic stress period for birds done at 12 weeks is between 14 and 21 days after vaccination. If birds are observed closely during that period a slight decrease in daily consumption can often be observed. Feeding of wet mash will usually overcome the decrease in consumption, and if the flock is severely affected, treatment with an antibiotic and additional Vitamin A should be included in the diet.

MANAGEMENT OF LAYING FLOCK

Egg production usually declines in birds which have been under lights during autumn and winter. Egg prices are lower and flocks should therefore be culled more severely.

Culling:

Second year hens laying at 35 per cent. would at present only be breaking even if their consumption was approximately 5.5 oz. of food per bird per day. They should be culled and only the very good producers kept for a few more weeks.

De-worming:

Where a few years ago birds were de-wormed by drenching with carbon-tetrachloride only twice (10 and 18 weeks) during their lives, it is now possible to de-worm the flock more often, as de-worming with piperazine does not cause a drop in production.
The complete cycle of the round worm (*Arcaridia galli*) is 90 days and the appropriate time to break this cycle is between 60 and 70 days. It is therefore recommended that all flocks be regularly de-wormed at 60 to 70 day intervals.

**Deep Litter Management:**
Management of deep litter during the wet winter months is often very difficult and break down of the litter can cause enteritis and unthriftiness due to the release of ammonia fumes.

Most farmers have successfully used lime to dry out the litter. This practice however, will release more ammonia which is detrimental to the flock's health. Superphosphate, at the rate of about \( \frac{1}{4} \) lb. per square yard should be used instead of lime. Superphosphate is hygroscopic (water absorbing) and will also bind the nitrogen in the litter and form a stable phosphate. Litter treated this way is a better fertiliser due to its higher nitrogen and phosphate content.

---

**CHICK SEXING EXAMINATION**

An examination in chick sexing will be held at the Department of Agriculture, Jarrah Road, South Perth, on Thursday, September 27, commencing at 7 p.m.

**Applications will close on Monday, August 20.**

A special certificate will be given for sexing 300 day-old chickens in 45 minutes with an efficiency of 98 per cent. and over. A first class certificate will be given for sexing 200 chickens in 30 minutes with an efficiency of 95 per cent. and over, and a second class certificate for sexing 100 chickens in 20 minutes with an efficiency of 90 per cent. and over. An injured chicken will count against the candidate the same as a chicken which has been wrongly sexed.

The chickens will be supplied to each candidate by the Department and will cost £7 10s. a hundred.

The money for these chickens together with an application fee of 2s. 6d. must accompany each application.

The applicants for the examination should bring a box in which to deposit the chickens after sexing. A receptacle for bowel deposits after emptying must also be supplied by the applicant.

Chicken sexing lamps with electrical fittings for either two or three point plugs must be supplied by the applicant.

The standard of chicken sexers in Western Australia is high and there are still many positions available for qualified sexers.
BOOKS FOR THE MAN ON THE LAND

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Animal Production</td>
<td>C. P. McMeekan</td>
<td>36.6</td>
</tr>
<tr>
<td>Easier Shearing</td>
<td>Barnes</td>
<td>11.0</td>
</tr>
<tr>
<td>Wool Away</td>
<td>Godfrey Bowen</td>
<td>23.6</td>
</tr>
<tr>
<td>Grass to Milk</td>
<td>McMeekan</td>
<td>45.0</td>
</tr>
<tr>
<td>The Australian Dairy Industry</td>
<td>Drake &amp; Edwards</td>
<td>84.0</td>
</tr>
<tr>
<td>Practical Sheep Farming in Australia</td>
<td>J. W. Jordan</td>
<td>63.0</td>
</tr>
<tr>
<td>Animal Breeding</td>
<td>Allan Fraser</td>
<td>33.3</td>
</tr>
<tr>
<td>Agricultural Science</td>
<td>Aitken &amp; Tulloh, Tribe &amp; Wilson</td>
<td>40.0</td>
</tr>
<tr>
<td>Soil Conditions &amp; Plant Growth</td>
<td>Russell</td>
<td>95.9</td>
</tr>
<tr>
<td>Australian Agriculture</td>
<td>Imre Molinar</td>
<td>110.0</td>
</tr>
</tbody>
</table>

We will gladly send any books on approval for 14 days.

WHITCOMBE & TOMBS PTY. LTD.
GENERAL & TECHNICAL BOOKSELLERS
95 William St. and 596-598 Hay St., Perth.

DAY OLD CHICKS

Australorp, First Cross, Kriss Kross, White Leghorns, Rhode Island Red.

All chicks hatched are from our own trapnested and progeny tested stock.

STARTED PULLETS
Price List on request.

WEXHAM HATCHERY, Epsom Avenue, REDCLIFFE, 6 5543.
WEXHAM POULTRY STUD, Berkshire Road, FORRESTFIELD.

SHADE TREES for Farms!

Choose from the wide variety available, including—

- Eucalypts
- Mahogany Gums
- Sugar Gums
- Peppers for Inland Areas

MANY OTHERS ALSO

DAHLIA LIST now available—Write for Catalogue and List of quotations

Still time to plant Fruit Trees this year!
Plant now! . . . end of August is the deadline
Full Range of Deciduous Fruit Trees Available
Also: Flowering Peaches, Cherries, Plums, Almonds.
Garden Shrubs and Trees in a huge range
In addition to Standard Size Plants in Pots we have 15,000 extra large shrubs growing in kerosene tins

Write for Catalogue which is Free and Post Free

74 Barrack St., Perth, 23 3048 (3 lines)
102 High St., Fremantle . . . 5 2447

Please mention the "Journal of Agriculture of W.A." when writing to advertisers