DISEASE PREVENTION CHECKLIST

What is your disease prevention score? Use this list to rate your poultry operation. A score of 80 or better is outstanding, 70 to 79 excellent, 60 to 69 good, 50 to 59 just fair, and 49 or less indicates a definite need for improvement.

A. SCORE 5 POINTS FOR EACH "YES" ANSWER.

( ) My poultry farm has only a one-age flock ("all in, all out").

( ) My farm is isolated from other poultry and from aviaries.

( ) My replacement birds are raised in isolation at a separate location.

( ) My vaccination and disease prevention programs are the result of veterinary consultation and are continually updated.

B. SCORE 4 POINTS FOR EACH "YES" ANSWER.

( ) I routinely meet with neighbors who own poultry and other birds to discuss health problems and to plan area disease prevention.

( ) My birds have been effectively vaccinated for each of the diseases prevalent in my area.

( ) I check sources of my replacement stock for disease problems.

( ) I do not purchase hens as a part of my replacement program.
( ) I have someone observe each flock every day for abnormal symptoms and maintain a daily diary of flock health.

( ) I routinely analyze my poultry production, feed consumption, and mortality, records for signs of problems.

( ) Vehicles or people cannot enter my farm or poultry houses without the manager's permission or knowledge.

C. SCORE 3 POINTS FOR EACH "YES" ANSWER.

( ) My poultry housing is animal and wildbird proof.

( ) Houses are thoroughly cleaned and disinfected between flocks.

( ) When vaccines are used, I record the brand name, serial numbers, expiration dates, and how they were used and by whom.

( ) I routinely have birds examined to monitor the health of my flocks.

( ) Trucks for dead birds do not enter my farm.

( ) Dead birds are picked up daily from the houses and stored in tightly closed containers.

( ) I have a farm communications system to minimize the movement of people on the farm.

( ) Service crews working on my farm bathe, put on clean clothing and disinfect all equipment before they enter my farm.

( ) For necessary visitors, I provide clean, disinfected coveralls and boots that do not puncture or tear.

( ) I never place more than one age group in a single house.

( ) My employees do not travel to other poultry premises not under my control.

( ) Filler flats and egg racks are cleaned and sanitized before they are brought onto my farm.
D. SCORE 2 POINTS FOR EACH "YES" ANSWER.

( ) All service vehicles entering my farm are properly sanitized before entry, and the drivers do not enter the poultry houses.

( ) All manure equipment is cleaned before coming on my farm.

( ) Farm employees work only in assigned areas; they do not go to other areas of the farm.

( ) Dead birds are not carried from house to house.

( ) I have instructed my employees and service crews about poultry disease and about vaccination and treatment methods.

E. SCORE 1 POINT FOR EACH "YES" ANSWER.

( ) My employees own no poultry.

( ) Poultry waste from other farms is never spread on fields adjacent to my farm.

( ) I have a continuous program to control mice and rats.

( ) I have an effective fly control program.

( ) All visitors to my farm sign a logbook.

( ) I regularly attend educational programs to keep abreast of new developments.

TOTAL (perfect score - 100)

How did you score? If your total was less than 60, you should take a hard look at your operation. You have too much invested to leave these matters to chance. This checklist is just a start. Add to or change it to make it most useful to you.

But regardless of how well or how poorly you scored, list your weaknesses and, after consultation, establish your own priorities for improvement. Then do something about them!

Poultry Digest, Dec., 1973
STEPS TO REDUCE CRAXS AND EGG BREAKAGE

1. Choose strains carefully. Some layer strains lay better quality shells.
2. Remember age of hens - after 10 months of lay, shell quality is much poorer.
3. Caution workers to be careful. Careless workers cause breakage, some of which is visible only under a candling light.
4. Provide adequate nests - some type of cushion on the lip of cages and roll-out nests may help.
5. Provide plenty of clean nesting material for floor birds.
6. Don't overcrowd cages - if cages are not properly supported, bottom of cage may have too much slope.
7. Collect eggs several times per day - collect on flats if possible. If baskets are used, don't fill over two-thirds full.
8. Use sound egg cases - craxs and breakage can be 12 times as high in poor cases.
9. Don't allow work areas and doorways to become cluttered.
10. Keep carts, washers and other equipment in good working order.
11. Don't allow laying house temperature to go over 90 degrees F., if possible.
12. Keep waterers clean. If birds have digestive upsets, shell quality deteriorates.
13. If egg breakage and poor shell quality are problems, consider adding calcium, vitamins and drugs to feed.
14. Do not use live vaccine after birds are 16 weeks of age.
15. Do not frighten birds.

Poultry Digest, March, 1971
COMING EVENTS - DATES TO REMEMBER

1. ALBERTA TURKEY PRODUCERS' ASSOCIATION MEETING, June 18/75, Red Deer

2. ALBERTA POULTRY HATCHERY ASSOCIATION MEETING, June 20/75, Red Deer

[Signature]

G. E. Patsula, Poultry Supervisor
O. S. Longman Building
6909 - 116 Street
EDMONTON, Alberta
DO YOU HAVE A DISPOSAL PIT?

How do you dispose of your dead chickens? On the manure pile? Fed to cats and dogs? In the gully, where rain, snow and spring run off can pollute streams and water supplies? Or maybe thrown at the local dump where mosquitoes, flies and mice can spread diseases from them!

The disposal of dead birds is a problem on all poultry farms. Sanitary disposal of dead birds is essential in controlling diseases such as Mareks, Fowl cholera, Coryza and many other infectious diseases.

ESTIMATING DEAD BIRD VOLUME

Mortality on most farms run about 1% a month. These birds die because they are usually sick and unhealthy - not because of old age. Thus prompt and proper dead bird disposal is essential and a must on all poultry farms. With an average mortality of 1% a month, how many lbs. of dead birds a day do you have on your premises? FIGURE IT OUT - it's shocking, especially if you're "just throwing them away".
DISPOSAL METHODS

Methods of disposing of dead birds are as follows:

1. Disposal pit
2. Incineration
3. Disposal by burial in trenches or landfill
4. Rendering
5. Maceration
6. Fertilizer plants

Disposal by incineration is excellent for large poultry flocks. If incineration is used, the incinerators should be equipped with afterburners. Odours from incinerators can be very objectionable; therefore, they should also be placed on the lee side of the dwellings. There are many commercial incinerators available.

The disposal pit is readily suitable for most poultry flocks in Alberta. Disposal is easy - just drop them in; flies are eliminated and odour is kept within the pit. Lime enhances decay. The pit should be placed in a well drained area and should not drain toward the water supply. It should also be large enough so as to act as a storage unit during the winter months since cold weather stops decomposition. The following plans of disposal pits and incinerators are suitable for Alberta.

IF YOU HAVEN'T ONE - BUILD ONE!
Locate where there is good drainage away from wells and poultry yards. Keep entrance tightly closed. Control flies in and around entrance pipe. Build two or more pits as needed.

DISPOSAL PITS

NOTE: All lumber for use underground should be pressure treated with an oil-base preservative.
CONCRETE BLOCK DISPOSAL PIT

GRADE LINE

BATTER BLOCK

REINFORCED CONCRETE CAP

BARREL BLOCK

COVER

5'12" TILE

HEIGHT VARIABLE

2'-6"

VARIABLE

DIA.

CANADIAN FARM BUILDING
PLAN SERVICE

DEAD BIRD DISPOSAL UNITS

PLANNED BY

DRAWN BY

CHECKED BY

SCALE 1/2" = 1'-0"

SHEET 1 OF 1

PLAN N

5020
CROSS SECTION OF INCINERATOR
PROGRESS REPORT ON POULTRY RESEARCH

Poultry Branch
Animal Industry Division
Alberta Agriculture

A full program of research on poultry nutrition and management was continued during 1974 at the poultry facilities of the Alberta Department of Agriculture located at Oliver. This program was conducted in co-operation with members of the Poultry Division of the Department of Animal Science at the University of Alberta.

Experiments in progress fall into three main areas. These are indicated by the titles given to the projects which are as follows:

1. The use of faba beans in rations for laying hens.
2. Studies on the use of rapeseed meal from low glucosinolate - low erucic acid varieties of rapeseed on productive performance of different strains of laying hens.
3. The effects of restricted feeding and ration type on the performance of broiler breeders.

A brief outline of the objectives of the experiments and of the experimental set-up being used is given below.

1. The use of faba beans in rations for laying hens.

Since production of faba beans as a crop in Canada might reduce our dependence on imported protein supplements, it seemed desirable that studies should be conducted to assess the use of the beans in poultry rations. The objective of the current experiment is to study the use of varying levels of faba beans in isocaloric and isonitrogenous rations for laying hens.
Rations containing six levels of faba beans (0, 5, 10, 15, 20 and 30%) are being fed to pullets housed in laying cages. Triplicate groups of 84 birds each were placed on each ration. The present experiment will be continued for 12 twenty-eight day periods and will be repeated next year. Records are being kept on mortality, egg production, feed consumption and egg quality.

2. Rapeseed meals from low glucosinolate – low erucic acid varieties of rapeseed in laying rations.

The presence of glucosinolates in rapeseed meals have often been blamed for increased mortality that may occur if high levels of rapeseed meal are included in rations for laying hens. In addition observations in the field and a limited amount of experimental work have suggested that level of mortality may be influenced by the strain of birds being used. With the development of new low glucosinolate varieties of rapeseed, it seemed possible that higher levels of rapeseed meal might be included in rations for all strains of laying chickens. Consequently, an experiment was initiated to study the use of rapeseed meal from a new low glucosinolate – low erucic acid variety of rapeseed in rations of 2 strains of White Leghorns commonly used in Alberta. One of the strains (Strain A) reputedly is able to tolerate higher levels of rapeseed meal than the other strain (Strain B).

In the experiment, duplicate pens of 100 birds from each strain were fed isocaloric and isonitrogenous rations containing either 0 or 10% Tower rapeseed meal. Records are being kept on mortality, egg production, feed consumption and egg quality.

3. Restricted feeding of broiler breeders.

Upon occasion, the performance of broiler breeders in Alberta has not attained the level that has been reported in Eastern prods. and the United States. It therefore
seemed possible possible that differences, if they really exist, might be related to either strain of broiler breeders, restricted feeding programs used during the laying period or the type of ration used for the birds. Traditionally, Eastern Canadian and U.S.A. rations have contained much more corn and soybean meal than those used in Alberta. Consequently an experiment was begun to determine whether strain, ration type or the use of restricted feeding during the laying year would affect the performance of broiler breeders.

In the experiment, two strains of broiler breeders raised on the Hubbard Skip-A-Day feeding and light program are being used. The treatments being imposed in the laying period involve combinations of two rations, (one based on wheat and the other on corn) and two systems of feeding (restricted and full-fed). Duplicate lots of 100 breeders from each strain were placed on each treatment. Records are being kept on mortality, production, feed consumption, egg weight and fertility and hatchability of eggs produced.
As a service to rural Albertans, The Bay, Edmonton is presently co-ordinating a Farmers' Market to provide an outlet to rural producers for the sale of their produce within Edmonton during the months of July, August and September of this year.

At the market, producers can sell:

Fresh Vegetables
Mushrooms (producer grown)
Eggs (inspected and cooled to less than 55. F.)
Cheese (cured 60 days, pasteurized and cooled)
Honey
Birch Firewood
Cut Flowers
Fresh Trout (inspected and cooled to 40. F.)
Poultry (inspected and cooled to 40. F.)
Homemade Crafts

The market is an excellent income opportunity for you, the producer.

Market Locations:

Southgate Farmers' Market
45 Avenue - 111 Street (southeast parking lot Southgate Mall)

Londonderry Farmers' Market
137 Avenue - 66 Street (south parking lot Londonderry Mall)

Market Times and Dates:

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<th>Day</th>
<th>Time</th>
<th>July</th>
<th>Fri.</th>
<th>Sat.</th>
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<tr>
<td>Thursday</td>
<td>6:00 pm - 8:30 pm</td>
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<td>12</td>
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<td>Friday</td>
<td>6:00 pm - 8:30 pm</td>
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<tr>
<td>Saturday</td>
<td>9:30 am - 1:00 pm</td>
<td>24</td>
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<td>Sept</td>
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<td>11</td>
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Market space will be rented at a cost of $5.00 per stand for each day. Stands are approximately 2 1/2' by 8'.
If you are interested in participating in the Edmonton Farmers' Markets or need more information, contact The Bay by phone or mail.

Ron Treiber
Farmers' Market Co-ordinator
The Bay, 10230 Jasper Avenue, Edmonton

Phone: 424-0121 ext. 417

COMING EVENTS - DATES TO REMEMBER


2. 38th Canadian Hatchery Federation Convention, Calgary Inn, Calgary, Alberta, September 30, October 1 & 2.

3. Agriculture Week - Throughout Alberta, October 6 - 10.

G. E. PATSULA
Poultry Supervisor
O. S. Longman Building
6909 - 116 Street
EDMONTON, Alberta
"PEACE" - The Promise of Christmas!

Let us believe in the Christmas promise of "Peace to men of Good Will", and let us strive to be men of good will, so that we may deserve the fulfillment of that promise.

This is the dream which should stir within our hearts at Christmas time, the dream of brotherhood, of love and concern for one another, the dream of real and lasting peace.

Let us continue to build bridges between the difficulties of our industry, and may each challenge serve as a stepping stone towards this achievement.

Greetings of the Season from the POULTRY BRANCH STAFF.

Merry Christmas & A Happy New Year!
SHORTAGE OF BROILER HATCHING EGGS !!

The shortage of broiler hatching eggs plus the 25 - 30% increase in Alberta's broiler marketing quotas over last year emphasizes the need for hatching egg producers to review management practices in the care of hatching eggs. The insufficient supply of eggs is further complicated by shortages in Eastern Canada and the United States.

CARE OF HATCHING EGGS

Source: Poultry Branch, Animal Industry Division
Alberta Department of Agriculture

Each hatching egg contains a potential chick and must be handled accordingly. Eggs must have sound, clean shells, which to a large extent depends on Good Management in the laying house. The following points must be adhered to if maximum performance and results are expected from a breeding flock:

1) KEEP THE NESTS CLEAN AND DRY. Change the litter in nests as often as necessary.
2) GATHER EGGS FOUR TO FIVE TIMES DAILY.
3) DO NOT LET HENS ROOST IN NESTS.
4) COOL EGGS GRADUALLY AFTER GATHERING.
5) KEEP FLOOR EGGS TO AN ABSOLUTE MINIMUM by making the nests easy for hens to get into. Lower some of the nests to the floor the first 2 to 4 weeks of production to get hens into the habit of going into them to lay. Provide partial slatted floors (roosts) over one-half the floor area over which waterers can be located. You may have trouble in getting heavy breeders to use the roost or slatted drooping boards unless waterers are placed over them.
This helps keep floor and litter dry and prevents floor eggs.

6) Store hatching eggs in a CLEAN EGG ROOM where temperatures and humidity can be controlled. Never allow eggs to "sweat".

7) TEMPERATURE AND HUMIDITY recommendations for holding eggs prior to shipment to hatchery are:

<table>
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<th>Temperature</th>
<th>Humidity</th>
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<td>First 6 hours to 10 hours</td>
<td>70°F - 80°F</td>
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<tr>
<td>Storage after 10 hours</td>
<td>55°F - 58°F</td>
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This permits the embryo development to be arrested gradually.

8) EGG FUMIGATION is recommended as a means of increasing hatchability, and as an aid in prevention of many egg transmitted diseases. Eggs should be fumigated immediately after gathering.

9) FLOOR-LAIRED AND DIRTY EGGS should be separated from clean eggs and NOT KEPT FOR HATCHING as they contaminate clean eggs and lower total hatchability.

10) FOR MAXIMUM HATCHABILITY it is desirable to have eggs set twice weekly or as soon as possible after being gathered. If this is not possible and your hatchery can set only once weekly, your EGG HANDLING PRACTICES, HOLDING ROOM TEMPERATURE AND HUMIDITY are especially important.

11) Pack hatching eggs SMALL END UP. After cleaning and cooling, pack eggs in shipping containers, seal the top and flip the case over. In 1967, F. G. Prowdfoot, Research Scientist, Canada Department of Agriculture, discovered that hatching eggs provide higher hatchability if stored point end up.

12) Dry cleaning of soiled eggs is still recommended. Where EGG WASHERS are used, the following points should be kept in mind:

a) WATER TEMPERATURE must be well above egg temperature. Washers
should be operated between 110 - 115° F.

b) **TIME OF WASHING** should be limited to 2 minutes - never more than 3 minutes. INFERTILE EGGS can result from eggs left in hot water too long due to being partially cooked.

c) **CHANGE WATER OFTEN.** Never use more than one hour in basket type immersion washers. Limit each wash water to 3 baskets.

d) Use an **EGG WASHING COMPOUND.** Washing compounds are balanced with sanitizers and detergents. The detergent acts as a cleaning agent to remove dirt. The sanitizer to kill bacteria. DON'T use ordinary household detergents as they do not have a sanitizer.

e) Where **RINSE WATER** is used, it should be 5° F warmer than the wash water. Use chlorine at 60 p.p.m., not to exceed 75 p.p.m.

f) Cool and dry eggs **BEFORE PACKING.** Packing damp or wet eggs can lead to MOLD and BACTERIA growth and subsequent spoilage.

g) If **IRON** is present at levels of 3 p.p.m. or more, the water should be treated with a water conditioner to avoid egg spoilage.

Improperly washed hatching eggs produce "**EXPLODERS**" in the hatchery incubators. An automatic egg washer is only as good as the operator. If the above points are not strictly followed, these "**EXPLODERS**, infested with bacteria, serve as a potential source of infection to healthy chicks. This is why excessively dirty floor eggs are not recommended for hatching. Even slightly soiled eggs should be separated from clean eggs and washed separately.
BROODING CHICKS ON SHAVINGS WITH SPLINTERS IS A DISASTER!

J. Mangat, Poultry Specialist
Calgary, Alberta

Wood shavings are a common, economical litter used for brooding chicks. The quality of shavings varies greatly depending on the type of wood and the source. A litter containing from 1/4" to 2" splinters in length makes poor bedding material for growing chicks.

At about three weeks of age, chicks start to look unthrifty and uneven in growth. As mortality increases, many chicks have gizzards packed with splinters of varying sizes. These chicks will be thin, pale and show no evidence of disease. The chicks are simply unable to grind up, break down and pass in to the intestine the mass of wood. Death is due to starvation even though feed is available.

A second cause of death is that caused by splinters puncturing the gizzard or stomach. In some instances the splinter is walled off leaving a large, hard cyst on the outer wall of the gizzard. More frequently the splinter completely punctures the gizzard or proventriculus, dumping feed and bacteria into the left anterior abdominal air sac. Infection of the air sac and lung soon kill the chick.

Although the splinter problem is recognized and the litter changed, damage may continue for a considerable time. It is not uncommon to find large splinters causing a problem many weeks after the litter has been changed or the birds have been housed in cages.

Why chicks pick up and eat splinters when feed is available is difficult to explain, except that the chicken is naturally a curious species. Evidence of this can be seen in the wide variety of materials found in chickens during routine autopsy.
Nails, staples, aluminum foil, bits of metal, rubber bands, candy wrappers, wire, glass and even money have been observed in gizzard contents.

What do you do with a batch of splintery shavings? Sell them to a dairyman for bedding if possible or as a last resort use them for litter in the hen house. Hens are better able to tolerate the splinters but even then problems similar to those in chicks will occur.

COMING EVENTS - DATES TO REMEMBER

1. Anyone interested in spending the last week of January in Georgia should get in touch with Rod Chernos, Poultry Specialist at Lethbridge. The Southern Alberta Poultry Council is organizing a tour leaving Calgary on the morning of January 26 and arriving back in Calgary in the afternoon of January 31. The return ticket will cost $303.15, and in addition there will be meals and lodging for 5 days.

Tentatively the tour will take in Tatum Farms, (broilers, broiler hatching eggs, and commercial eggs), the University of Georgia, a large turkey operation and Goldkist Farms who have a killing plant, a beef feedlot, a hog operation and a broiler operation. In addition some time will be spent at the South Eastern Poultry Show and Exhibition which is reported to be the biggest show of its kind in North America. Anyone who wants to get away from snow and winter for a week should contact Rod Chernos right away at Animal Industry Division, Science Building, SS 1, Lethbridge, T1J 4B3, Phone: 328-9633.
2. The 25th annual (silver anniversary) Alberta Poultry Industry Conference will be held February 9 - 12, 1976 at the Palliser Hotel in Calgary.

We have a hot program lined up that is sure to be of interest to all poultry producers and allied industry personnel alike. Several producer groups will hold mini meetings within the Conference time. Alberta Commercial Egg Producers, Broiler Growers Association, Turkey Growers Association, and the Hatchery Egg Shippers Association will be holding group meetings. The Alberta Egg & Fowl Marketing Board will hold its annual meeting.

Topics discussed at the Conference will range from poultry diseases, turkey production, poultry waste disposal and the meat inspection act.

A display of poultry equipment and poultry health products will be set up and the Poultry Industry Council (a co-sponsor) of the Conference will hold its annual meeting. For display space, contact Jim Mangat, Poultry Specialist, Calgary, Phone: 261-6351

Plan now to attend the Poultry Industry Conference February 9 - 12, 1976 in Calgary.

3. **Plebiscite on the Termination of the Alberta Egg & Fowl Marketing Board**

   by

   Tom Sydness, Secretary
   Alberta Agriculture Marketing Council

As a result of a petition signed by more than ten percent of the producers registered with the Alberta Egg & Fowl Marketing Board, the Alberta Agricultural Products Marketing Council will be conducting a plebiscite on the termination of the Plan which established the Egg Board.

All eligible producers in the province of Alberta must register with the Marketing Council in order to be entitled to vote on the plebiscite. A
Registration Form will be mailed to all known eligible producers in the province. A list of these producers will be posted in the local District Agriculturist's office.

In order to be eligible to vote, a person must have been registered with the Alberta Egg & Fowl Marketing Board on November 18, 1975 and not have been granted an exemption from Board regulations. Registration Forms must be completed and returned to the Marketing Council office on or before January 6, 1976.

All eligible producers who register with the Marketing Council will be mailed a ballot which must be completed and returned to the Council office on or before February 4, 1976. Ballots will be counted on February 5, 1976 in the office of the Alberta Agricultural Products Marketing Council.

If any person should have a question regarding the plebiscite, he should contact the Alberta Agricultural Products Marketing Council (Phone: 427-2164, Edmonton).

A further breakdown for the meetings to be held during the Conference are as follows:

Monday, February 9/76
- Alberta Commercial Egg Producers' Association - 1:00 P.M.
- Alberta Poultry Hatchery Association - 7:30 P.M.

Tuesday, February 10/76
- Alberta Egg & Fowl Marketing Board Annual Meeting - 9:00 A.M.
- Alberta Turkey Growers' Association - 1:00 P.M.
- Alberta Broiler Growers' Association - 1:00 P.M.
- Alberta Hatching Egg Producers' Association Annual Meeting - 1:00 P.M.
The hatching egg producers meeting should be very interesting. Representatives from the other Western provinces will be in attendance. The producers would like to form a Western Hatching Egg Producers Association.

Wednesday, February 11/76
- Alberta Poultry Industry Council - 1:00 P.M.

5. Last but not least in February!!

Editor: G. E. Patsula
Poultry Supervisor
O. S. Longman Building
6909 - 116 Street
EDMONTON, Alberta