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4-H 150
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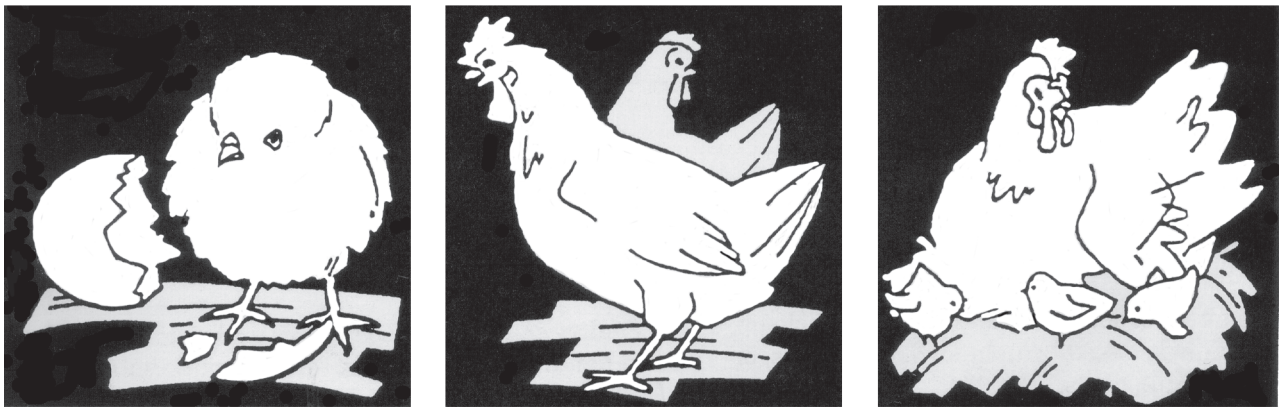

POULTRY PROJECT

4-H Member Guide

Oregon State University | Extension Service

Contents

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Which Came First— The Chicken or the Egg?

It really doesn't matter, because you can learn and have fun with the 4-H Poultry Project studying either the chicken or the egg. You don't even have to own a flock!

Purpose

- Learn how to brood, feed, and care for chickens, turkeys, ducks, geese, guinea fowl, pheasants, or other wild game birds.
- Learn responsibility by having a flock of your own.
- Develop business ability by having a business enterprise of your own.
- Learn how to keep and use records.
- Learn interesting things about poultry.

Advantages

- Oregon's climate is favorable for poultry production.
- Poultry are easier to handle than larger animals.
- Only a small area is required.
- You will gain valuable knowledge of poultry production, which will be helpful if you decide to become a commercial poultry producer.
- There is a very large poultry industry in Oregon and the United States that is always looking for knowledgeable individuals to employ.
- You can help provide food for your family or you can sell eggs and/or birds for income.

Choosing a project

- Identify your objective. Do you want: To have fun? To add to the family food supply? To make money? To explore a career? To have something different for show? To help keep a breed from becoming extinct?
- Determine the space and equipment needed.
- How much money can you invest?
- What are the city and county ordinances where you live? Are there any restrictions?
- If you live in the country, could your poultry project be a partnership arrangement with another 4-H member or a member of your family?

Poultry Production Option

Selecting your project birds

- Day-old chicks are much less of a disease risk than "older" chicks.
- Buy from a reliable source.
- Because you may want only several birds, go to a hatchery to pick them up.
- A list of approved hatcheries is available from the Oregon Department of Agriculture, Salem (see "Resources").

When purchasing chicks, purchase only from producers who participate in the National Poultry Improvement Plan (NPIP). This is a U.S. Department of Agriculture (USDA) program in which all breeders from NPIP flocks are tested for some of the important diseases of poultry. This assures you that the chicks you receive are not infected with diseases.

Chickens

- Family flock project for eggs and/or meat at home. Start with 15 or more chicks and/or 6 or more layers.
- An income-producing flock for home supply and limited sales. Start with 25 pullets or 20 layers.
- Broiler raising for home supply and sale. Start with 50 or more meat-type chicks ready for processing in 6 to 8 weeks.
- Fancy breeds, either large fowl or bantams, can be an interesting hobby or study. Start with a pair or trio of adult birds, or 10 or more chicks.

Ducks or geese

- Start with a pair of ducks/geese, a setting of eggs, or 8 or more ducklings.

Turkeys

- Start with 10 or more poults.

Guinea fowl

- Start with a pair or more or with 8 or more chicks.

Pheasants and other wild game birds

- Start with a setting of eggs or 25 chicks.

Poultry Science Option

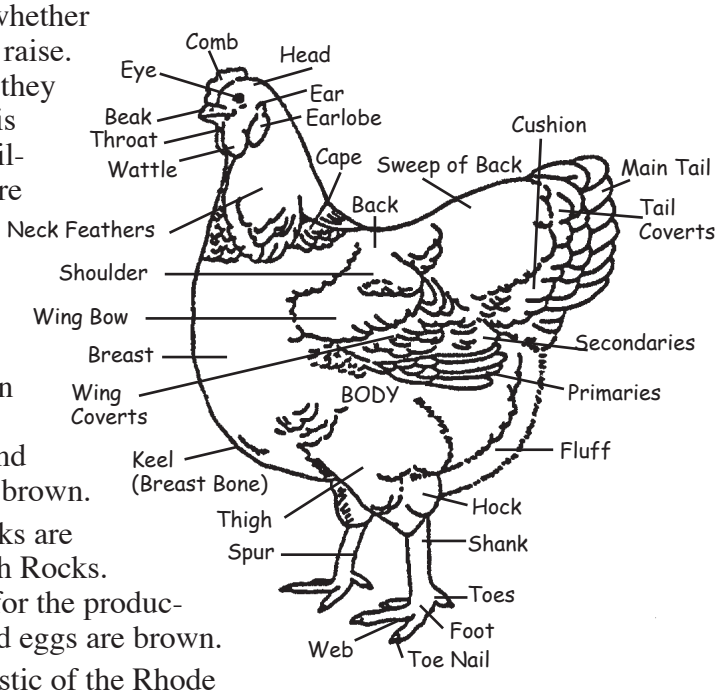
This option includes experiments and study—you'll make things and investigate interesting ideas. You can study embryology, eggs, poultry careers, inoculation, incubation, and bird physiology, or you make a still-air incubator. You also can develop a plan in the 4-H Veterinary Science project with an emphasis on poultry.

Breeds

As a 4-H poultry club member, you have a wide selection of breeds and varieties of poultry from which to choose. There are more than 100 different breeds of poultry, including chickens (large and bantam), ducks, geese, and turkeys, and more than 400 different varieties.

The popularity of bantams has increased tremendously in recent years. Many poultry shows have as many or more bantams than large birds. Bantams are simply small chickens. Some are miniatures of large poultry breeds, while others are found only as bantams and are of a type and color not seen in large chickens. When there are large fowl counterparts, the bantams are about one-fourth to one-fifth the size of the large fowl. Many people who cannot keep large poultry raise bantams, while others simply enjoy raising bantams.

The following lists describe the more common breeds that 4-H poultry project members are likely to encounter and show at county and state fairs. Many of the rare breeds of poultry, whether large fowl or bantam, typically are more difficult to raise. Also, because of the rarity of some of these breeds, they have been inbred to the point where their livability is poor—they lay fewer and smaller eggs, and the fertility and hatchability of their eggs is less than the more common breeds and varieties.



Chickens

New Hampshire. This breed was gradually developed beginning around 1915 from a foundation of Rhode Island Reds. In the past, they have been a very popular, general-purpose utility fowl for egg and meat production. Skin color is yellow, and eggs are brown.

Plymouth Rock. The best-known Plymouth Rocks are the White Plymouth Rocks and the Barred Plymouth Rocks. They are dual-purpose breeds that were developed for the production of both meat and eggs. Skin color is yellow, and eggs are brown.

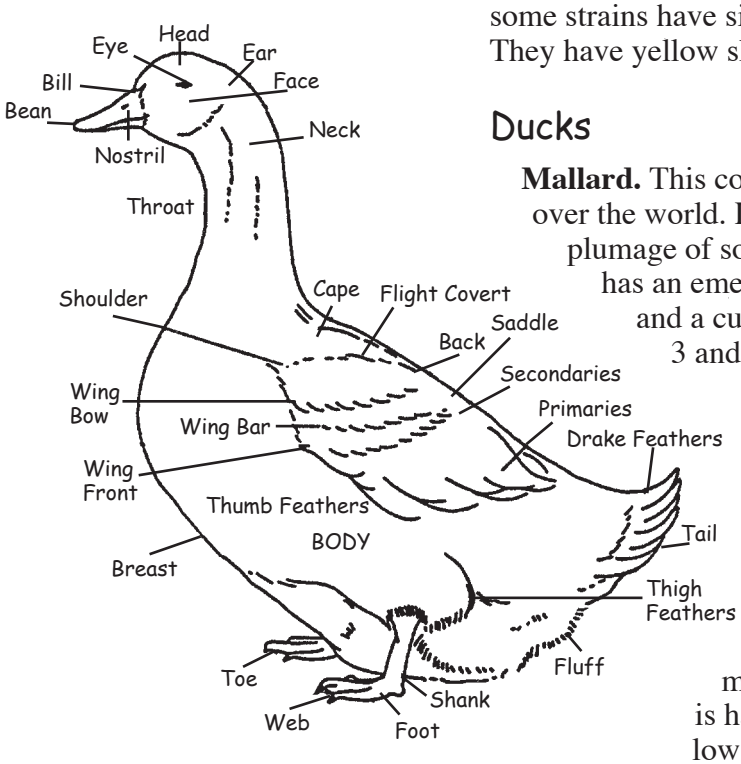
Rhode Island Red. The distinct shape characteristic of the Rhode Island Red breed is the horizontal oblong body. This general-purpose breed is bred for the production of meat and eggs. The color of the skin is yellow. The egg shell color varies from brown to dark brown.

White Leghorn. The single-comb White Leghorn has been the foundation of the commercial egg industry in America. This breed is characterized by great activity, hardiness, and prolific egg-laying qualities. This breed has yellow skin and lays white-shelled eggs.

Cornish. The Cornish breed originated in Cornwall, England. A distinguishing characteristic is that both the male and female body are the same conformation. Both the Dark Cornish and White Cornish are super-heavy meat-producing birds and are valuable for crossing with other breeds for the production of market poultry. The skin is yellow, and egg shells are brown.

Cornish Cross. Although this is not a true breed, it is one of the most common poultry types found in small flocks where chickens are raised for meat production. The bird is a cross started in the 1930s by a breeder in California. The cross was probably the Cornish because of its body type, the New Hampshire for its body size, and the White Plymouth Rock for its white feathers.

Since the original cross, generations of genetic selection have developed a bird that grows very rapidly to a large size (from chick to 5.5 pounds in 6 weeks) and reaches 20 pounds as an adult. This superior growth is accomplished on relatively little feed—only 1.8 pounds of feed for each pound of body weight through about 6 weeks and 5.5 pounds. This bird should be used only for meat production because of its large size. It eats a tremendous amount of feed as an adult and has relatively poor egg production compared with other common breeds. These birds are mostly white feathered; however, some strains have significant numbers of black and brown speckles. They have yellow skin and lay very large, light brown eggs.



Ducks

Mallard. This colorful breed is well-known to duck enthusiasts all over the world. Like most ducks, the hen has a demure plumage of soft browns, buffs, and blacks, while the drake has an emerald head, white belly, russet breast, white collar, and a curl in the tail feathers. A drake will weigh between 3 and 4 pounds (roughly, between 1 and 2 kg).

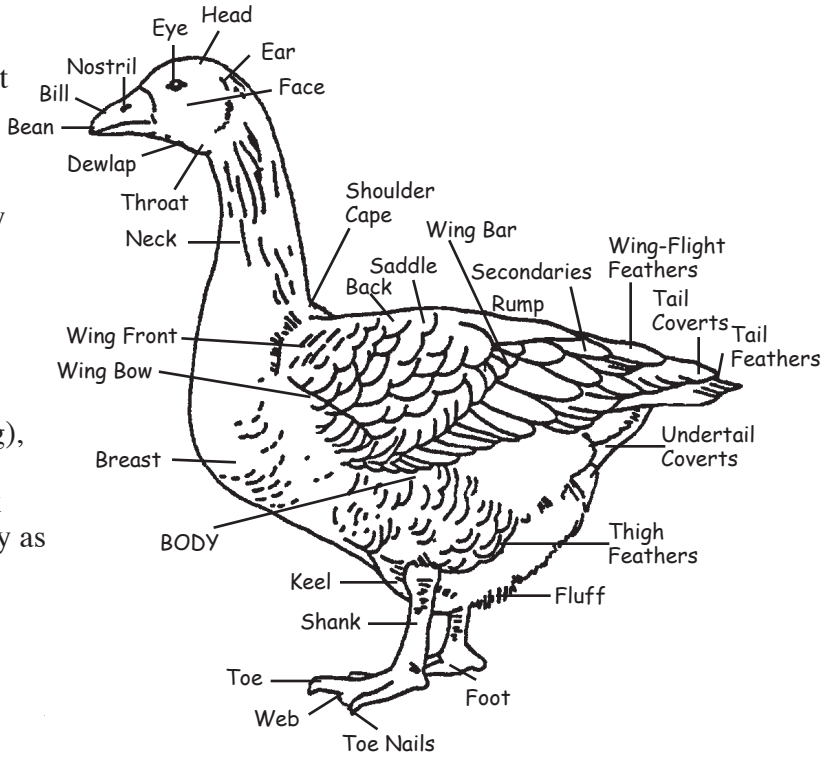
Muscovy. This breed originated in South America. It is a distinct race, and when crossed with other races of ducks, its progeny is sterile. The period of incubation for eggs of this variety is 35 instead of 28 days.

Pekin. A creamy-white bird, Pekin is by far the most popular breed of domesticated duck in the United States and is the breed grown on most commercial duck farms. This large, heavily meated breed is hardy, a fair layer, and easily confined by low fences.

Geese

Emden. While the Emden breed does not appear to be as massive as the Toulouse, mature weights of both adult males and females are very similar to the Toulouse breed. The Emden breed is characterized by pure white plumage, orange bills, and deep orange shanks and feet.

Toulouse. This breed is large, low-set, broad, and massive. The abdomen of a fat bird nearly touches the ground. Adult ganders weigh 25 to 30 pounds (11 to 14 kg), with adult females weighing from 20 to 25 pounds (9 to 11 kg). This breed is a dark blue-gray color, which goes to a lighter gray as it reaches the back. The abdomen is almost completely white.



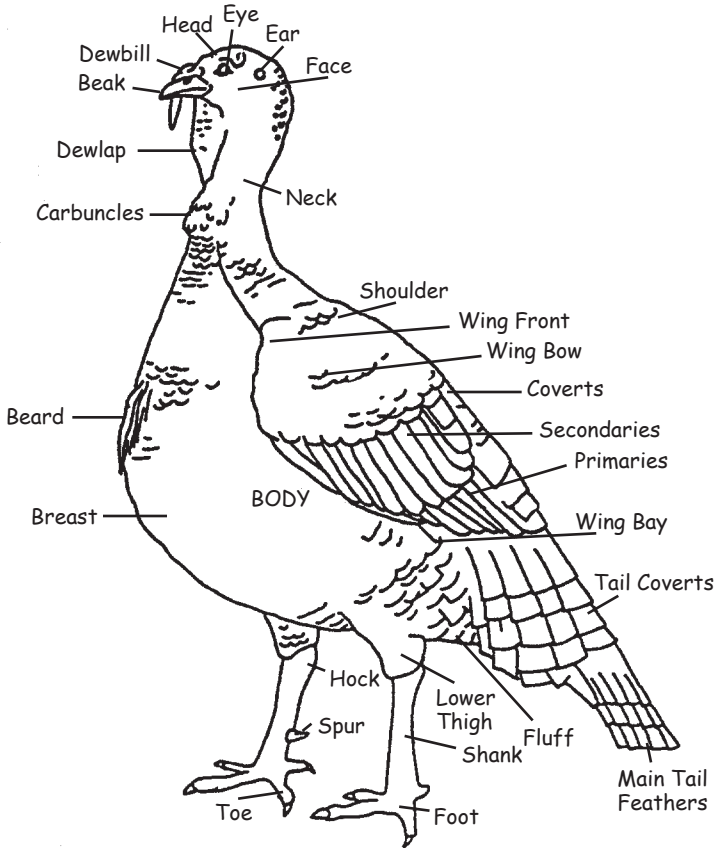
Turkeys

Broad Breasted White. This variety was developed from the Broad Breasted Bronze. It is also a heavy meat-type variety, and is an efficient converter of feed into meat.

Broad Breasted Bronze. This variety originated in the 1930s in the Pacific Northwest. It is characterized by a large, meaty breast. When mature, toms of this breed weigh from 50 to 70 pounds (approximately 23 to 32 kg).

White Holland. This variety also was developed for its meat-producing qualities, but it is not as large or as broad-breasted as the Broad Whites or Broad Breasted Bronze. Several strains are noted for their high egg production.

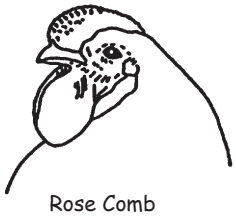
Bourbon Red. This is a very colorful breed with most of its body covered with rich, dark, mahogany-colored feathers. The tail feathers and the primary and secondary wing feathers are pure white.



Combs

Single Comb

Pea Comb



Rose Comb

Health Program

A good sanitation program is essential to a successful 4-H poultry project. Thoroughly clean and disinfect the place in which the chicks are to be brooded at least 1 week before the chicks arrive.

Remove all litter and manure from the previous brood. Scrape or sweep bits of manure and other debris from the sidewalls and floor. Sweep the dust from the sidewalls and ceiling. This is important because one tiny bit of manure can harbor millions of disease-causing organisms for months.

Thoroughly wash the brooding area with water and a good detergent. After the area has dried, disinfect the area with an approved disinfectant (ask your local Extension faculty for advice). Thoroughly wash and rinse all waterers and feeders and set them in the sun. The sun is one of the best disinfectants available, but it must strike all surfaces. Turn the equipment for complete coverage.

Thoroughly clean and disinfect stoves, hovers, and any other equipment to be used in brooding. Place a pan of disinfectant near the door and always step in it when entering or leaving the chick brooding area.

During the brooding period, one of the messiest areas in the house will be around the waterers. Lessen this problem by placing the waterers on raised platforms. Such platforms can be made using 2 x 4s. Cut four pieces of 2 x 4-inch boards into 30-inch lengths. Place the pieces on edge to form a square and nail the corners. This makes a platform 4 inches high and 30 by 30 inches square. Cover with 1-inch hardware cloth or welded wire fabric.

When bringing in new adult birds or returning birds to your flock after showing, it is a good idea to quarantine them for about 2 weeks prior to returning them to the flock. Chickens that appear healthy may be carrying disease organisms from contact with other birds. A quarantine area consists of several small pens that are a distance from your main flock. Care for the quarantined birds *after* caring for the rest of your flock. If the birds in quarantine are infected, they will show signs of disease in 2 to 3 weeks.

Diseases

It is better to prevent rather than try to cure poultry diseases. You can prevent nearly all poultry diseases by following a strict sanitation, feeding, and management program. Always remove sick birds from the flock and give them special attention or kill them. If you suspect a disease outbreak, check with a local veterinarian. If a veterinarian cannot help you, check with the Veterinary Diagnostic Laboratory, College of Veterinary Medicine, Oregon State University in Corvallis or the Oregon Department of Agriculture in Salem.

Common poultry diseases

Coccidiosis is a protazoal disease that is extremely common in young poultry. To prevent this disease, provide your flocks with starter and grower feeds that contain an anticoccidial drug. It is important to maintain a strict sanitation program to prevent the disease.

Marek's Disease is a virus that spreads through the air. It is a common, but untreatable, disease. You can prevent it from your flock by purchasing stock from a reputable source. Always ask for proof that the birds were vaccinated for Marek's Disease. To help reduce the incidence of this disease, follow a good sanitation program and management scheme that does not brood chicks of different ages in close proximity to adult birds.

Parasites

The most common poultry parasites are lice, mites, and worms. Feed stores stock insecticide dusting powders that are effective in reducing or eliminating the louse and mite problem. Check with your local Extension faculty for a list of insecticides approved for use on birds, roosts, and cages.

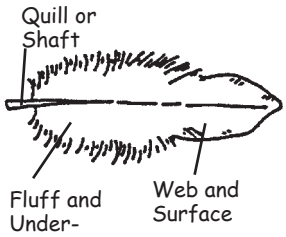
Worms usually are not a problem unless birds are kept in outdoor pens used by previous generations of birds. The problem can become especially severe when winter temperatures have not been very cold or if chickens have access to standing water on the ground. Worms usually require a secondary host such as insect larvae or earthworms to infect a chicken. Chickens with worms may look healthy, but if they eat a lot of feed and remain skinny, their keel bone is more prominant than usual, or you see worms in their droppings, check with a local veterinarian.

Over-the-counter wormers for chickens are available at feed stores. Eliminate most worm problems by keeping birds on wire floors.

Nutrition

Feed young birds a well-balanced ration to promote rapid growth and prevent stunting. Such a ration will contain proteins, carbohydrates, fats, minerals, and vitamins in the proper levels for chickens at certain ages and productive status.

Feathers



Wing

1. Front
2. Bow
3. Bar
4. Secondary
5. Primary
6. Primary Coverts
7. Axil Feather

Proteins

Protein is a nutrient that must be present in adequate amounts in poultry food. Proteins are broken down into amino acids during the digestive process. Amino acids are classified as "essential" or "nonessential." The "essential" amino acids are those that cannot be produced in sufficient quantity in digestion to meet a bird's nutritive requirements. They must be supplied in the diet.

Since most protein sources individually will not supply all essential amino acids, it is common to use combinations of materials containing protein. Common protein sources include meat meal, fishmeal, soybean meal, alfalfa meal, and corn gluten meal.

All feed manufacturers are required to list the percentage of protein contained in their feed on a tag attached to the bag. Always check the feed you buy to sure it has the required protein content. The amount of protein required in the ration varies by species, and in some cases, changes as the birds grow. The chart below identifies poultry feed protein requirements by species.

Approximate protein percentage recommendations

Birds	Starting ration	Growing ration	Laying & breeding ration
Chickens:			
Broiler			
0–6 weeks	21–23		
6–9 weeks		20	
Pullets			
0–6 weeks	20		
6–20 weeks		18	
Over 20 weeks			15–16
Ducks	20	17	18
Partridges	28	22	17
Geese	20–22	15*	18
Guinea	28	22	17
Pheasants	28	22	17
Pigeon			16
Quail	28		
Turkeys:			
0–8 weeks	28		
8–14 weeks		20	
14 weeks to market age		16	
Breeders			14

* After 3 weeks

Carbohydrates and fats

Both carbohydrates and fats serve as sources of energy for the birds. Most grains supply carbohydrates in large amounts but do not contain enough protein, minerals, or vitamins in amounts or quality to produce strong, vigorous birds. Carbohydrates also are found in other ingredients of vegetable origin, such as soybean meal. The most common carbohydrate source in typical poultry diets is corn.

Fats are found in limited amounts in grains, and to a greater extent in some other feedstuffs such as meat or fish meals as well as in pure form. Usually, when fats must be added to poultry diets they are added as either vegetable oils or tallow (rendered animal fat).

Minerals

Minerals are essential inorganic elements, and unless provided in sufficient supply, both egg production and hatchability may drop. Grains, their by-products, and other vegetable feed stuffs are low in minerals and must be supplemented with ingredients of higher mineral content. In nearly all poultry diets, a trace mineral premix is added to meet the birds' mineral requirements.

Vitamins

Vitamins are required in small amounts for normal health, growth, and reproduction. Vitamins essential for viability and growth of chicks include among others Vitamins A, B_{12}, D, riboflavin, and pantothenic acid. As with minerals, a vitamin premix is added to nearly all poultry diets to meet basic needs.

Rations

Commercially mixed feeds usually are the best way to make sure poultry receive a proper balanced diet. Because chicken requirements change with age and productive status, feed names typically reflect the age and production level of the birds. For example, young chicks from hatch to about 6 weeks of age should receive "starter" feeds. Prior to laying—8 to about 18 weeks—feed the birds a "grower/developer" mix. After 18 weeks, feed the birds a "layer" diet.

Birds being raised for meat should be fed a diet that is specifically formulated for meat birds. Scratch is not a balanced feed. Because it usually is cracked corn and wheat, consider it a supplement. The majority of chicken feed on a daily basis must be a prepared ration. Give scratch, table scraps, and garden waste only as 10 to 15 percent of their daily intake, or what they will clean up in 15 minutes.

Today, almost all feed is available in crumble or pellet form. This is the ground feed (formerly called mash) that is formed into a pellet, and sometimes crushed into a crumble. Today, it is very difficult to find rations in mash form.

It is not advisable, and usually not successful, for 4-H members to mix their own feed. Poultry require additional sources of grains and protein because their diets require vitamin and trace mineral premixes. You also must own a grinder and mixer to mix your own feed. If you wish to mix your own poultry rations, visit with your local Extension faculty or the OSU Department of Animal Sciences in Corvallis.

Medicated feeds

Most starter feeds have a coccidiostat added to the poultry ration to prevent coccidiosis. This additive adds little to the cost when you consider the amount of protection it provides. Medicated feeds are developed for young chicks, so keep adult chickens away from these feeds. Also, do not give medicated feeds to laying chickens.

Some companies mix nonmedicated feeds. If you choose these feeds, you can expect a higher mortality (death rate) in your flock. Always follow the manufacturer's recommendations for proper use of medicated feeds

Brooding

The success of your 4-H poultry project will depend on how well you brood and grow your birds. Heavy mortality from disease, chilling, starve-outs, or dehydration are discouraging, but they also result in considerable loss of money. Often these losses can be prevented.

Both the publication *Brooding and Rearing Baby Chicks* (PNW 491) and the "Brooding guide" chart are helpful references.

Brooding guide—Chickens, turkeys, and pheasants

Age	Floor space	Feeder space	Water space	Ventilation room temp.	Management practices
1st week	1 sq ft (929 sq cm) per chick	1 linear inch (2.5 cm) per chick	Two 1-gallon waterers (3.8 liters) per 100 chicks	Keep air fresh. Ventilate moderately. 70–100°F	Use chick guard. Place waterers near edge of brooder. Dip beaks in water when placed under hover. Sprinkle feed on paper towels first 3 or 4 days. Fill feeders full.
2 to 6 weeks	Same	2 linear inches (5 cm) per chick	Two 3-gallon (11.3 liters) waterers per 100 chicks, or 30 lineal inches (76 cm) of trough per 100 chicks	Increase ventilation to keep room cool and chicks comfortable. 70–90°F	Keep area around waterers dry.
6 to 8 weeks	Same	3 linear inches (7.6 cm) per chick	Same	Same 70–80°F	Put pullets on grower ration with protein level of 18 percent. Fryers should continue to be fed a high protein ration until processed.

Presentation topic suggestions

- How to get ready for chicks
- How to handle and examine a live bird
- How to cull
- How to debeak a chicken
- How to prepare birds for show
- How to build a platform for a waterer
- How to build a mash hopper
- How to build a shell feeder
- How to build a community nest
- How to make an egg candler
- How to build a dropping pit
- How to build a shipping crate
- How to kill and dress a bird
- How to cut up a broiler
- How to candle and grade eggs
- Genetic changes within a breed
- Controlling parasites
- Disease recognition
- How to build a still-air incubator
- Caring for hatching eggs
- Vaccination
- Catching and carrying
- Range feeding
- Controlling rodents
- How to make a catching hook
- Brooding equipment and its use
- Poultry rations
- Poultry judging

Member Activities

Presentations

A 4-H presentation can be a "Show and Tell," an illustrated talk, a demonstration, or a slide talk about something learned in your 4-H experience. Depending on circumstances, it can be given either inside or outdoors. It may be of any length and may be presented by one person or a team of two.

A presentation is an excellent way to teach 4-H members and others in the community. Presentations help your club and your community, but they also help you. As you become familiar with your subject, your ability to speak and think clearly increases. You learn to organize and present facts in a clear, brief manner. Presentations help you become an active ("doing") part of your club and community.

Choose a topic that is timely, can be given with available material, and is suited to your age and experience.

Many 4-H members think presentations are hard to give. The most common reason for not wanting to do presentations is self-consciousness. Giving a presentation can be a rewarding experience, however, if you prepare ahead and think of the necessary steps.

Some poultry-related activities can lead to competitive events at the county, state, and national level. Several examples of individual events include egg cookery, chicken barbecue, and turkey barbecue demonstrations. Team activities include poultry judging and Avian Bowl (a knowledge contest).

Judging poultry and eggs

Poultry judging contests are designed to give training in judging poultry for meat and egg production. These contests are based on USDA quality grading for egg and carcass grading, and past egg production performance for laying hens. In addition to placing and judging, members are required to give oral reasons on at least one class of hens.

Detailed information on judging for egg production, egg judging for quality, and ready-to-cook poultry, refer to the *National Poultry Judging* publication (4-H 1502).

Showing exhibition poultry

4-H exhibition judging is comprised of several classes of birds, Standard breeds, Non-Standard birds, Crossbred birds, and market birds. In all cases, birds are judged for body condition, feathering, lack of defects, health, and vigor. Birds judged in Standard breed classes also are placed according to the breed type as described in the *American Standard of Perfection* or the *Bantam Standard*. These

books describe the various breeds and varieties of large fowl and bantam poultry and their defects and disqualifications. Use the references as guides for more detailed work in exhibition judging.

Defects of birds

A defect is anything that is not perfect, such as crooked breastbone or toes, grey specks in plumage of white varieties, or combs that are undeveloped or are large and beefy. The *American Standard of Perfection* or the *Bantam Standard* identify defects as anything that does not meet the standard for the breed.

Disqualifications of birds

A defect of such a serious nature that it bars a fowl from competition is considered a disqualification. Some of the more common disqualifications include:

- Crooked or deformed back
- Crooked or cross beak
- Side sprigs on single combs (extra point on side of comb)
- Enamel white in earlobes of common heavy breeds
- Feathers or feather stubs on shanks or toes of clean-legged breeds
- Squirrel tail—one in which any portion of the tail projects forward from the base of the tail

Showmanship

Showmanship is the attractive and pleasing presentation of a bird and 4-H member to a judge. It is the total picture of you and your bird, and it is more than following a set of rules for fitting, handling, turning, and posing. Your goal is to make you and your bird look the very best.

In 2002, Oregon introduced the National Standard program to the 4-H Poultry project. The National Standard includes handling, parts identification, and knowledge of the bird, in addition to requiring each member to cage and uncage a bird and walk the bird down the showmanship table.

The National Standards program is more thorough than previous showmanship contests. For this reason, review the publication *4-H Poultry Showmanship* (4-H 1503) to know what is expected during this part of the project.

It is important to be neat and clean. Your hands and face should be clean, hair combed or brushed, and shoes clean and polished. Clean slacks or jeans are appropriate; girls may wear a skirt; however, long slacks would be better (shorts are unacceptable for either boys or girls). Contestants should wear long-sleeved button shirts or blouses that are tucked into the waist of the slacks. If you wear a T-shirt, it should be a 4-H club shirt.

Consider the color of your bird when selecting your shirt. For example, a white bird will look better against a colored background. Wear a jacket if the weather is chilly.

Be friendly, courteous, and smile to show that you are having a great time. A couple of personal "no-nos" to remember during showmanship: First, don't wear a hat unless it is part of your club uniform. Second, do not chew gum.

Showmanship is designed to be enjoyed by the contestants, the spectators, visitors, leaders, and parents. It is an opportunity to test your skill and to show how much you have learned when handling chickens, how much poise and maturity you have developed, and how well you have trained your bird.

It's important to remember this is a contest, and some win while others "place." Everyone can learn and have fun doing their best. Good sportsmanship is important—regardless of your placement.

Selecting, training, and fitting

Select healthy, well-developed birds of desirable conformation that are quiet, gentle, and free of defects and parasites. It is a good idea to use bantams because they are small and easier to control (this is especially true for younger members). Certain breeds such as Cochins and Cornish bantams are especially docile and easier to handle on the showmanship table.

Always move quietly among your birds at first and handle them gently. Do not frighten your birds with sudden or unusual action, noise, or commotion. Handle your birds several minutes each day for several weeks before the show. Take your bird through the National Standard showmanship routine until you memorize the requirements and your bird gets used to handling. Practice with others in your group. Be sure to include spectators to help your bird get used to the showmanship arena. It also is helpful to have people moving around and talking loudly with one another to get your bird used to activities during showmanship events.

Washing

To look its best, a bird should be clean. If you keep their house and yard clean, most birds usually will clean themselves. Some birds need only feet, legs, and head washed. Others—particularly white birds—may need complete washing. Please remember that washing a bird is not recommended unless it is absolutely necessary.

With color breeds, wash the shanks and feet with warm water and soap. Use a toothpick or similar piece of wood to clean the

dirt from under the scales on feet and legs. Clean the head and wattles with a damp cloth.

Washing and drying birds is not difficult, but it takes time and care. We suggest the following equipment and procedures:

1. The room in which you're washing birds should be 70 to 80°F (21 to 26°C) and free from drafts.
2. Use three tubs of water:

   Tub 1. Fill with 6 to 10 inches (15 to 25 cm) of warm water. Add mild soap flakes. Wash the bird thoroughly with your hands. Rub feathers down (not up). Clean the legs and between toes with a brush. Squeeze as much water as possible from the feathers.

   Tub 2. Fill with 6 to 10 inches (15 to 25 cm) of lukewarm water. Hold the bird and using your free hand, rinse the feathers thoroughly; be sure to remove all the soap. Again, squeeze as much water as you can from feathers.

   Tub 3. Fill with 6 to 10 inches (15 to 25 cm) of cool water. You may want to add a few drops of vinegar to remove all the soap. Thoroughly rinse the bird again in the cool water. Be sure there is no soap left on the bird.

3. Take the bird from Tub 3 and move to a level surface; press water from its feathers. You can wipe the bird with a towel or clean cloth, but be sure to wipe *down* the feathers.
4. Place the bird in a wire-bottom coop or a coop with clean straw on the floor. Put the coop in a drying room that is warm and away from drafts. Some exhibitors apply mineral oil or petroleum jelly to the comb, wattles, and legs; however, the oily surface attracts dust and the bird may look worse than before the oil was applied.

Transporting your birds

Always transport your birds in a container where they can stand up. Check that the container is large enough for them to turn around and get adequate air. Use clean shavings for litter in the cage to help keep your bird clean. *Never transport birds in a burlap bag*.

During transport, make sure that your birds are not in the direct sunlight. Even on a cool day, direct sun shining on a bird in its traveling container can overheat and cause stress on the bird. If the overheating is prolonged, it could lead to your bird's death.

Handling, showing, and scoring

For more information about handling, showing, and scoring, see *4-H Poultry Showmanship* (4-H 1503).

Taking your birds home

At the fair or show, your birds may be exposed to one or more diseases. Upon taking the birds home, do not return them directly to your flocks. If they picked up a disease organism at the fair, your entire flock would be exposed and this could ruin your poultry project. Place your show birds in a pen or cage away from your main flock for 2 or 3 weeks. Be sure to care for them *after* you care for the rest of your flock.

If your show birds appear healthy at the end of 2 or 3 weeks, return them to your flock. If they become sick, immediately check with a local veterinarian, the Poultry Diagnostic Laboratory in the College of Veterinary Medicine at Oregon State University in Corvallis, or the Oregon Department of Agriculture in Salem. Your local Extension faculty can help you identify the person to talk to at these locations.

Glossary of Terms

Abdomen—The underpart of the body from the point of the keel to the tail.

Amino Acids—Amino acids are building blocks of protein. For example, if a brick wall represented protein, each brick in the wall would be an amino acid.

Anticoccidial—A drug to prevent coccidiosis.

Axial feather—The short feather growing between the primaries and secondaries of the wing.

Bantam—A diminutive fowl—some being distinct breeds, others being miniatures of a large breed or variety, approximately one-fourth to one-fifth their size. Usually ornamental in character, some breeds have considerable merit as egg producers, a few as meat fowl.

Breast—The entire forward part of the body of live fowls from the juncture of the neck and body down to the rear point of the keel bone.

Brood—1. A distinct group or birds, usually of the same age, placed as a group. **2.** The act of rearing chicks using heat and other management options.

Cock—A male fowl 1 year old or more.

Cockerel—A male fowl less than 1 year old.

Condition—The state of a fowl with regard to health, including cleanliness and brightness of plumage, head parts, legs, and feet.

Coverts—Those feathers that cover the base of the primary and secondary wing and main tail feathers.

Dubbed/dubbing—A term used to describe the close trimming of the comb, wattles, and earlobes of the male.

Earlobes—The fleshy patch of bare skin below and behind the ears, varying in size and shape with color, either red, white, blue, or purple, according to the breed.

Enamel-white—The satinlike white surface color found in the earlobes of Mediterranean breeds.

Faking—A self-evident attempt to remove or conceal a disqualification or serious defect to create merit which does not naturally exist; results in disqualification.

Hock—The joint between the lower thigh and shank, sometimes incorrectly referred to as the knee.

Keel—In chickens and turkeys as well as most birds, large bony protrusion on the midline of the breastbone; it resembles the keel of a boat, both as to shape and position.

Keelbone—The large bony protrusion on the midline of the breastbone or sternum.

Line-breeding—Mating of distantly related individual birds.

Plumage—The collective feather covering of the entire body of a fowl, including the head, neck, wings, tail, and, where specified for breed, the shanks and toes.

Poult—The young of the domestic turkey before the sex can be determined.

Poultry—A general term applied to all domesticated fowl, including chickens, turkeys, and waterfowl.

Primary feathers—The long, stiff feathers of the wing, growing from the last segment of the wing. When at rest, these feathers are folded under and are completely hidden by the secondaries when the wing is properly folded; also known as "primary flight feathers." These feathers are responsible for power during flight.

Pubic bones—The thin, terminal portion of the hip bones that form part of the pelvis. Considered important in evaluating productivity of the female fowl.

Pullet—For exhibition purposes, a female fowl less than 1 year old.

Secondary feathers—The long, stiff wing feathers growing from the middle wing segment. When the wing is folded, the exposed secondaries form a triangular area known as the "wing bay." These "secondary flight feathers" are responsible for lift during flight.

Shank—The portion of the leg below the hock, exclusive of the foot and toes; the metatarsus.

Spur—A stiff, horny projection from the rear inner side of the shanks, rounded or pointed according to age, prominent in the male fowl, may be present in female fowl, increasing greatly in size with age.

Stern—The rear underpart of a fowl extending from the rear end of the keel bone to the ends of the pubic bones.

Sternum—The breastbone to which the ribs and keel are attached.

Strain—Fowl of any breed or variety that have been line-bred for a number of years and that reproduce uniform characteristics with marked regularity.

Stub—A short section of the stem of a feather, sometimes with a few short barbs attached. A disqualification when found on shanks or on or between the toes of clean-legged breeds.

Uropygial gland—The oil or "preen" gland, the only skin gland in birds. A large gland opening on the back at the base of the tail feathers, secreting an oily fluid which the fowl applies to its feathers during preening. It is especially developed in waterfowl because the oil helps make the plumage shed water.

Variety—A subdivision of a breed, distinguished either by color, color and pattern, or comb.

Wattles—The thin, hanging growths of flesh at either side of the base of the beak and upper throat; usually much larger and longer in males than in females. Usually red in color, but purple in Sumatras and Birchen, and brown in Red Modern Games and Silkies. Should be fine and soft in texture, slightly concave in surface, regular in outline, and uniform in size.

Resources

Extension publications

Brooding and Rearing Baby Chicks by James C. Hermes (1999). A Pacific Northwest Extension publication (PNW 491), Oregon State University, Corvallis. 4 pages.

Hatching Small Numbers of Eggs by James C. Hermes (1995). A Pacific Northwest Extension publication (PNW 478), Oregon State University, Corvallis. 4 pages.

How to Feed Your Laying and Breeding Hens by James C. Hermes (1999). A Pacific Northwest Extension publication (PNW 477), Oregon State University, Corvallis. 4 pages.

Raising Small Flocks of Chickens by Kendrick A. Holleman and Charles M. Fischer (1992). An Oregon State University Extension Service publication (EC 761), *out of print*, Corvallis. 8 pages.

Other resources

Bantam Standard (1997) by the American Bantam Association, P.O. Box 127, Augusta, New Jersey 07822 (http://www.bantamclub.com/).

Merck Veterinary Manual (1998) by Merck Editors, Merck and Co., Inc., Rahway, New Jersey 07065 (ISBN# 0-911910-29-8).

Oregon Department of Agriculture, 635 Capitol St., NE, Salem, Oregon 97301-2532 (phone: 503-986-4550; http://oregon.gov/ODA/).

The Standard of Perfection by the American Poultry Association, 133 Millville St., Menden, Massaschusetts 01756 (http://www.amerpoultryassn.com/).

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