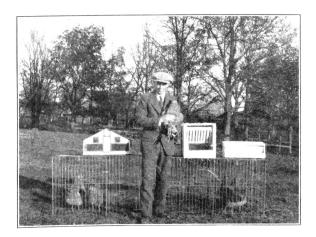
# POULTRY CLUB III The Poultry Breeding Club

Boys' and Girls' Club Circular 17

COLUMBIA, MO.

MARCH, 1926





# COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

University of Missouri College of Agriculture and the United States Department of Agriculture Cooperating
A. J. Meyer, Director, Agricultural Extension Service Distributed in furtherance of the Acts of Congress of May 8. and June 30, 1914

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# POULTRY CLUB III The Poultry Breeding Club

Poultry Club III is a project for groups of five or more boys and girls between the ages of 10 and 21 years who desire to own, breed and manage a flock of high producing fowls.

#### THE POULTRY BREEDING CLUB

**Object.**—The object of the third year poultry club work is to organize boys and girls into groups for the purpose of demonstrating the methods of breeding high producing fowls; and to train the members in rural leadership.

Work Required.—Each member of the third year poultry club is required to raise as many chicks as possible from 10 selected breeding hens that are mated to a certified or pedigreed cockerel.

Records Required.—Each club member is required to keep an accurate record of feed costs, and egg production throughout the year, and also a record of the cost of rearing the chicks, on record blanks provided by the Extension Service of the Missouri College of Agriculture.

Ownership Required.—Each club member shall own, feed and care for a demonstration flock of 10 breeding hens and shall purchase a certified or pedigreed rooster which should cost from \$5.00 to \$10.00, to mate with the hens. If brood coops are not available and must be built, they will cost about \$2.50 each. Whenever practical, the use of a coal stove brooder and colony house is recommended. Additional profits should be received from the sale of hatching eggs from this breeding pen. As many chicks as possible should be raised by this method as foundation stock for the member's certified flock the following year.

Time Required.—Time to feed and care for a club demonstration flock.

Time for attendance to at least six club meetings.

Time to take part in a try-out for the club demonstration team. Time for attendance at the club round-up or achievement exercise at the close of the year's work.

Organization.—The third year poultry club work will extend throughout the year, beginning at the close of the second year's work on November 1, and ending October 31.

Prepared by Berley Winton, Poultry Specialist, in collaboration with Theodore T. Martin, State Club Agent.

It is recommended that the third year club composed as nearly as possible of members who have had the first and second year work. In voting in new members to the third year club, those having had actual experience in rearing chicks and feeding hens should be shown a preference.

# RESPONSIBILITIES OF DIFFERENT PERSONS IN POULTRY CLUB WORK

Annual Control of the			BOOK TO SEE THE SECRET PROPERTY OF THE SECRET	and the second s
Things to be done in the year's pro- gram			Duties of: agent, or project leader, or Co. Supt. of Schools	
Leaders' Planning con- ference.	Place Date	Attend.	Arrange. Notify leaders. Attend. Conduct.	Provide specialist.
Enroll mem- bers to do club work		See parents. Use news- papers. Explain club	Supply leaders with enrollment blanks. As- sist in making financial arrangements, if neces- sary	
Organize club	In Nov. At community center.		club literature. Assist leaders if necessary.	Provide county with club literature.
	To be decided by leader and club.		Attend one or more regular club meetings.	1
	In June or July at community center.	Arrange. Help outline plans. Conduct tryout. Select team of 2 or 3 members.	sary.	Provide county with demonscration score card and suggested outlines
County Fair		hibits and dem. team.	Arrange. Notify leaders. Secure awards. Secure judges. Conduct.	provided, depending
State Fair.		Arrange locally for club.	Notify leaders. Be responsible for county club representation.	
		lect record books. Con-	Present achievement buttons if awarded.	. In agent co. Approve report in agent's office. In non-agent county. Approve reports in state office.

# I. Organization of the Club

Standard clubs are required to hold at least six regular meetings during the club year. These meetings may be held as often as the local club leader and the members desire, however, the meetings usually are held once each month.

Below are subjects suggested for a number of club meetings. It may be necessary to devote two or more meetings to some of the subjects. It is suggested that these subjects be followed in the order named. Local club leaders and clubs are expected to adapt these subjects to local community conditions.

# Suggested Subjects of Meetings for the Club Year

		Page
I.	Organization of the Club	5
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# Suggested Programs for Poultry Club Meetings

- I. Organization of the Club.—Page 3, Club Secretary's Record Book.
- 1. The business meeting—The local club leader in charge.
  - (1) Election of club officers from the membership of the club: President, Vice-President, Secretary, Song and Yell Leader, and Club Reporter.
  - (2) Selection of a name for the club. (It is suggested that the name be selected so as to identify the club and the project).
  - (3) Selection of a time and place for regular club meetings.
  - (4) Setting a club goal.
  - (5) Appointment of a committee to work up or select an appropriate song and yell for the club.
  - (6) Assignment of the 4-H club pledge to be learned by all members before the next meeting.
  - (7) Adjournment of business meeting for instructions in club work.

- 2. Instructions—The local club leader in charge.
  - (1) Explanation of the duties of the club officers and members. Reference: The Club Secretary's Record Book, page 4.
  - (2) Distribution of club literature, and explanation of its use as follows:
    - a. A club circular and a club record book, to each member.
    - b. A club secretary's record book, to the club secretary.
    - c. The club book on songs and yells, to the song and yell leader for the club.
  - (3) Explanation of standard 4-H club requirements.
  - (4) Explanation of club project requirements for Poultry III.
  - (5) Discussion of main club events for the year (See page 3).
  - (6) Stating specifically what each member should do to start the home project work.
  - (7) Assignment of work for the next meeting, including the bringing of record books to the meeting.

### II. Selection and Care of Breeding Flock

- 1. The business meeting. The club president in charge. Reference: Duties of club officers in Club Secretary's Record Book, page 4.
  - (1) Meeting called to order by the president, who leads the club members in repeating the 4-H club pledge as follows:
    - "As a true club member, I pledge my head to clearer thinking, my heart to greater loyalty, my hands to larger service, and my health to better living—for my club, my community, and my country."
  - (2) Roll call by the secretary, the members responding by giving. a progress report of their home project work and by having the club record book in hand for use in the meeting.
  - (3) Reading of the minutes of the last meeting by the secretary, which should be adopted as a permanent record by the club when approved.
  - (4) Old business:
    - a. Unfinished business from the last meeting.
    - b. Report of the committee on club songs and yells.
  - (5) New Business:
    - a. Appointment of a social committee to plan for some games at future club meetings.
    - b. Anything for the good of the club.
  - (6) Songs and yells, led by the song and yell leader.
  - (7) Adjournment for work.
- 2. Instruction and demonstration.—The local club leader in charge.
  - (1) Discussion: Selection and Care of Breeding Flock, page 12.
  - (2) Demonstration practice in selection of breeders.

- (3) Explanation of keeping the record book.
- (4) Assignment of work for the next meeting, including the bringing of record books to the meeting.
- 3. Social hour.—Games, etc.

### III. Location and Types of Laying Houses

- 1. The business meeting.—The club president in charge.
  - (1) Meeting called to order by the president, who leads the club in repeating the 4-H club pledge.
  - (2) Roll call by the secretary, the members responding by reporting on a previously assigned topic and by handing in the record books for use in the club meeting.
  - (3) Reading of the minutes of the last meeting by the secretary.
  - (4) Old business:
    - a. Unfinished business from the last meeting.
    - b. Report of the social committee.
  - (5) New business:
    - a. Appointment of committees.
    - b. Anything for the good of the club.
  - (6) Songs and yells.
  - (7) Adjournment for work.
- 2. Instruction and demonstrations.—The local club leader in charge.
  - (1) Discussion: Location, Types and Requirements of Laying Houses, page 13.
  - (2) Demonstration: Practice in looking over blue prints and plans of different types.
  - (3) Assignment of work for the next meeting, including the bringing of record books to the meeting.
- 3. Social hour-games, etc.

# IV. Bacillary White Diarrhea and its Control

- 1. The business meeting.—The club president in charge.
  - (1) Meeting called to order by the president, who leads the club members in repeating the 4-H club pledge.
  - (2) Roll call by the secretary, the members responding by reporting on a previously assigned topic, and by handing in the club record books for use in the club meeting.
  - (3) Reading of the minutes of the last meeting by the secretary.
  - (4) Old business:
    - a. Report of the social committee.
  - (5) New business:
    - a. \_\_\_\_\_

- (6) Songs and yells.
- (7) Adjournment for work.
- 2. Instruction and demonstrations.—The local club leader in charge.
  - (1) Discussion: Bacillary White Diarrhea and its Control, page 15.
  - (2) Demonstration: Practice in taking blood samples.
  - (3) Assignment of work for the next meeting, including the bringing of record books to the meeting.
- 3. Social hour—games, refreshments, etc.

### V. Artificial Methods of Incubation and Brooding

- 1. The business meeting.—The club president in charge.
- (1) Meeting called to order—members repeating the 4-H club pledge.
  - (2) Roll call—members responding by reporting on a previously assigned topic, and by handing in the club record books for use in the club meeting.
  - (3) Old business:

a. \_\_\_\_\_\_

(4) New business:

a. \_\_\_\_\_

- (5) Songs and yells.
- (6) Adjournment for work.Instruction and demonstrations.—The local club leader in charge.
  - (1) Discussion: Artificial Methods of Incubation and Brooding, page 16.
  - (2) Demonstration: Practice in setting up incubator and brooder stove and disinfecting incubator.
  - (3) Making a study of the record books.
  - (4) Assignment of work for the next meeting, including the bringing of all record books to the club meeting.
- 3. Social hour-games, etc.

# VI. Summer, Fall and Winter Management.

- 1. The business meeting.—The club president in charge.
  - (1) Meeting called to order—members repeating the 4-H club pledge.
  - (2) Roll call—members responding by reporting on a previously assigned topic, and by handing in the record books for use in the club meeting.
  - (3) Old business:

a. \_\_\_\_\_

(4) New business:

- (5) Songs and yells.
- (6) Adjournment for work.
- 2. Instruction and demonstrations—The local club leader in charge.
  - (1) Discussion—Summer, Fall and Winter Management, page 17.
  - (2) Demonstration: Practice in the construction of out-door water appliances.
  - (3) Making a study of the record books.
  - (4) Assignment of work for the next meeting, including the bringing of record books, and each member coming prepared to give an individual demonstration of some practical work that he or she has learned to do in poultry club work.
- 3. Social hour—games, etc.

### VII. Breed Types and Disqualifications

- The business meeting.—The club president in charge.
   Meeting called to order—members repeating the 4-H club pledge.
  - (2) Roll call—members responding by reporting on a previously assigned topic, and by handing in the record books for use in the club meeting.

	the club meeting.
(3)	Old business:
(4)	a. New business:
(5)	a. Songs and yells.

- (6) Adjournment for work.
- 2. Instruction and demonstration.—The local club leader in charge.
  - (1) Discussion: Breed, Types and Disqualifications, page 18.
  - (2) Demonstration: Practice in selecting birds for types and in observing disqualifications.
  - (3) Assignment of work for the next meeting, including the bringing of record books to the meeting.
  - (4) Social hour—games, refreshments, etc.

# VIII. Simple Factors in Breeding.

- 1. The business meeting—The club president in charge.
  - (1) Meeting called to order—members repeating the 4-H club pledge.
  - (2) Roll call—members responding by reporting on a previously assigned topic, and by handing in the record books for use in the club meeting.
  - (3) Old business:
    a. \_\_\_\_\_\_

	(4)	New business:
		a
	(5)	Songs and yells.
	(6)	Adjournment for work.
2.	(1)	ructions and demonstrations—The local club leader in charge. Discussion: Simple Factors in Breeding, page 19. (Poultry Specialist present)
	(2) (3)	Demonstration: Practice in selection of breeding cockerels. Assignment of work for the next meeting, including the bringing of record books to the meeting.
3.	Soci	al hour—games, refreshments, etc.
		IX. Poultry House Equipment
1.	The	business meeting—The club president in charge.
1.	(1) (2)	Meeting called to order—members repeating 4-H club pledge. Roll call—members responding by reporting on a previously assigned topic, and by handing in the record books for use in
		the club meeting.
	(3)	Old business:
		a
	(4)	New business:
		a
	(5)	Songs and yells.
	(6)	Adjournment for work.
2.		ructions and demonstrations—The local club leader in charge.
	(1)	Discussion: Poultry House Equipment, page 19.
	(2)	Demonstration: The construction of nests, feed hoppers, and
	(2)	other appliances.
	(3)	Assignment of work for the next meeting, including the bring- ing of record books to the meeting.
3.	Soci	al hour, games, etc.
1	The	X. Preparing Birds for Exhibition.
1.	(1)	business meeting—The club president in charge.
	(1)	Meeting called to order—Members repeating the 4-H club pledge.
	(2)	Roll call—members responding by reporting on a previously
	(-)	assigned topic, and by handing in the record books for use in
		the club meeting.
	(3)	Old business:
	• •	a
	(4)	New business:
		a. Appointment of committee on club achievement program.

- (5) Songs and yells.
- (6) Adjournment for work.
- 2. Instructions and demonstrations—The local club leader in charge.
  - (1) Discussion: Preparing Birds for Exhibition, page 20.
  - (2) Demonstration: Practice in washing white birds.
  - (3) Assignment of work for the next meeting, including the bringing of record books to the meeting.
- 3. Social hour, games, etc.

#### XI. Public Demonstrations

- 1. The business meeting.—The club president in charge.
  - (1) Meeting called to order—members repeating the 4-H club pledge.
  - (2) Roll call, members responding by reporting on a previously assigned topic, and by handing in the record books for use in the club meeting.
  - (3) Old business:
    - a. Report of committee on the club achievement program.
  - (4) New business:
    - a. .....
  - (5) Songs and yells.
  - (6) Adjournment for work.
- 2. Instructions and demonstrations—The local club leader in charge.
  - (1) Discussion: Public Demonstrations, page 21.
  - (2) Demonstration: Try-out for demonstraion team by individual club members.
  - (3) Selection of demonstration team to represent the club.
  - (4) Final instructions on completion of club record books for the year's work.
  - (5) Final instructions on the club achievement exercise.
  - (6) Instruction to the club reporter on news items for the local paper about the club achievement exercise.
- 3. Social hour—games, etc.

### XII. The Club Achievement Exercise

The club achievement exercise should be held at the close of the work for the club year.

Each club member should hand in to the local club leader the completed record book so that the results of all the work of the club may be summarized for the year in the Club Secretary's Record Book.

At the achievement exercise, each club member should make an exhibit of birds in a home-made exhibition coop.

#### SUGGESTED PUBLIC PROGRAM

- 1. A typical meeting by the club.
- 2. A brief history and a short statement of the club's achievements by a club member or by the local club leader.
- 3. One or more demonstrations by club teams.
- 4. A talk on 4-H club work.
- 5. Awarding a 4-H achievement button, if given, to each member of the club who hands in a completed record book to the local club leader.
- 6. Announcement of club plans for the coming year.
- 7. Adjournment.

#### Suggestions

Only club members who make a complete report or have their records up-to-date, should be eligible to take part in county or state contests.

The event of the club round-up and the results of the club work for the year should be carefully prepared and offered to the local newspapers for publication.

# II. Selection and Care of the Breeding Flock SELECTION OF BREEDERS

During the late summer or early fall each club member should go through his flock of yearling hens and select ten or more of the choicest birds to be used for breeders the following season. This can be done by selecting those birds that prove to be late molters and show that they have been high producers by the absence of the yellow color in the beak and shanks. This color test applies only to the yellow-skinned varieties.

**Vigor.**—Only vigorous, high producing females that are true to type and color and free from standard disqualifications should be chosen.

Every fowl used as a breeder should possess an abundance of constitutional vigor and vitality because this characteristic has to do not only with the health of the individual, but the number of eggs produced, the per cent of eggs hatched, and the health and the growth of the chicks hatched from these eggs. Vigor and the ability to produce a large number of eggs are so closely associated that they may be properly considered together.

The head of a bird is not only an index to her ability to produce winter eggs, but it also shows how persistent and vigorous she is. The head should be clean cut, medium in size, fairly wide and deep, not crow-shaped or too long and not too stubby or short. A long crow-shaped head is generally associated with the lack of vigor and poor laying qualities. A beefy head is generally associated with the disposition to fatten and a low egg production. The eye should be large and prominent. The body should be comparatively deep and wide from front to rear.

The quality of the skin indicates to a great extent the ability which a bird has to make use of its feed. The skin should be soft, pliable and elastic to the touch.

The temperament of both males and females is an indication of egg production. High producing hens and pullets possess an active, friendly, disposition. Whereas, the females and males which have a shy, nervous, cross disposition are generally low producers and inferior breeders.

Broodiness is a characteristic that limits the possibility of high egg production. It can be eliminated from the breeding flock by selecting only the non-broody females for breeders and mating them with male birds that come from such females.

Type and color are inherited and should be carefully considered in the selection of breeders. Only those individuals that are good representatives of the breed and are absolutely free from standard disqualifications should be regarded as suitable for breeders.

Male birds should be selected on the same basis as has been described for the female. In addition to this, all males should be either pedigreed, coming from hens with a yearly trapnest record of at least two hundred eggs or from a selected pen headed by pedigreed male birds, such as are produced by the U. of Mo. certified breeders.

### CARE OF THE BREEDERS

The breeding stock should be fed a well balanced ration throughout the year. A liberal supply of both milk and green feed makes possible a greater percentage of fertile eggs and a higher percentage of livable chicks. They should be allowed free range whenever possible.

# III. The Location and the Types of Laying Houses Location of the Laying House

The best location for the laying house is fairly close to the dwelling house on a loose, well drained soil with a southern or southeastern exposure. A house placed on a heavy, poorly drained soil makes conditions favorable for the outbreak and spread of both contagious diseases and intestinal parasites.

The southern or southeastern exposure will make it possible to construct the house so that the maximum amount of sunlight will enter the house.

### TYPES OF HOUSES

The three distinct types of poultry houses, most common in Missouri, are the half-monitor, the shed-roof and the gable or Missouri type. The kind of house constructed should be determined by the ultimate size of the flock desired and the merits of one type over the others.

The advantages and disadvantages of each of the above types may be briefly stated as follows:

### Half-Monitor Type

- 1. Is difficult to construct.
- 2. Is rather expensive.
- 3. Is unusually hard to ventilate.
- 4. Is not uniform with other farm buildings.
- 5. Its value lies in the fact that a narrow, medium high shed-roof house can be widened satisfactorily.

### Shed-Roof Type

- 1. Is not uniform with other farm buildings.
- 2. Original cost is excessive for each unit of floor space.
- 3. Is very simple to construct.
- 4. Facilitates expansion by constructing additions to the original house.
- 5. Provides for a large amount of sunlight when properly constructed.

# Missouri Type



- 1. The square shape makes it the most economical to build per unit of floor space.
- 2. The maximum amount of light within the house is provided.
- 3. Excellent ventilation without draft is insured.

- 4. The straw loft keeps the house dry and comfortable.
- 5. Time and labor are saved by having feed bins in the loft.
- 6. Old buildings can be remodeled into the Missouir type at minimum expense.
- 7. More dignity is given to the poultry work, because of its uniformity with other farm buildings.

# IV. Bacillary White Diarrhea and its Control THE DISEASE

Bacillary White Diarrhea is a germ disease that attacks little chicks when they are from one to fourteen days old. The mature hen may carry the germs in her body and show no outward symptoms and then pass the germs on to the chicks through the yolks of her eggs. The healthy chick can also pick up the germs from the droppings of an infected chick. This is another reason why the house should be kept as clean as possible.

Bacillary White Diarrhea should not be confused with ordinary chick bowel trouble, which is caused by improper feeding, chilling, and overheating. The amateur poultryman cannot tell the difference between the two forms of diarrhea.

Control.—Bacillary White Diarrhea cannot be cured. The only way to control it, is to dispose of the birds that are diseased. The carrier stage of this disease does not injure chickens for meat purposes.

The only way known to detect the diseased hens is to make a blood test from every bird in the flock. The operation of drawing the blood sample is very simple and does not injure the bird. Anyone who is planning to make the test should write to the Veterinary Department of the Missouri College of Agriculture at Columbia, Missouri. This Department will furnish, upon request, full information regarding the cost, drawing the samples and packing them for shipment.

Generally speaking, it is not recommended that club members should make this test unless they have been having serious trouble in raising chicks from this stock.

Much can be done to prevent disease by thorough cleaning, careful feeding, and proper housing. If the chicks are well fed and kept in a clean well lighted, and ventilated house, they will develop into strong, healthy chicks that are more resistant to disease than improperly fed chicks that have been kept in a dirty, filthy house.

# V. Artificial Methods of Incubation and Brooding INCUBATORS AND BROODERS

Why?—The Poultry Breeding Club members should no longer use the old hen for hatching and raising the chicks. This method is expensive of time, labor and money. The broody hen can be broken up and put back to laying eggs.

The use of an incubator and a brooder stove makes it possible to have the chicks hatched off early and in large, uniform lots. Early hatched well fed pullets mature properly and come into egg prouction when the price of eggs is high. The cockerels can also be brought to broiler weight at a profit.

Reliable machines should be purchased and carefully operated in order to raise and develop the young stock properly.

### FEEDING SCHEDULE†

AGE	GRAINS	MASH	DRINK	MISCEL- LANEOUS
0 to 50 hours 50 hours				A few grains of sand.
54 hours	Chick-food 3 times daily.	Bread crumbs, rolled oats or mash mixed with eggs. Mash, equal parts by weight of bran, shorts	Milk or water	Shade is necessary for growing chicks.
7 to 10 days 21 days.	Same as above Chick-food twice a day	and cornmeal.  Same as above.  Add 10 per cent tankage or meats crap to mash if milk is not fed. Also 5 per cent bone meal.*	possible.	Green food as early as possible. Keep fine limestone grit or fine oyster shell before the chicks.
6 weeks.	Change to coas- er graims			A range which teems with insects and green food
10 weeks to matur-	Same as above	Same as above.	Remember the fresh water	will insure thrifty chicks.

<sup>\*</sup>Feed mash in shallow tray. Keep before chicks one-third of the time.

### RANGE FOR CHICKS

Strong, healthy chicks cannot be developed properly and grown into husky, vigorous pullets and cockerels if they are allowed to range around the old poultry house. This ground, when used by the old hens every day, is contaminated with the germs and very small worms that do not affect the mature stock but are very serious for the young chicks. This makes necessary the use of a portable brooder house. The cost of this house and the moving of it once or twice each year is small when compar-

<sup>†</sup>Experiment Station Circular 133.)

ed to the death loss and stunted growth of the young stock. If it is not possible to move the house to fresh ground the old ground should be covered with unslaked lime and spaded or plowed. Growing a green crop like wheat or rye also helps but even this is not nearly as good as moving the house to fresh ground where chickens have not been raised for the past two years.

The most common diseases that affect the young stock from 3 to 20 weeks of age are worms and coccidiosis. These diseases live over from year to year in the soil or are carried by the old hens. The brooder house should be carefully cleaned with some commercial disinfectant or scrubbed with hot lye water before the baby chicks are hatched. Chicks that are raised on fresh ground and fed according to the following schedule make rapid growth.

# VI. Summer, Fall and Winter Management

Poor management during the growing season will make a cull out of any chicken. Special attention should be given to the growing pullets and to the cockerels which are to be used for breeders. Planty of grain, mash in open hoppers, oyster shell and grit, clean water or milk and shade should be applied in abundance. The chickens should be examined under the wing, on the head, and around the vent for lice. Mites lives on the roosting poles.

Upon the approach of cold weather and before the pullets begin to lay heavily they should be removed to freshly cleaned winter houses. This can be most conveniently accomplished and with the least disturbance to the birds if done at night. Many times it is desirable to cut down the amount of protein feed in the mash and increase the grain in order to get the pullets fat before they begin to lay. After the pullets are placed in winter quarters they should be liberally fed good laying rations.

#### FREE RANGE OR CONFINEMENT

The results secured at the Missouri College of Agriculture and the observations made throughout the state indicate that it is best to confine the laying flock during the fall, winter and early spring months. By following this practice you will be able to keep a closer watch upon your birds, keep them more comfortable, and induce them to eat the maximum amount of mash. All of these factors contribute to a high winter egg production. Birds from which you are saving hatching eggs should be allowed outdoors on sunshiny days.

### **EQUIPMENT**

One large nest and one foot of open mash hopper space should be provided for every five or six hens. Water or milk should be before them at all times.

### MANNER OF FEEDING

The grain should always be given to the birds in a deep litter of straw. Exercise keeps the hens in good health and develops an appetite for more mash, which in turn is responsible for a greater egg production.

The mash should be kept before the hens every day in the year in open mash hoppers.

### SANITATION

The laying and brooder houses should be kept sanitary by the removal of droppings and litter as the latter becomes soiled. The houses should be thoroughly cleaned and disinfected at least twice each year. No feed should be given that is musty or moldy. The chicken range should be cultivated and planted to crops in order to keep the soil sweet and as free from disease germs as possible.

#### THE EGG MARKET

Club members should strive to breed birds that produce large eggs of uniform size, shape and color. The market desires clean, infertile eggs. In order to produce good eggs you must gather them often, store them in a cool, dry, well ventilated place that is free from bad odors and market them at least twice each week during the summer time.

# VII. Breed Types and Disqualifications BREED TYPES

The shape or type of a chicken determines the breed to which it belongs. "Shape makes the breed, and color the variety." One can become familiar with the various shapes of the different breeds by studying the book called the "Standard of Perfection" and observing the best specimens of the various breeds. The Rhode Island Red is brick shaped. The Wyandotte is ball shaped and is termed the bird of graceful curves. The Orpington has the shape of a derby hat turned upside down. (For pictures of breed types see Figs. 7, 8, 9, and 15, Ext. Circ. 8).

# DISQUALIFICATIONS

"A disqualification is a deformity or one or more serious defects that excludes a fowl from an award or score." A fowl excluded from competition is said to be disqualified.

"General disqualifications are those which apply to all varieties and debar the bird from competition." The following disqualifications are the most common: Feathers on the legs or toes of clean shanked varieties; side sprig—a point growing on the side of a single comb; squirrel tail—a tail carried in front of a perpendicular line drawn at the base of the tail; clipped wings; absence of main tail feathers; wry tail; absence of spike in rose comb; birds so small that the weight cut exceeds four points, except in the Asiatic class. (See drawings, page 18, Club Circular 4.)

Each variety has its own special disqualifications. The American Standard of Perfection should be the source of information on this subject as well as breed and variety characteristics.

# VIII. Simple Factors in Breeding

Each member of the Poultry Breeding Club should begin to make a careful study of the art of breeding for vigor, type, color and egg production. It is only through a combination of these factors that the flock will be bred up to the most profitable stage.

It is advisable for the beginner to purchase either hatching eggs or baby chicks from some reliable breeder who has, to a certain degree, combined the above factors in his breeding flock.

The practice of returning to the same reliable breeder year after year for males and other stock should be followed closely. The good breeders keep accurate trapnest records so that they can supply birds which are of the same strain or family, but are not too closely related.

### AGE OF BREEDERS

Hens are generally recommended over pullets for breeders. They lay larger eggs and their chicks are usually stronger. Their egg production as shown by past performance can be more accurately judged. The male bird must be vigorous and healthy. There is very little choice between cockerels and cocks for breeding purposes.

### PROPORTION OF MALES TO FEMALES

The number of males required for the females varies with the different classes of chickens. The following proportions are recommended: American and English classes (Rocks, Reds, Orpingtons) one male to every 12-15 females; for the Mediterranean and other light classes, such as Leghorns and Anconas, one male to every 20-25 females.

# IX. Poultry House Equipment

Every poultry house should be well equipped. Good nests, dropping boards and mash hoppers are very much needed parts of a hen house.

They make caring for the flock much easier. Such equipment can be made at home at a very small cost. Extension Circular No. 151 gives the drawings, the dimensions and the bill of materials for practically all kinds of poultry house equipment. (See Fig. 20, Extension Circular No. 151.)

# X. Preparing Birds for Exhibition SELECTION OF BIRDS

A few weeks in advance of Achievement Day each club member should select a pen composed of four females and one male for the Poultry Club Show. Selection for type can be done best when the birds are on the ground in their natural pose.

The birds selected should be large, active, fully feathered, true to type and color and free from disqualifications. They should be examined very closely for general and variety disqualifications and any broken or off-colored feathers in the soft-feathered section should be removed.

### TRAINING AND POSING THE BIRDS

Club members should handle their birds gently and teach them not to be frightened when any one comes near the coop. A bird should be taught to pose in the attitude that will show it to the best advantage. This can be done best by frequent, gentle handling and by stroking the wattles of the birds with the fingers. (See drawing Page 26 (top), Club Circular 4.)

#### WASHING THE BIRDS

Practically all white birds that are exhibited are washed. A white bird that has not been washed does not compare well with those which have been washed. It is not a difficult task, but the amateur should practice on a few fowls that are not be to exhibited. It is advisable to wash the birds one to five days in advance of the exhibition so that they will be thoroughly dry and in good condition. During the summer months the washing process can be done most easily out in the open. During the cool weather they should be washed in a room where the temperature is from 80° to 90° in order to protect them against taking cold. (See drawing Page 27, Club Circular 4.)

Mr. D. W. Young, a well known White Leghorn breeder, used five tubs in which to wash his birds. His method as briefly given in the "American Poultry World" a few years ago is as follows:

"After confining the bird in an exhibition coop for three or four days in order to get it accustomed to confinement, I take a basin of hot water and soap and scrub with a nail brush his head, comb, legs and feet thoroughly. Next, I take five tubs of soft water, the first being

heated to a temperature of about 110 degrees. Submerge the bird, head and all, in this tub. After the feathers are soaked through to the skin, I take a cake of Ivory soap and rub it well into the feathers until a lather is formed. I am not afraid of using too much soap. After I am sure the bird is clean, I rinse off as much of the suds as possible in this water. Next, the bird is put in the tub number two, in which the water is heated to about 90°, and rinsed well in this. Then put it in tub number three—same temperature—and rinse carefully in this water. Next it is placed in tub number four, same temperature, then in tub number five, which is cold and blued a little more than is ordinarily used in laundry work. After taking the bird out of the last tub, it is placed in a room heated to about ninety degrees, in a training coop about three feet square, with clean-cut straw or shavings for litter, being very careful to keep it clean so that the feathers will not become soiled. Of course, it pays to look after the birds while they are drying as the feathers are liable to become twisted, especially the sickle feathers of the male birds. In about twenty-four hours after this is done the plumage will be in perfect shape and the bird, if naturally white, will be perfectly clean and as white as snow."

It should be stated in this connection that the lather and water are rubbed with the feathers and not against them. For ordinary cleansing, four tubs of water are sufficient. Care should be taken not to use too much blueing in the last tub of water. In case too much is used, the birds will have to be washed over and over again until the blueing is removed. To brighten up the color of the comb, face and wattles, apply with a soft rag a lotion of equl parts of vaseline and alcohol.

# XI. Public Demonstrations

Every Poultry Breeding Club should complete the year's work by giving a public team demonstration. After the subject for the demonstration has been chosen all of the books and bulletins you can get should be studied and a definite outline made for each member of the team. The demonstration outlines suggested in this circular may be followed.

Each team member should become so familiar with the subject that he will use his own language in the demonstration.

In so far as possible, all club members should be instructed in the regular club meetings by the demonstration method. Usually one or more members of each club can give individual practice demonstrations before the club immediately after the demonstration is given by the club leader.

After two or three months of practical experience in handling real things, all mature club members should be able to give public team demonstrations. The scope of the team demonstration usually should be limited to the essential processes of some phase of the club work carried on during the year. A team of two or three of the best demonstrators, according to the number needed, should be selected from the membership of one club, either by competition or by mutual consent. All teams should have an opportunity to demonstrate before the local club group and the people of the home community, and the championship team should represent the local club at the county round-up.

### SCORE CARD FOR JUDGING PUBLIC DEMONSTRATION TEAMS

			Perfect Score	Actual Score
1.	Subj	ect Matter	30	
	(1)	Importance of the subject matter presented and relation to fundamental problems of home or farm.		
	(2)	Accuracy of statements made in oral presentation and proper methods in doing the work.		
	(3)	Completeness with reference to the giving of all steps necessary to clear understanding of process.		
	(4)	Clearness and definiteness of statements made in simple language easily understood.		
	(5)	Replies to practical questions. Judges' questions only should be considered in team scores. Team should give authority for subject matter presented.		
2.	Tear	n Work	20	
	(1)	Preparation, arrangement and use of materials. The team will be responsible for the arrangement and preparation of equipment and its use.		
	(2)	Organization of work, each member in so far as practical to be kept busy with a definite part so that the work and instructions given will proceed without delay, but each member of the team should be able to demonstrate the whole process.		

# SCORE CARD FOR JUDGING PUBLIC DEMONSTRATION TEAMS

(Continued)

	(3)	Appearance and conduct of the team. Appearance and conduct includes the personal	3	
		appearance of the members, and of the		
		team as a whole. They should be business		·
		like, pleasant and so far as possible, a unit		
		in action and appearance.		
	(4)	The team member not actually directing		
		the demonstration should re-inforce the		
		point at hand or at least should not detract		
		from the theme of the demonstration.		
3.	Skill		20	
	(1)	Ease in procedure.		
	(2)	Workmanship and efficiency of manipula-		
		tion.		
	(3)	Neatness and cleanliness in doing work.		
	(4)	Speed, system or dispatch.		
4.	Rest	ılts	- 15	
	(1)	Effect upon the audience, and also upon		
		materials used in the demonstrations, as		
		may be shown in the finished product.	-	
	(2)	All processes made clear.		
5.	Prac	ticability	15	
	(1)	Value of principles given for the home and		
	` '	community.		
	(2)	Actual club practices shown.		
	(-)	Total Score	100	

# SUGGESTED OUTLINE OF A POULTRY CLUB JUDGING DEMON-STRATION

This demonstration is arranged for a team of two members from the same club, designated as "A" and "B".

References: Boys' and Girls' Club Circular No. 4, Missouri College of Agriculture, Columbia, Missouri. "The Judging of Chickens,". Extension Service Circular No. 8, Missouri College of Agriculture. "American Standard of Perfection," by the American Poultry Association, Ft. Wayne, Indiana.

Equipment: Cockerels and several pullets of one breed, a cockerel and pullet from each club member, exhibition coops (home made or otherwise).

The demonstration should be presented in a forceful manner and should be continued with each member working or speaking all the time.

It is suggested that each demonstrator wear a 4-H club cap, made up in national club colors of green and white.

In as far as practicable, members should arrange their own equipment and stage and should clean up after the demonstration.

Time: Fifteen to thirty minutes.

### Procedure

A addresses the audience; makes a brief statement about the club which the team represents, leads in repeating the 4-H club pledge or in giving a spirited club song or yell; and introduces team mate and self.	peating the 4-H club pledge or in giving a song or yell; and stands at attention while being introduced.
A speaks Discusses and demonstrates: 1. How to handle birds. 2. Standard requirements. Standard disqualifications for the variety at hand.	B assists Assists A in demonstrating as he explains the work.
A assists Assists B in demonstrating as he explains the work.	B speaks Discusses and demonstrates: 3. Good and bad types of the same breeds and of different breeds. 4. Places birds and tells why placings are made.
A speaks Gives a brief summary of points made in the demonstration. Asks for questions pertaining to the demonstration. Leads in giving a spirited club song or yell. Thanks the audience for its attendance and attention.	Quietly collects equipment and cleans up the table, if time permits. Stands at attention.  Joins in giving club song or yell. Stands at attention.