




POULTRY NEWSLETTER

NO. 48, JUNE 1989

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QUAIL MEETING (FRIDAY 25 AUGUST 1989)

QUAIL - A RAPIDLY DEVELOPING INDUSTRY IN VICTORIA

This meeting has been organised in response to the Department of Agriculture and Rural Affairs publication "Production and Marketing of Quail in Victoria". Future directions for the quail industry will be discussed.

DATE: FRIDAY 25 AUGUST 1989

TIME: 7.00 PM

PLACE: Egg Farmers of Victoria Auditorium,
Cnr. Chandler & Kirkham Roads, Keysborough

COST: \$5.00 - includes refreshments and a copy of the publication "Production and Marketing of Quail in Victoria".

PROGRAMME

7.00 - 7.30	INSPECTION OF THE TRADE DISPLAY
7.30 - 8.10	"PRODUCTION METHODS TO MAXIMIZE PROFIT" Mr John Dark, Poultry Officer, Department of Agriculture and Rural Affairs
8.10 - 8.50	"SELLING MORE QUAIL - BUILDING A BIGGER MARKET" Mr Laurie Miller, Statewide Industry Officer, Department of Agriculture and Rural Affairs
8.50 - 9.30	"WORKING TOGETHER TO BUILD A STRONG QUAIL INDUSTRY" Mrs Judy Backhouse, Marketing Adviser Department of Agriculture and Rural Affairs
9.30 - 10.15	Informal discussion and further inspection of the trade displays over coffee/tea
10.30	Close

Further information: Mr John Dark (03) 651 7859

This is a joint WPSA - Department of Agriculture and Rural Affairs meeting.

AN OATS INDUCED PAUSE IN LAYING
IMPROVES EGG PRODUCTION AND SHELL COLOUR

The high nutritional quality and versatility of oats as a cereal food for humans and animals is now well known. We have found that oats can also be used effectively to induce a pause in laying in ageing brown-egg layers.

Egg production was halted in 6 days in 68-weeks old hens given only whole oats without any restriction of either water consumption or daylength. The pause in laying lasted for 8 to 9 days after the oat-feeding period of 7 days. A normal laying diet was given to the hens at the end of the oat-feeding period. The hens resumed laying after the next period and reached a 50% level of production in about 15 days after the normal laying diet was given.

It was found that the hens given a rest from egg production outperformed those not given a rest both in terms of egg numbers and egg quality. The rested hens as compared to those not rested laid 14 more eggs per hen and the eggs had thicker shells and better albumen quality. An interesting finding was the darker colour of the shells in eggs laid by the rested hens. This difference in colour intensity was greater than 10% during the first 6 months of lay after the pause.

The advantages of the oat-feeding method of inducing a pause in laying are:

- * short duration of the non-productive period (about 15 days)
- * minimum loss of bodyweight (about 17%)
- * partial moult of neck and body feathers only
- * no increase in food intake in the post-moult laying period.
- * no increase in the mortality rate.

For further details see paper in British Poultry Science, Volume 30, pages 271 - 278

(1989).

H KARUNAJEEWA

Research Scientist

ARI Werribee

ERRATA

An article on page 3 of the previous newsletter was written by Dr H Karanajeewa. It was carelessly proofread and the last paragraph should read as follows:

The higher energy diets also improved feed conversion efficiency by 9 percent. In a recent study, Dr M W McDonald of the Queensland Agricultural College has found that profits from egg production were higher on high nutrient density diets with 11.80 MJ/kg than on diets with only 11.57 MJ ME/kg.

It is suggested that to maximise the laying performance of hens, the energy content of high-protein mash diets in particular, should be increased to about 11.8 MJ/kg. This could be done by including high-fat feed ingredients, such as full-fat soybeans, tallow or vegetable oils and rice pollard.

As Hector points out 'profits are not necessarily higher on high protein diets'.

POULTRY HUSBANDRY BY HOME STUDY

Do you already work in the poultry industry? Or would you like to work in either the chicken or game-bird industries?

If the answer is YES to either question, or you are just interested in poultry, then the McMillan Poultry Husbandry Course by home study is for you.

This course emphasises the technical and practical details of poultry husbandry. It will involve you in about 160 hours of work at home throughout the year. There will also be a number of workshops that you can attend.

COST:

The fee of \$160 covers the cost of all home study units, including mailing.

HOW TO ENROL:

For further information or to enrol, contact:

Philip Darton
Rural Education Officer
VCAH-McMillan
South Road
WARRAGUL VIC 3820

Telephone (056) 23-5366

EGG SYSTEM CHANGES

Legal changes have been introduced to help Victoria's egg industry meet a possible challenge from New South Wales producers.

Minister for Agriculture, Barry Rowe, said the changes would put Victoria in "peak condition" to meet competition if the NSW egg marketing system was deregulated or collapsed under its own weight.

The changes were a response to criticisms of egg marketing arrangements in Victoria by the Prices Commissioner and the Public Bodies Review Committee.

Changes in the Egg Industry Bill introduced into Parliament last week included:

The maximum farm quota will be increased from 10,000 hens for individuals or 40,000 for a family farm to 80,000 hens.

Exemption from licensing and quota requirements will be extended from producers keeping less than 20 to less than 50 birds.

The hen quota tender pool will be abolished and free trading in quotas allowed. Leasing of quotas will also be permitted.

The Victorian Egg Marketing Board will be expanded and accountability to both industry and government improved.

The Board will no longer be permitted to cross-subsidise the disposal of unprofitable surplus eggs by an industry wide equalisation levy, and will be able to pay producers different prices according to the end use of their eggs.

Compliance with the relevant code of practice under the Prevention of Cruelty to Animals Act will now be a condition of license as a poultry farmer.

An egg prices review panel, with the prices commissioner as chairman, will be established. The role of producer agents will be expanded allowing agents to grade, pack and market their own as well as other producers' eggs, thereby introducing competition to marketing.

(These agents would be free to undertake commercial initiatives, developing their own brands, packaging, marketing and advertising strategies).

A review of Victorian egg marketing arrangements and progress towards eventual abolition of quotas will be held in 1994.

The industry's current problems were illustrated by the situation in NSW where production was out of hand and consumers were subsidising a multimillion dollar "egg mountain".

Mr Rowe said the disposal of surplus egg production was subsidised by a levy (around 27 cents a dozen), and the NSW egg corporation had accumulated debts of \$30 million.

SOURCE: The Weekly Times, 26 April, 1989.

CERTIFICATE IN FARM MANAGEMENT - POULTRY

Following the successful course conducted jointly by VCAH Longerenong and Australian Poultry at Geelong many people from other areas of the state have expressed interest in participating in a course in their local area.

The Longerenong Campus is now taking expressions of interest from farmers and industry representatives who wish to undertake the certificate course in either the Bendigo or the Metropolitan Area.

The structure of the course is one day per week of roughly 6 hours duration with the main direction of the course reflecting the needs of participants. The areas of Budgeting, Housing, Poultry Science and interest areas such as stress management and legislation would normally be included in the course.

The course length is approximately 160 hours. This includes group participation classes and the home study segment. The course is aimed at people who have spent 5 years in the poultry industry.

Please contact either Mr Tony Muntz or Mr Andrew Almond for further details.

Phone 053 847208

AN APPRENTICESHIP IN POULTRY FARMING

The poultry industry is one of the most technically advanced primary industries in Victoria, but without the involvement of trained young people, its rapid advancement will falter. The apprenticeship in poultry farming has been put together by the industry to offer training for interested young people.

The next intake of apprentices will be in June 1989, with an expected 10 young men and women starting the course. Apprentice applications and enquiries are being taken now.

The response from employers towards supporting the apprenticeship in poultry trades has been very disappointing in 1989 when compared with the successful 1987/88 apprentice enrolments. Many fine young people are presently employed in the industry who would benefit from the skills training the apprenticeship offers and consequently would become more valuable employees.

Poultry farming today is no longer simply a matter of producing meat or eggs for an assured market. Many factors now influence the decisions that are made on the farm, and without a sound basic knowledge of these factors, the enterprise will find it difficult to keep pace with the rapid technological advances within the poultry industry.

Poultry Facilities

In order to provide apprentices with the latest information and technology available in the poultry industry, Longerenong Campus has established state-of-the-art poultry facilities. The campus boasts a 12,000 - bird capacity, controlled-environment, cross flow, chicken meat production shed contracted to Great Western Poultry.

Longerenong also features a new 4,000-bird, controlled environment, hi-rise, commercial egg unit with a producer agents license to supply Horsham with graded eggs. In addition, cage and deep-litter rearing units and incubators for hatching chickens are located on campus.

Group Learning

The apprenticeship covers a broad section of topics within the poultry industry. By meeting as a group, apprentices may share their work experiences while learning about other types of poultry operations from fellow apprentices. Exchange of ideas in a group learning situation allow apprentices to develop strong friendships and a sense of belonging in the poultry industry.

Apprentices will learn the skills required to be proficient in operating in a commercial egg, chicken meat or commercial hatchery unit. On completion of the course, apprentices will receive a certificate of proficiency from the Industrial Training Commission and will become important members of the industry.

Employers wishing to obtain further information can contact Longerenong by writing to:

The Apprenticeship Co-ordinator
VCAH - Longerenong
DOOEN VIC 3401
Phone (053) 847208

POULTRY PRODUCTS ARE CHEAPER (IN TIME) THAN 20 YEARS AGO

Most basic products have fallen in value relative to time worked to pay for them. In 1988 the cost in time for eggs and chicken meat was respectively 2.7 and 2.4 times less than in 1968. In fact, of the 15 grocery products listed in an Age article 22 March 1989, it is calculated that eggs had the greatest relative fall. When chicken meat was included as another item it made third ranking after eggs and butter.

ITEM	PRICE \$		INCREASE % per year	MINUTES WORK		RANK IN TIME 1968:1988
	1968	1988		1968	1988	
EGGS 1 doz	0.62	1.87	10.0	22.7	8.4	2.7
BUTTER 500 g	0.55	1.74	10.8	20.0	7.8	2.6
CHICKEN MEAT 1 kg	1.15	3.94	12.1	41.1	17.3	2.4
SUGAR 2 kg	0.47	1.65	12.4	17.2	7.4	2.3
BACON 250 g	0.54	2.36	16.8	19.7	10.6	1.9
MILK 600 ml	0.11	0.50	18.2	3.9	2.2	1.8
RUMP STEAK 1 kg	2.08	9.19	17.1	75.5	41.2	1.8
SAUSAGES 1 kg	0.62	3.33	22.0	22.5	14.9	1.5
BREAD 680 g	0.14	1.10	35.7	5.0	4.9	1.0

The figures are based on average weekly wages of \$65 in 1968 compared with \$475 in 1988.

JOHN DARK

POULTRY BREEDERS DIRECTORY
 A Resource Guide for Backyard
 Poultry Keepers and Pure
 Breed Fanciers

Compiled by Megg Miller and Julie Riley 1989

The Directory lists names and telephone numbers of Fanciers Australia wide and is available for \$5 from:

Night Owl Publishers PO Box 764 Shepparton Victoria 3630
 057-947263

Poultry Convention Officials in the United States outline "how to's" in responding to animal rights.

The "how-to" list explains how to handle animal rights demonstrations and media questions.

The producer should -

1. notify everyone on the farm of the demonstration and tell employees not to confront the demonstrators or speak to reporters;
2. take no action if the demonstrators are not blocking access to or exit from the farm or are not on the farm;
3. notify the police if the demonstrators are blocking gates and/or are on the farm property; and
4. issue a moderate statement to the media, "redefining" the issue by explaining that the demonstrators are misinformed and that production practices are care-oriented.

A speaker said that producers also must take a stand with reference to demonstrators who block gates or come on property by prosecuting them. He said that the demonstrators do not want to be tied up in a court proceeding or in making financial retribution or serving a sentence. He said that prosecuting will deter property violations.

A producer should not confront demonstrators because confrontation exaggerates the demonstration's importance and leads to undesirable publicity.

A speaker suggested that the producers name one person in the company to be a spokesperson and instruct all other employees and staff to refer reporters to that person. He recommended that the spokesperson be "expert" in the animal care, nutrition and production sectors so that he can provide very credible answers to questions.

He suggested that the spokesperson be well-rehearsed and have prepared statements.

Another speaker outlined several steps that producers can take to defuse the animal rights movement, including:

- . Have clean, well-run operations that portray someone who cares.
- . Practice a good-neighbour policy by belonging to, and speaking to local clubs and organizations so that the consumer public understands animal husbandry. He said that modern production needs to be explained to the public so that "it makes sense to them".

- . Promote agriculture in the schools.
- . Question visitors about what they are interested in finding out and seeing, and why, and screen all job applicants.
- . Establish good security, including locks on buildings and gates, night-lights and watch dogs.

Source: FEEDSTUFFS, March 6, 1989

BUSINESS LICENCE CENTRE
ONE-STOP-SHOP SAVES TIME, MONEY AND THE RUN AROUND

The State Government launched the Business Licence Centre a "one-stop-shop" to assist existing and intending business operators in Victoria to determine what regulatory requirements in the form of licences, registrations, permits, approvals etc, are necessary to conduct a given business activity. It is a world first.

The BLC will eliminate the run-around people would have experienced in the past going from Department to Department to obtain information on licences, permits etc and obtaining the relevant application forms.

Now, anyone requiring this information can simply make one phone call or one visit to the BLC. The BLC will provide the following information on all current Victorian business licences etc.

- . name of the licence,
- . phone number and address of responsible authority,
- . circumstances under which licence applies,
- . licence requirements and documentation required,
- . period of approval and renewal date,
- . assistance available for applications,
- . complaint and appeal processes, and
- . fees and charges.

The new service leads to enormous savings in time and money for business people and much reduced paper work for small business operators and the BLC is expected to save the private sector up to \$7 million a year.

SOURCE: George Cousins
Victorian Business Centre
1st Floor
100 Exhibition Street
MELBOURNE VIC 3000
Phone (03) 650 9655

BROAD-SPECTRUM DISINFECTANT PROVES EFFECTIVE

Bio-Tek Industries, Inc., Atlanta, Georgia, has announced that Tek-Trol disinfectant has proved effective against Mycoplasma galisepticum, Salmonella enteriditis, Aspergillus, Alcaligenes, LT, Reovirus, Adenovirus, AI, IB, Pasteurella, Newcastle, Salmonella arizonae and others. Mycoplasma gallisepticum and Salmonella enteriditis were killed in the presence of 10% blood serum and 1,000 ppm of hard water in order to simulate Tek-Trol's effectiveness under realistic field conditions.

SOURCE: Agribusiness Worldwide Jan/Feb 1989.

BODYWEIGHT THE KEY TO EGG PRODUCTION

Pullet flock body weights are the key to efficient egg production. They influence egg size, egg numbers, flock uniformity and flock mortality.

Breeders have established target weights and uniformity standards for pullet flocks on a strain basis.

The production of pullet flocks which conform to these standards is in many ways dependent upon the facilities available to the farmer and the stockmanship skills applied using these facilities.

Modern engineering advancements have certainly provided improved facilities for farmers to produce superior pullet flocks, but these systems are capital intensive (\$6 to \$10 per bird). Hence the evaluation of the costs and benefits needs to be thoroughly and cautiously undertaken.

The most ill-defined benefit to be derived from these modern rearing facilities is an enhanced capacity to control body weights of pullets. Target weights are also more easily achieved by effective grading of birds, and/or by provision of additional feeding and drinking space.

Potentially, flocks of pullets can be produced with accurate target weights. However evenness or uniformity is not experienced on many Victorian Farms.

With low numbers of underweight and/or fat birds the genetic potential for egg size and numbers can be fully expressed. Improvements in average egg size of 2 grams and egg numbers of 6 eggs per hen seem realistic estimates of potential gains on many Victorian Farms.

For farms considering expenditure on rearing facilities, efforts must be made to evaluate existing systems, both in terms of costs and potential production improvements.

There are several successful systems operating in Victoria at the moment, and visits or advice can be organized if producers are interested.

Dr G PARKINSON 3472322

CHINESE TREATMENT FOR NEWCASTLE DISEASE

A product developed by researchers at the Baiquan Agro-Technical School in China is reported to provide more than an 80% recovery rate in birds infected with Newcastle disease. They report that infected birds recovered three days following inoculation with the compound, code named 85510, and resumed laying.

SOURCE: Poultry International.

TURKEY PECK ORDER CHANGES

The new Secretary of the Australasian Turkey Federation is:

Mrs Judith Leadoux
RMB 6500
BAIRNSDALE VIC 3875
Phone 051-569224.

The outgoing Secretary, Mrs Jan Harris, Mitiano held the position for 7 years and was involved in organizing 6 Annual Conventions. Membership of the Federation stands at 50 and the next Convention is March 1990 at Tamworth.

JOHN DARK.

PETERSIME WINS BELGIUM'S EXPORT ACHIEVEMENT AWARD

Zuite (Olsene), Belgium - Petersime NV, a poultry incubator manufacturer, was awarded the 1988 Oscar for Export by the Belgian Minister of Foreign Trade. The award recognizes exceptional export performance. The company has for the last 10 years exported more than 95% of its production to more than 100 countries.

SOURCE: Agribusiness Worldwide
Jan/Feb 1989.

THIS WEEK IS CHEMICAL AWARENESS WEEK

"Chemical Awareness Week" is being conducted as a component of one of the "Cleaner Agriculture" Agriculture Strategy projects. This is to be an annual statewide activity as part of a program aimed at promoting a responsible attitude amongst chemical users. This year Chemical Awareness Week will focus on chemical use by farmers. The following Agnote has been prepared to assist in the Programme.



agnote

For all districts

Guidelines for storage and disposal of unwanted agricultural chemicals and chemical containers

February, 1989

Order No. 4013/89

This agnote replaces agnote Order No. 2567/84, Agdex 686, and Order No. 3388/85, Agdex 130/686

prepared by the Environment Protection Authority
and the Department of Agriculture and Rural Affairs

These guidelines have been developed to provide advice on the storage and disposal of current stocks of chemicals. They also provide guidance on preventing the build-up of surplus stocks of chemicals.

Chemicals covered by these guidelines include insecticides, fungicides, herbicides, vermin destroyers, molluscicides, growth regulators and nematocides. These chemicals are intended to destroy unwanted plants, animals and insects. If used carelessly they can injure plants and animals that are not pests, and fish and other aquatic life. Manufacturers, distributors and farmers all have an important role to play in the safe management of these potentially hazardous materials. These guidelines focus on one important aspect of farm chemical control, namely the safe storage and disposal of unwanted chemicals and their containers.

It is essential that these guidelines are followed carefully. If unwanted farm chemicals and chemical containers are disposed of carelessly, they can contaminate livestock, produce, and wildlife, as well as being potentially hazardous to anyone who may accidentally disturb a disposal site.

Minimising waste production

The first step in successful management of farm chemicals is to minimise the amount requiring disposal. This not only avoids the difficulty and cost of disposal, but also unnecessary expenditure in purchasing chemicals that are not used.

All users should keep surplus chemicals to a minimum by:

- finding out whether using a chemical is the most appropriate means of dealing with a pest problem;**
- purchasing only the quantity of chemical needed for immediate use, and never more than is needed for the season;**
- mixing only the quantity needed for immediate use. Unmixed chemical can then be stored for use at a later time;**

taking care to avoid spillage during mixing, handling or storage; and,

returning unopened containers to the supplier as soon as they are no longer required.

Storage

Chemicals that are intended for use on the farm, or that are held prior to disposal, must be stored safely and securely to prevent accident. Farm chemicals therefore should:

be stored in a building or cupboard that is reserved for this single purpose and can be securely locked;
never be stored in the same room with food, feed or water;

always be stored in the original labelled container;
be checked frequently for container leaks, tears, or loose lids. Drip trays to contain any leakage are a useful precaution.

Store herbicides separately from other agricultural chemicals, fertilisers and seeds to prevent any cross contamination.

Spillage

If chemicals are spilt:

- keep vehicles, bystanders and animals away;**
- wear appropriate protective clothing;**
- return any uncontaminated chemical to its container if possible;**
- absorb remainder with sand or soil and place all contaminated materials in a clearly labelled container; and**
- store container for later disposal.**

Disposal of unwanted farm chemicals

Despite efforts to keep surplus or unwanted chemicals to a minimum there will still be a need for farmers to dispose of some chemicals, either because:

- the shelf life has passed;
- there is no longer a need for that particular chemical; or,
- the chemical is now prohibited.

All chemicals that are still allowed to be used are hazardous if used or applied carelessly; some more so than others. Some are hazardous because they do not break down rapidly in the environment.

Particular care must be taken to see that such persistent chemicals are stored until there is a collection service in the area, as they require special treatment and disposal techniques. These chemicals include lead arsenate, and mercury-based compounds as well as dieldrin, aldrin and chlordane, which are banned for all agricultural uses.

Unidentifiable chemicals, the container labels of which have been lost or worn, may be hazardous and must be treated as such.

Prohibited chemicals

These chemicals must be stored securely on the farm, until a chemical collection is conducted in the area. Under no circumstances should these chemicals or their containers be used, buried, burnt or emptied into drains or streams.

Other chemicals

Because of the possibility of contamination of livestock or produce, and pollution of groundwater, surface waters or soil, **on-farm disposal of unwanted chemicals is not acceptable.**

By-products from the burning of farm chemicals may have immediate or long-term health effects. **Burning of unwanted chemicals and containers should not be carried out under any circumstances.**

All unwanted chemicals should be handed in to a government collection program or disposed of through a private chemical salvage firm.

Unwanted farm chemicals should therefore be dealt with by:

securely storing them until a chemical collection is conducted in the area. Advice on storage is provided in these guidelines;

using the collection service when it is available; and cooperating with neighbors who may still have a need for the chemicals, so that a surplus is avoided. In such an arrangement, you need to be absolutely certain about the identity of the chemicals and make sure that the chemical is not prohibited.

Surplus spray liquors and container rinsings
On-farm burial should only be considered for surplus spray liquors and container rinsings. **On-farm disposal of undiluted chemicals is not acceptable.**

Where small amounts (up to 40 litres) of surplus sprays or rinsings are to be disposed of:

check the label to see if any special procedures or warnings are mentioned;

choose a burial site located well away from houses, crop growing areas, stock watering places and other sensitive uses;

ensure that there is no danger of flooding, drainage into water courses, or pollution of groundwater (that is, avoid drainage lines and depressions);

construct a pit at least half a metre deep. Line the pit with agricultural lime;

pour wastes into the pit and backfill with soil, being sure to create a mound above the pit to encourage rain run-off from the surface;

fence off the site and identify its location with a suitable sign; and

remember you could be liable for any health or environmental damage that resulted from this disposal operation. So make sure it is done properly and is safe.

Where surplus quantities larger than 40 litres cannot be avoided, please seek advice from the local office of the Department of Agriculture and Rural Affairs or the Environment Protection Authority before disposal.

Disposal of containers

The disposal of chemical containers must be carefully managed to ensure that they do not pose a health or environmental hazard. To dispose of containers:

rinse all used containers at least three times with water, adding rinsings to the chemicals mixing or spray tank;

puncture and crush the containers wherever possible. This may be difficult with plastic containers; and,

Dispose of the rinsed and crushed containers at a municipal tip.

On-farm burial of containers should not be undertaken unless there is no municipal tip readily available in your area.

To dispose of chemical containers safely on the farm:

select a level site with no drainage or seepage into water courses, or ground water, and that is not subject to flooding. Avoid sandy sites; and,

bury the washed, crushed and used containers under a layer of soil at least 500 mm thick.

Containers that still contain chemicals must never be buried on a farm or in a tip.

Further information

Local offices of the Department of Agriculture and Rural Affairs.

Environment Protection Authority Projects Branch
477 Collins Street Melbourne 3000 Tel. (03) 628 5695.

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REPORT TO 21/3/89 - 462 DAYS - 66 WEEKS - PERIOD 12

ENTRY NAME	Breed	Income minus feed chick, costs \$	Increase over period 11 cents	Adult mort- ality to date %	Hen day prodn. to date eggs	Hen housed prodn. to date eggs	Rate of lay period 12 %	Adult feed/ bird from 18 weeks kg	Daily feed intake per bird period 12 g	Feed/ kg egg period 12 kg	Feed/ kg egg from 18 weeks kg	Ave. egg weight period 12 g	Ave. egg weight from 18 weeks g	Egg Grades for period 12 and from 18 weeks				
														67	61	55	49	43
														g %	g %	g %	g %	g %
Hi Chick No. 1	WXNH	7.02	80	6.2	256	246	69	35.6	103	2.32	2.40	64.6	58.2	9.6	18.8	37.2	28.3	6.0
Aztec 101	WXNH	6.92	88	5.2	255	248	70	35.3	94	2.11	2.41	63.9	57.3	33.8	33.5	17.8	1.0	-
Hy-Line No. 2	WXA	6.54	86	4.2	238	234	70	35.6	103	2.31	2.55	63.5	58.4	7.7	15.6	39.1	25.6	6.8
Hy-Line No. 1	WXNH	6.34	76	8.3	248	238	75	36.7	118	2.50	2.55	62.7	58.0	26.9	31.2	30.4	1.0	-
SIRO CT	WXA	6.29	72	10.4	266	253	78	36.7	106	2.23	2.48	60.8	55.8	9.4	18.9	42.2	22.0	4.3
Fantasy No. 2	SYN	6.20	89	15.6	247	228	80	36.9	107	2.10	2.53	64.7	59.2	25.4	34.3	30.2	2.6	-
Fantasy No. 1	SYN	6.02	88	5.2	232	224	69	35.6	102	2.28	2.59	64.6	59.5	6.4	18.9	42.7	23.3	5.0
Development	WXNH	5.67	76	3.1	236	233	61	32.7	90	2.29	2.38	65.0	58.5	18.1	39.6	28.6	3.3	0.9
Fantasy No. 3	SYN	5.61	76	7.3	244	236	70	37.7	114	2.57	2.68	63.5	57.7	3.0	8.9	40.9	32.4	8.8
Aztec 301	WXA	5.51	54	12.5	247	228	70	38.0	116	2.55	2.58	66.0	59.7	11.4	25.9	39.2	9.2	-
Brinkkotter	SYN	5.51	78	4.2	237	229	67	38.4	111	2.50	2.69	66.7	60.5	12.6	21.12	37.4	20.4	4.2
Hi Chick No. 2	WXA	5.32	59	10.4	237	225	65	37.3	104	2.45	2.64	65.4	59.8	36.4	25.8	23.4	0.4	-
Excell	SYN	5.31	64	4.2	223	220	62	35.8	109	2.66	2.69	66.5	59.7	13.6	22.3	36.4	20.7	3.7
SIRO CB	NHXA	5.10	65	13.5	260	241	79	41.9	123	2.46	2.78	63.6	58.1	33.7	32.6	24.0	1.9	-
Hy-Line No. 3	NHXA	4.55	68	4.2	236	233	62	42.5	114	2.83	3.01	65.8	59.9	11.3	20.1	38.2	20.8	6.1
Stewart	WXA	3.01	51	9.4	199	186	53	37.3	108	3.05	3.09	67.3	60.8	34.2	34.5	17.9	3.2	-
TEST AVERAGE		5.68	73	7.7	241	231	69	37.1	108	2.45	2.63	64.6	58.8	9.3	16.1	39.0	25.0	6.8
														27.4	33.6	29.4	3.0	-
														15.9	18.9	34.0	19.9	5.1
														35.1	20.9	19.1	1.6	-
														20.2	22.6	32.8	14.3	3.8
														52.4	23.3	9.6	-	-
														15.4	19.1	37.5	17.6	4.1
														36.8	20.3	21.9	2.2	-
														16.4	21.0	33.0	20.1	4.8
														37.0	32.2	17.8	0.6	-
														8.1	17.4	40.7	23.6	4.5
														25.6	29.0	21.7	2.0	-
														16.0	22.7	37.2	17.1	3.4
														40.9	37.2	13.1	0.6	-
														23.0	21.3	32.1	16.5	3.8
														52.8	24.7	14.7	-	-

Adult mortality to date: Leucosis 0.3%; Cannibalism 2.6%; Ovarian 2.9%; Miscellaneous 2.0% - Total 7.8%
 Costs such as rates, water, electricity, depreciation, labour and interest on capital have not been deducted.

DEPARTMENT OF AGRICULTURE AND RURAL AFFAIRS, VICTORIA
 31ST RANDOM SAMPLE LAYING TEST, BURNLEY GARDENS
 INCUBATION REPORT - HATCHING DATE - 5 MARCH 1989

NAME OF ENTRY	BREED	FERTILITY (%)	HATCHABILITY OF EGGS SET TO HATCH (%)	HATCHABILITY OF ALL EGGS SET (%)	SEX RATIO OF PULLETS (%)	PRICE QUOTED PER 100 PULLETS AT 1,000 RATE (%)
AZTEC 101	WXNH	56	81	45	49	138
AZTEC 202	WXSYN	75	74	56	53	138
AZTEC 401	NHXA	45	75	34	50	138
AZTEC 402	NHXA	32	70	22	51	138
BRINKKOTTER	WXSYN	70	89	63	52	138
FANTASY SILVER DOLLAR	WXNA	74	91	67	49	137
FANTASY SILVER ROCKET	NHXW	77	84	66	53	137
FANTASY HONEY BROWN	NHXAO	70	84	59	46	137
HI CHICK NO.1	WXNH	67	82	55	47	132
HI CHICK NO.2	NHXSYN	84	88	74	51	132
STEWART	WXA	85	92	78	44	130
TEST AVERAGE		66.8	82.7	56.27	49.5	137