

EXPLORE



LIVESTOCK AND AGRICULTURE *POULTRY*



texas4-h.tamu.edu

The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife.



EXPLORE

TEXAS 4-H POULTRY PROJECT



Description

The Texas 4-H Explore series allows 4-H volunteers, educators, members, and youth who may be interested in learning more about 4-H to try some fun and hands-on learning experiences in a particular project or activity area. Each guide features information about important aspects of the 4-H program, and its goal of teaching young people life skills through hands-on experiences. Additionally, each guide contains at least six learning experiences, which can be used as a project guide, or as activities for six different 4-H meetings.

Purpose

Texas 4-H is designed to develop the youth of our state into productive adult citizens. The 4-H Program uses a non-formal educational process of engaging youth in a "learning by doing" process. This includes hands-on opportunities, participation in workshops and clinics conducted by volunteer leaders or professionals, as well as competitive experiences which allow 4-H members to demonstrate the knowledge they have gained. Through this entire process, the youth are learning key life skills such as working with others, teamwork, cooperation, and goal setting. Through all experiences, youth get to interact with adult volunteers and county Extension agents.

What is 4-H?

4-H members across the nation are responding to challenges every day in their communities and their world.

As the youth development program of the Cooperative Extension System of land-grant universities, 4-H is the nation's largest youth development organization, empowering six million young people throughout the United States. Cooperative Extension of 1862 and 1890 land-grant universities provide leadership to engage young people in 4-H in all 3,007 counties of the United States. The impact of the Cooperative Extension partnership is profound, bringing together National Institute of Food and Agriculture of USDA, land grant universities and county government to resource learning opportunities for youth.

Through America's 110 land-grant universities and its Cooperative Extension System, 4-H reaches every corner of our nation—from urban neighborhoods to suburban schoolyards to rural farming communities. With a network of more than 6 million youth, 600,000 volunteers, 3,500

professionals, and more than 25 million alumni, 4-H helps shape youth to move our country and the world forward in ways that no other youth organization can.

Texas 4-H

Texas 4-H is like a club for kids and teens ages 5-18, and it's BIG! It's the largest youth development program in Texas with more than 550,000 youth involved each year. No matter where you live or what you like to do, Texas 4-H has something that lets you be a better you!

You may think 4-H is only for your friends with animals, but it's so much more! You can do activities like shooting sports, food science, healthy living, robotics, fashion, and photography.

Look for 4-H clubs at your school, an after-school program, a community center, or even on a military base or through the reserves for military families.

Texas 4-H is part of the Texas A&M AgriLife Extension Service and the Texas A&M System. Founded in 1908, 4-H is the largest youth development program in Texas, reaching more than 550,000 youth each year.

The 4-H Motto and Pledge

"To Make the Best Better!"

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, my Country, and my world.

Participating in 4-H

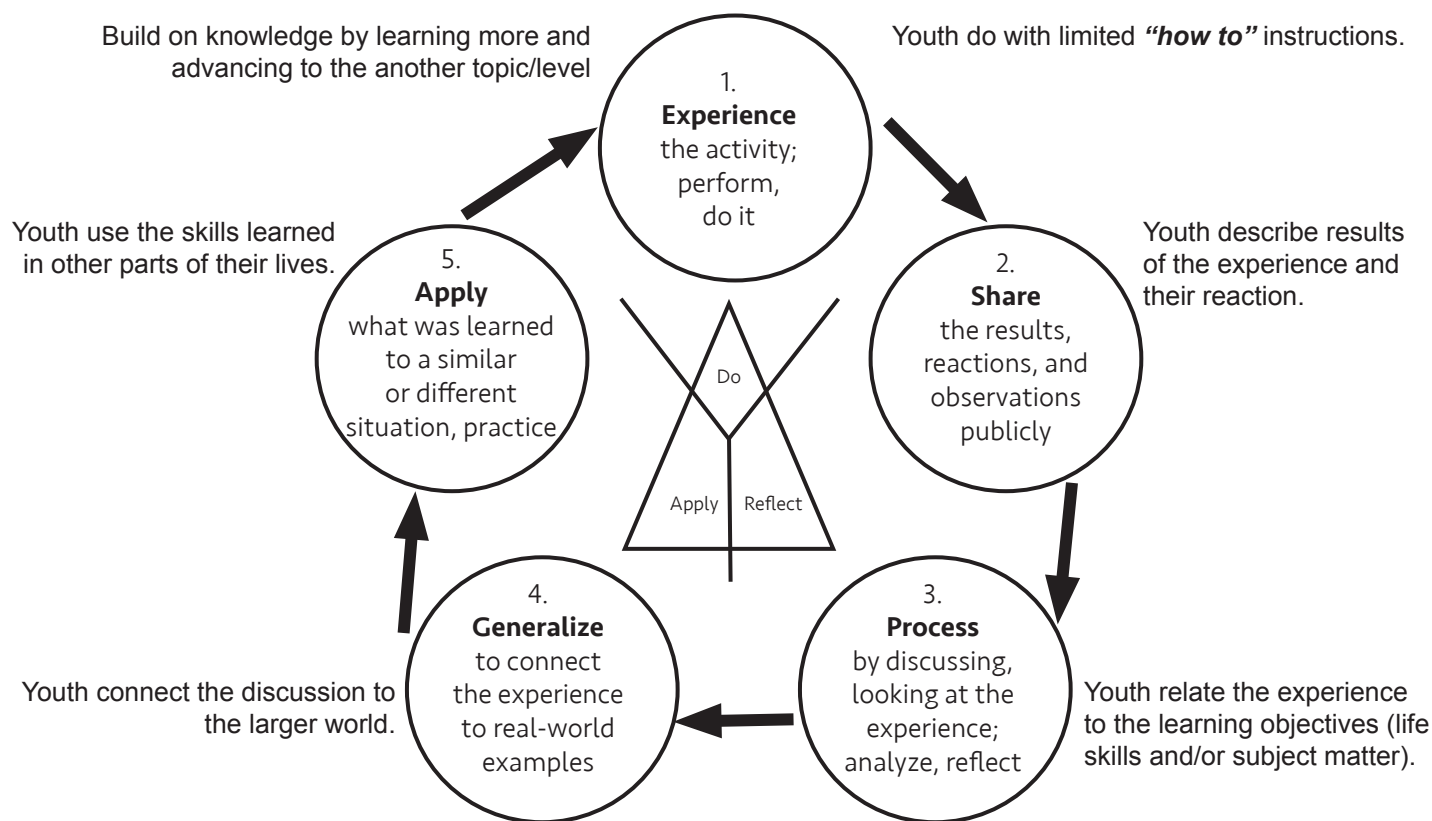
4-H is a great program because it provides options for young people to participate. From a 4-H club located in your community, a SPIN club that focuses on one particular project area, or participating in 4-H through your classroom at school, 4-H allows youth to learn in many different environments. If you are interested in joining 4-H, contact your County Extension Office and ask for a list of the 4-H clubs in your area. If you are a school teacher/educator and would like to use 4-H curriculum or these project guides in your classroom, contact your Extension Office as well for assistance.



4-H “Learning by Doing” Learning Approach

The Do, Reflect, Apply learning approach allows youth to experience the learning process with minimal guidance from adults. This allows for discovery by youth that may not take place with exact instructions.

EXPLORE THE CONTENT Introduction of the topic, overview and exploration of content, and review of objectives







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EXPLORE
POULTRY PROJECT

Starting Your Poultry Project



EXPLORE THE CONTENT:

As you prepare to begin the poultry project, you first need to select which poultry project you want to raise. You can choose from turkeys, broilers or roasters. Turkeys are shown when they are 18 to 22 weeks old. Broilers are chickens that are raised for meat production to approximately 6 weeks of age, while roasters are broiler chickens that are shown at 8 to 10 weeks old. All poultry projects are great for beginners as they are easier to handle, require a small amount of space, and are typically less expensive than many other livestock projects. The purchase price for broilers and roasters is usually less than \$2 per head and less than \$5 per head for turkeys. They are especially a good option for youth who live in urban areas as they can easily be raised in town and do not require the vast amount of space like larger livestock projects. Not only will the poultry project provide the opportunity to learn about poultry production and marketing, but will also provide you with opportunities to learn and practice several skills including:

- Communication
- Decision Making
- Leadership
- Patience
- Record Keeping
- Responsibility
- Understanding and Concern for Livestock

TIME:

- 20-30 minutes

MATERIALS NEEDED:

- pen and paper
- computer

OBJECTIVES:

The 4-H member will:

- become familiar with the Texas A&M poultry webpage where they will learn necessary information for starting a poultry project.

San Antonio Stock Show and Rodeo

- Allowed to show one pen of 3 broilers
- Exhibitors can show one turkey hen and one turkey tom

Houston Livestock Show and Rodeo

- Allowed to show one pen of 3 broilers
- Allowed to show one turkey (either tom or hen)

Rodeo Austin

- Allowed to show one pen of 3 broilers
- Allowed to show one turkey (either tom or hen)

State Fair of Texas

- Youth Broiler Show (2 max)
- Pan American (no max)
 - Breed Division

Poultry Shows

Below are the guidelines for several major livestock shows. Note that every major livestock show is a terminal show, which means that every bird entering the show grounds will become property of the show and will not be removed from the show grounds. It is important to check each show's rules before exhibiting.

Ordering Your Birds

Once you have decided which poultry project you are going to raise, it is time to order your birds. To be able to compete at any of the major livestock shows, you **MUST** order your birds from the Texas A&M AgriLife Extension Service, Poultry Science Office. Only your County Extension Agent or Agricultural Science Teacher can place an order. Each exhibitor may order an individual set of broilers with a minimum of 25 chicks and a maximum of 75 chicks. Broiler orders need to be in increments of 25, thus you may order 25, 50 or 75 chicks. For turkey orders, a minimum of 5 poults and maximum of 75 may be ordered by an exhibitor. If you have multiple exhibitors in a household, you can order a set of birds for all exhibitors or you can order an individual set for each exhibitor.





- **Broiler Orders Per Exhibitor:**
 - **Minimum of 25 chicks**
 - **Maximum of 75 chicks**
 - **Note: ordered only in increments of 25**

- **Turkey Orders Per Exhibitor:**
 - **Minimum of 5 poult**
 - **Maximum of 75 poult**

DO:

Activity: Getting Started with Poultry

Preparation: Have students and parents answer the following questions to help decide if a poultry project is right for their exhibitor. Next, have students do a website scavenger hunt on Texas A&M's poultry page. Website: <https://posc.tamu.edu/texas-agrilife-poultry-extension-specialists/youth-programs/>

Before you decide that the poultry project is the right one for you, answer the following questions:

1. Do you have the time to care for your project?
2. Are chickens and turkeys allowed where you live? Hint- Check with your city ordinances and HOAs for restrictions.
3. Do you have a place to house your birds?
4. Do you have a way to make sure your birds are protected from other animals in the area, including other birds?

Website Scavenger Hunt:

1. Does Texas A&M Poultry Science Department mail chicks to you?
2. Where are chicks picked up?
3. How much are wing-banded chicks?
4. What are the two main points for consideration when transporting newly hatched chicks and poult?
5. What is the Poultry Institute for Youth?
6. What is the Market Poultry Production & Selection Workshop?

REFLECT:

- Are there other things you need to look into before starting the poultry project?
- What is one of the benefits of participating in the poultry project?
- Who can participate in the poultry project?

APPLY:

- How has this information helped you to decide if you should have a poultry project?
- How will you prepare for your poultry project if you decide to be involved?
- Are the questions you answered for the poultry project applicable for other livestock projects? If so, how are they?
- How can you use this information to help others decide if they want to be part of the poultry project or other livestock projects?

REFERENCES:

- <http://aglifesciences.tamu.edu/posc/wp-content/uploads/sites/20/2012/08/EP5012-How-to-Produce-Broilers-and-Roasters-for-Show-1.pdf>
- <https://posc.tamu.edu/texas-agrilife-poultry-extension-specialists/hslr-sassr-rodeo-austin-turkey-show/> (order forms and rules)
- <https://posc.tamu.edu/texas-agrilife-poultry-extension-specialists/state-fair-of-texas-poultry-show/> (order forms and rules for State Fair)



Nutrition and Feeding



EXPLORE THE CONTENT:

As with all livestock projects, proper nutrition and feeding are essential for the animal to grow to their genetic potential. By understanding the fundamentals of an animal's digestive tract, it aids in our ability to provide them adequate nutrition. Show broilers and turkeys have a distinct digestive tract that includes the crop, proventriculus, and gizzard. The crop is in the neck region of the bird and acts as a storage pocket that will house food until it is ready to move onto the rest of digestive tract. The crop is connected to the proventriculus or the "true stomach" in the bird. This is where enzymes and hydrochloric acid is released in order to aid in the digestion of food. After the digestion begins in the proventriculus, it moves on into the ventriculus, commonly known as the gizzard. Since poultry lack the ability of to chew food, like other livestock animals, they have the gizzard which is composed of two muscles that allow for the food to be ground up. Often, the gizzard will be referred to as the "mechanical stomach" because of its role in reducing the food particle size. Once the food is broken down, it will make its way into the small intestine. The small intestine consists of three parts: duodenum, jejunum and ileum. This is where the nutrients from the food will be absorbed. Lastly, the remaining undigested food will reach the large intestine where it will be excreted as fecal material. Water is the most essential nutrient in any animal's diet. It is important to always provide your animal with fresh, clean water daily. For starter chicks, it is best to

use nipple drinkers as chicks are naturally attracted to the water droplets at the ends of the nipple waterers. Even more so, they are easier to clean and maintain than trough drinkers and will aid in keeping your birds healthy. It is vital to keep your water at room temperature for younger chicks as cold water can chill small chicks and negatively affect their overall health. When birds grow to three weeks of age, they will be more inclined to drink from trough waterers. At this time, it is no longer essential to keep the water warm. It can be beneficial to provide cooler water to older birds during warmer seasons in order to reduce heat stress. When placing waterers in the birds' pen, it is important to remember to place it where it will be even with the birds back when they are sitting down.

TIME:

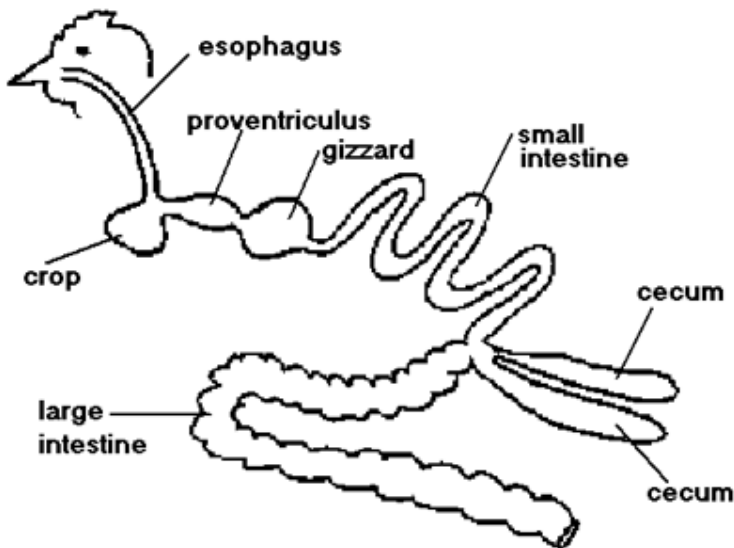
- 30-45 minutes

MATERIALS NEEDED:

- play-doh
- digestive tract sheet (provided)
- pen or pencil

OBJECTIVES:

- The 4-H member will learn about the digestive tract of a bird which will aid in understanding proper nutrition.



https://projects.ncsu.edu/project/ansci_feeds/gi_tract/gi_tract.htm





Feeding your poultry project is critical not only for the overall health of your bird, but also for their ability to reach their growth potential. The birds should always have food available. When birds are not given free access to feed, they are likely to overeat and this can cause impaction of their crop.

Feed

To ensure that your broilers receive adequate nutrition that supports growth, they need to be provided with a feed that is at least 21 percent protein. If you are raising turkeys, it is important to provide them with a starter feed that is at least 26 percent protein. Many successful exhibitors will follow a feed regimen similar to these:

Source: <https://posc.tamu.edu/wp-content/uploads/sites/20/2012/08/EPS012-How-to-Produce-Broilers-and-Roasters-for-Show-1.pdf>

Broiler and Roaster Feed Schedule

Age (days)	Feed type
0-14	Turkey or Game Bird Starter (26 to 31 percent protein)
14-35	Broiler Starter (24 to 26 percent protein)
35-42*	Broiler Finisher (21 to 23 percent protein)
*Can be up to 70 days if showing roasters	

Turkey Feed Schedule

Age (weeks)	Feed type
0-12	Turkey or Game Bird Starter (26 to 31 percent protein)
12-22	Broiler or Turkey Finisher (21 to 24 percent protein)

Along with your birds receiving a high protein diet, it is important to provide vitamins so that you can prevent leg weakness. For the first 3 days, add water-soluble poultry vitamins to their drinking water at the recommended level stated on the package. Do not add the vitamins past three days as consuming too much can lead to toxicity and severe health problems in your birds. If you have any questions or concerns about vitamin supplements for your birds, consult your local veterinarian.

DO:

Activity: Poultry Nutrition

Preparation: Break students up into groups. Give each group clay or play-doh and the digestive tract sheet below. Have students mold/build a poultry digestive tract then label each part. Students need to discuss the function of each part and write it down. After, students should answer the questions at the bottom of the digestive tract sheet.

REFLECT:

- Why is it important to understand how your bird’s digestive system works?
- Why should you provide your birds with clean, fresh water daily?
- Should you feed your birds the same feed for their entire life?
- How does your bird’s feed requirements change as it ages?

APPLY:

- How would the information covered in this activity apply to birds raised for purposes other than showing?
- Consider the birds that you are feeding and what they require for optimal health and growth. After consideration, analyze what their feed is currently providing then think about these:
 - » Is the diet meeting the birds’ requirements?
 - » Does this feed suit their stage of life?





REFERENCES:

- <http://www2.ca.uky.edu/agcomm/pubs/ASC/ASC203/ASC203.pdf>
- <http://aglifesciences.tamu.edu/posc/wp-content/uploads/sites/20/2012/08/EPS012-How-to-Produce-Broilers-and-Roasters-for-Show-1.pdf>
- <https://posc.tamu.edu/wp-content/uploads/sites/20/2012/08/ps-5145.pdf>
- <https://posc.tamu.edu/wp-content/uploads/sites/20/2012/08/L-5159.pdf>

Activity: Poultry Nutrition

DIGESTIVE TRACT	FUNCTION
ESOPHAGUS	
CROP	
PROVENTRICULUS	
SMALL INTESTINE	
LARGE INTESTINE	

QUESTIONS:

- What can happen if your birds do not have access to feed at all times?
- What is the most essential nutrient for your animals?
- When should you heat the water for your birds?
- When should you provide a vitamin supplement to your birds?
- Why is it important to have a proper starter feed for your birds?



Housing



EXPLORE THE CONTENT:

It is important to have proper housing for your animal so that they can remain healthy and grow to their full potential. Before you bring your chicks home, you need to make sure that you have their housing prepared to move in. Your housing does not have to be fancy or include expensive equipment. All that is required is a clean, dry, well-ventilated structure along with feeders and waterers.

Housing Structure

The most ideal structure for housing your chickens is one that can be fully enclosed so that it can protect your chickens from any dramatic changes in temperature, but can also allow natural light and air in. You can easily set up a pen in a barn, garage, or workshop as long as you have the ability to regulate temperature along with ventilation. A good rule of thumb is to provide at least two square feet of floor space per chick. An existing storage shed can make a great place to house your birds.

Source: <https://aglifesciences.tamu.edu/posc/wp-content/uploads/sites/20/2012/08/EPS012-How-to-Produce-Broilers-and-Roasters-for-Show-1.pdf>

TIME:

35-40 minutes

MATERIALS NEEDED:

- paper
- pencil
- ruler

OBJECTIVES:

The 4-H member will:

- Understand the necessities of a poultry house and how to build one that will best meet the needs of the birds.



Bedding

By selecting the right bedding for your birds, you can ensure that they are raised in a healthy, clean environment which will have a positive impact on their growth performance. Before you bring your birds home, make sure to set up their pen. The bedding will provide your chicks warmth, as well as cushion, for their feet and breast when they lay down. A few examples of good bedding for





your poultry project are: rice hulls, wood shavings, or coarse, dry sawdust. If you are raising turkeys, you may want to choose wood shavings as turkeys tend to try to eat the rice hulls instead of their feed. Make sure to lay down at least 4 inches of bedding on the floor of your chick's pen. It is essential to make sure the bedding is kept dry by cleaning out the pen on a regular basis. Wet bedding can harbor diseases and can cause respiratory problems in your birds. A good way to determine if the bedding is too wet is by grabbing a handful of bedding and squeezing it together. If it sticks, it is too wet and you need to replace it with dry, clean bedding.

Temperature Control

Just like other animals, poultry have a thermoneutral zone, which is when the temperature feels just right to them. If the temperature is above their thermoneutral zone, then the birds are susceptible to heat stress, whereas if the temperature is below, the birds will use more of their energy in order to stay warm.

Using fans in your poultry house can assist in keeping your birds cool during the hot months. The best type of fan system would be to use fans that are controlled by timers or thermostats. It is important to remember that you need to allow fresh air to enter the poultry house through doors or windows.

If you don't have the ability to install fans with timers, stir fans can be setup in the house to help cool off your birds. The fans need to be placed 2 to 3 feet off the ground which will allow for the cool air to blow across the birds.

Air conditioners can be useful in your poultry house during the warmer months. You must be careful when using air conditioners because your birds can get acclimated to the cooler climate, then can become heat stressed when you take them to a show where they will be housed in a non-air-conditioned environment. It is important to note that excessive heat stress can kill your birds, so you need to keep this in mind when setting up your ventilation system in your poultry house.

Temperature Guideline for Broilers and Turkeys

Age (Days)	Broilers (F)		Turkeys (F)	
	Day	Night	Day	Night
0-4	88	90	90	92
4-8	86	88	90	92
8-14	84	86	88	90
14-21	82	84	86	88
21-30	80	82	84	86
30-35	78	78	82	84
35 and older	76	78	80	82

<https://www.uaex.edu/publications/PDF/FSA-8004.pdf>

Lighting

By providing 24 hours of natural or artificial light to your poultry project, you can help improve their feathering along with their weight gain. After you remove the heat lamps, you can hang a 40-watt bulb 6 feet above the birds to provide them with artificial light.

DO:

Activity: Build Your Own Poultry House

Preparation: Provide each child with a piece of sketch paper, a pencil and a ruler. Ask them to draw the area where they plan to keep their birds and how they would arrange everything to make it easy for them to care for their animals. Have them show and explain their layout to another participant.



**REFLECT:**

- What type of housing structure should the birds have?
- How will you regulate the temperature for your birds?
- What type of bedding are you going to chose? Why?

REFLECT:

- How are you going to prepare for bringing your birds home?
- Why is it important to provide your birds with fresh, clean water?
- Why should you make sure to keep your birds in their thermoneutral zone?
- What else can you do to ensure a good environment for your birds?
- Do you think the basic needs of birds apply to other animals? Why or why not?

REFERENCES:

- <https://www.uaex.edu/publications/PDF/FSA-8004.pdf>
- <http://aglifesciences.tamu.edu/posc/wp-content/uploads/sites/20/2012/08/EPS012-How-to-Produce-Broilers-and-Roasters-for-Show-1.pdf>
- <https://posc.tamu.edu/wp-content/uploads/sites/20/2012/08/ps-5145.pdf>



The Brooding Process



EXPLORE THE CONTENT:

The brooding stage is the nursery period for your chicks. This is an extremely critical time in your young chicks' life, as the first seven days will determine how well your chicks will perform as they continue to grow.

Heat

During the first week, it is important to provide your chicks with supplemental heat. If your chicks are chilled, it will increase their sensitivity to disease as well as stunt their growth. By setting up electric heat lamps with 125-watt bulbs, you can effectively keep the brooding chicks warm. It is important to secure the lamps so that they cannot be easily knocked over and fall into the litter. Before your chicks arrive, you should turn on the heat lamps at least 24 hours in advance so that they can begin to warm the bedding. Use a thermometer to check the pen temperature at floor level, it should be between 90°F to 95°F and never exceed 100°F as that can cause heat stress. If you notice that your chicks are huddling together and being extremely vocal, you may need to raise the temperature as the chicks are showing signs of being uncomfortable or cold.

Brooder Guard

In order to keep the young chicks close to the heat, food, and water, a brooder guard needs to be setup in the pen. Brooder guards are typically made of cardboard or wood and fastened together to create a circle. The circle should be a minimum of 5 feet in diameter and at least 14 inches tall. If you have 100 chicks, the brooder guard will need to be at least 7 feet in diameter. Once the chicks reach 7 days of age, the guard can be removed so that they can have free reign of the pen. If you notice the chicks start to crowd in the corners, wood or cardboard barriers should be setup in order to prevent this behavior.

<https://articles.extension.org/pages/65884/brooder>

TIME:

25 minutes

MATERIALS NEEDED:

- 2 sets of 3x5 index cards (may need more sets depending on number of participants)
- 3 labeled containers (large bags can also work)
- Pencils

OBJECTIVES:

The 4-H member will:

- Learn to figure cost analysis.
- Learn how to determine cost per the amount of ingredient used.
- Learn how to figure the total cost of dish.
- Learn how to figure the cost per serving.



**Feed and Water**

The placement of the waterers should be a safe distance from the heat lamps in order to prevent splashing on the lamps. The feeders should be placed near the heat lamps, but not directly underneath them as the heat can breakdown some of the essential nutrients in the feed.

DO:**Activity: What's Wrong with This Picture?**

Preparation: Gather materials needed to create an ideal environment for the brooding stage of the birds (heat lamp, water, feeder, and cardboard for the brooder guard). Setup two small brooder pens, one that is correctly setup and one that is not. Then have the students look at each setup, tell you which one is incorrect and why.

REFLECT:

- Why is it important to place the feeders away from the heat lamps?
- What is the purpose of the brooder guard?
- How can you look at your flock and determine if they are comfortable? What tells you that they are too cold?
- What can happen if your chicks are chilled?
- What is the importance of the brooding stage?

APPLY:

- How would the guidelines for caring for your brooding chicks apply to other young animal projects?
- How can you ensure the poultry house is ready for the arrival of your chicks?

REFERENCES:

- https://www.extension.iastate.edu/4hfiles/agriculture/MarketBroilerCare_Management.pdf
- <http://aglifesciences.tamu.edu/posc/wp-content/uploads/sites/20/2012/08/EP5012-How-to-Produce-Broilers-and-Roasters-for-Show-1.pdf>
- <https://articles.extension.org/pages/65884/brooder>





EXPLORE THE CONTENT:

Monitoring your animals daily is essential to any successful 4-H project. It is important to know what behavior is normal for your animal(s) so that you can easily determine when something is wrong. When raising your poultry project, you must keep your broilers or roasters from mixing with other birds. This is the number one way to prevent the spread of disease among your flock. You should contact your local veterinarian and establish a vet-client-patient-relationship (VCPR) so that they can assist you in maintaining your bird's health. Always check with your veterinarian prior to treating your livestock.

Feather Picking

Feather picking occurs when birds pluck other birds feathers out. If you notice this happening in your flock, it is typically caused by your birds being under stress. This stress can be induced by excessively bright lights, high temperatures, poor air flow, lack of available feed and clean water, or overcrowding. Taking preventative action is essential when feather picking occurs. Check the temperature of the poultry house and open windows or adjust the fans to ensure that you are keeping your birds in their thermoneutral zone. Make sure there is always enough feed, as well as feeder space. If feather picking has occurred in your flock, you need to treat the birds that have been pecked with anti-peck compounds such as menthol-based ointments. Always check with your veterinarian and the show rules before treating your birds.

Fowl Pox

Fowl pox is a virus that is spread by mosquitoes that can affect both broilers and turkeys. There is no treatment for fowl pox, thus it is important to take preventative measures. If you are raising your flock in an area prone to large mosquito populations, then it is important to vaccinate your birds for fowl pox prior to two weeks of age.

External and Internal Parasites

Rarely are external (lice, mites or fleas) or internal parasites (intestinal worms) a problem among flocks if the birds are managed properly and sanitary conditions, cleaning the litter is a great preventative maintenance technique. Thus, it is not necessary to deworm your chickens and turkeys. However, you should continue to monitor them daily and walk through their pen to check for any potential health issues.

TIME:

30 minutes

MATERIALS NEEDED:

- Medication label (provided)
- Highlighter
- Pen or pencil

OBJECTIVES:

The 4-H member will:

- Learn what proper bird health is and how to handle illnesses or poor health situations.



**Fire Ants**

Fire ants can cause skin blisters on birds; thus, it is important to control any fire ant beds around your birds' housing/pens. Treat the mounds with insecticide but make sure that your birds cannot get near it as they might ingest the insecticide, causing them to become ill. Contact your veterinarian immediately if you believe that your birds may have come into contact with the insecticide.

DO:**Activity: Reading a Medication Label**

Preparation: Print out the medication insert and worksheet for students. Have each student highlight where the information can be found and fill in the worksheet.

REFLECT:

- Why is it important to read medicine labels to determine the proper injection type?
- What is the importance of withdrawal times of medications?

APPLY:

- Why should you always consult with your veterinarian with regard to treatment of livestock projects?
- How should you establish a good veterinarian client patient relationship (VCPR)?
- What vaccinations have your birds already received?
- Why is it important to maintain records on health status, treatments and vaccinations?

REFERENCES:

- https://www.extension.iastate.edu/4hfiles/agriculture/MarketBroilerCare_Management.pdf
- <http://aglifesciences.tamu.edu/posc/wp-content/uploads/sites/20/2012/08/EP5012-How-to-Produce-Broilers-and-Roasters-for-Show-1.pdf>
- <https://posc.tamu.edu/wp-content/uploads/sites/20/2012/08/ps-5145.pdf>
- <https://articles.extension.org/pages/68128/fowl-pox-in-poultry>



Medication Insert

NADA 141-449, Approved by FDA

1 Liter

safe-guard[®] AquaSol
(fenbendazole oral suspension)

Suspension Concentrate, Antiparasitic

200 mg of fenbendazole/mL

For oral administration via drinking water

DESCRIPTION: Safe-Guard[®] AquaSol is a suspension concentrate containing fenbendazole, an antiparasitic. Each mL of Safe-Guard[®] AquaSol contains 200 mg of fenbendazole.

INDICATIONS: Safe-Guard[®] AquaSol is indicated for the treatment and control of adult *Ascaridia galli* in broiler chickens and replacement chickens intended to become breeding chickens and for the treatment and control of adult *A. galli* and *Heterakis gallinarum* in breeding chickens.

Not for use in laying hens and replacement chickens intended to become laying hens.

DOSAGE AND ADMINISTRATION: Safe-Guard[®] AquaSol must be administered orally to chickens via the drinking water at a daily dose of 1 mg/kg BW (0.454 mg/lb) for 5 consecutive days. Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism.

▶ **RESIDUE WARNING:** No withdrawal period is required when used according to labeling. Do not use the drug in laying hens. ◀

STORAGE INFORMATION: Store at room temperature 30° C (86° F). Once opened, do not store the container above 25° C (77° F). Do not freeze. Protect from light. Use within 6 months after opening. Use the medicated water within 24 hours.

The container was opened (write the date here): _____

See attached Product Information Insert for complete directions and warnings before using.

For customer service, adverse effects reporting, and/or a copy of the SDS, call 1-800-211-3573.

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Net volume (1 Liter)

Code No. 148720



Source: <https://dailymed.nlm.nih.gov/dailymed/fda/fdaDrugXsl.cfm?setid=62bd7997-81e5-46ca-806c-7407344449ae&type=display>

Reading a Medication Label Worksheet

Information to Look for on the Label	Information Found on the Label
Medication Name	
Active Ingredients	
Indications	
Dosage	
Proper Injection Method	
Withdrawal Period	
Storage Requirements	
Cautions/Warnings	

Preparing for Show



EXPLORE THE CONTENT:

Culling

Culling is a term used in the livestock industry for the removal of animals that are falling behind or have decreased growth performance compared to the rest of the flock. Once your chicks reach 4 weeks of age, it is time to start evaluating the flock for any birds that are small, stunted, sick or deformed. These birds need to be removed from the flock. If you are raising your birds for sex-separate shows, you will need to first sort the pullets (females) from the cockerels (males) then cull from each pen. By culling, you are reducing the flock size which increases both floor and feeder space for the remaining birds. This allows for these birds to improve their overall growth performance in terms of fleshing, uniformity of the birds, and finish.

Selection for Show

As you get closer to show, you need to evaluate your flock for any birds that might have physical defects that would cause them to be sifted at show. Physical defects that you should be looking for are:

- Cuts and tears in the skin
- Broken bones
- Bruises on the skin or flesh
- Blisters on the breast or heavy calluses
- Ulcers or sores on the footpads
- Insect bites
- External parasites

When evaluating your birds' footpads, they should be clean, smooth and free of any ulcers or sores.

Source: <https://ucanr.edu/sites/poultry/files/186895.pdf>



TIME:

- Variable

MATERIALS NEEDED:

- Live birds *or* photos of birds (provided)

OBJECTIVES:

The 4-H member will:

- Learn how to choose which birds to take to the show and how to prepare for the show with their birds.





This would be an example of a physical defect such as a breast blister, that you might find on your birds. When selecting, you want to avoid picking birds with any blisters or sores. Remember, providing your birds with dry, clean bedding can help alleviate the presence of blisters.

Source: <https://articles.extension.org/pages/65865/breast-blister>

The judge will be looking for several things when evaluating your birds at the show. Each of the following items are taken into consideration by the judge:

Conformation

Conformation refers to the overall shape of the bird. Broilers should ideally be shaped like a rectangle by having a long, straight breastbone that has an absence of any dents or knobs. If you have a bird that has a curved or "V-shaped" breastbone, you should not select it for show. The bird should have a good spring of ribs which means that it has a long, wide back and deep body. The body depth needs to be proportional to the bird's width and length to have ideal conformation.

Fleshing

Fleshing is the amount of muscle or meat that is on the bird. The breast is the highest valued portion of broilers; thus, judges will put the most emphasis on the breast when evaluating your birds. The breast muscle should mimic a rectangle along the entire length of the keel bone. The keel bone is the extension of the sternum or breastbone of your bird. Typically, birds with a well-developed breast will also have heavy fleshing in their legs and thighs. The thighs and legs of your bird should have a plump, round appearance.



When comparing the two birds, the bird on the left has a more ideal breast that is broad and rectangular in shape which indicates a higher degree of fleshing.

Source: <https://green.extension.wisc.edu/files/2017/05/Raising-Roasters-and-Broilers.pdf>





Finish

Finish refers to the amount of fat that your bird has in and under their skin. At the show, judges will be looking for well-finished broilers or those that have a uniform layer of fat. The amount of finish that your bird has directly relates to its eye appeal. When evaluating the finish on your bird, you should look for the fat that is located between the feather tracts on the side of the breast.

Uniformity

When it comes to uniformity, each broiler within a pen should closely resemble its pen mates. They should mimic each other in terms of size, shape, fleshing and finish. If one of the broilers has a defect, the whole pen will be negatively affected when it comes time for judging and placing. When it comes to showing roasters, uniformity is not a factor as they are typically shown individually.



When selecting your broilers for show, you want to make sure that your pen is as uniform as possible. Your birds should be the same sex, should match in fleshing, conformation and finish. The more alike they are, the better!

Source: <https://green.extension.wisc.edu/files/2017/05/Raising-Roasters-and-Broilers.pdf>

Transporting to Shows

When it comes time to transport your birds to show, there are a few things you should keep in mind. First, you need to have a carrier for your birds. A simple cardboard box with 4 inches of bedding placed at the bottom can make a great carrier. It is essential that you cut several holes in the box so that your bird can receive enough air and ventilation. Make sure to not over crowd your birds when transporting them as they can scratch and hurt each other during transport. Thus, it is best that each one of your birds has their own box. It is also important to be cautious when placing your bird in the carrier as you want to avoid bruising their skin or damaging their wings. Once you get to the show, check your birds carefully for any bruises before presenting them to the sifter.

DO:

Activity: Keep or Cull

Preparation: If you don't have onsite birds to evaluate, use the following pictures to help students understand what they are looking for when selecting their birds for show. Ask the students whether they would keep or cull the bird(s) then ask them to explain why or why not.



**REFLECT:**

- How important is it for an animal to have good structure?
- Why do we want uniformity among our birds?
- How does the finish of a bird relate to its' eye appeal?
- Who is available to help guide you through the selection process of your birds?

APPLY:

- Aside from competition, where else would the knowledge you gained from this activity be applicable?
- How would this information apply to poultry production?

REFERENCES:

- https://www.extension.iastate.edu/4hfiles/agriculture/MarketBroilerCare_Management.pdf
- <file:///C:/Users/Owner/Documents/4-H/EPS012%20How%20to%20produce%20broilers%20for%20show.pdf>
- <https://green.extension.wisc.edu/files/2017/05/Raising-Roasters-and-Broilers.pdf>
- <https://georgeranchffa.ffa.org/F/georgeranchffa/Raising%20show%20chickens.pdf>
- Additional Resource: Selecting Broilers: <https://ucanr.edu/sites/poultry/files/186895.pdf>



Keep/Cull Questions

1. **Question:** Would you cull or keep this bird? Why or why not?



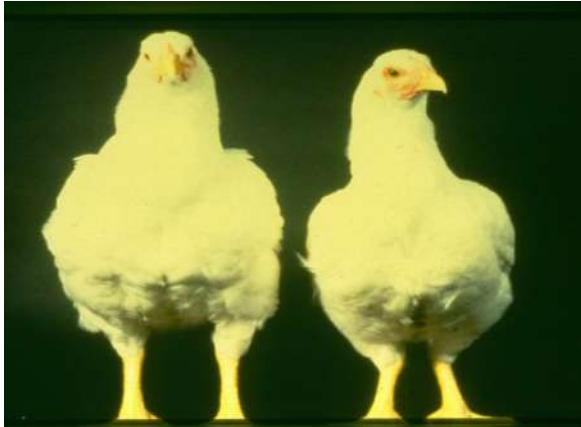
1. **Answer:** Cull because this bird has a crooked keel bone; thus, has poor conformation.

2. **Question:** Would you cull or keep this bird? Why or why not?



2. **Answer:** Cull because the bird's breast is lopsided. The breast is one of the most important parts of the birds thus, judges place a heavy emphasis on it. Ideally, we want our birds to have broad breasts that resemble a square, meaning they have equal muscling and finish on each side.

3. **Question:** By evaluating the following two birds, which bird would you keep and which one would you cull?



3. **Answer:** Keep the left bird and cull the right. The bird on the left shows adequate body depth in terms of width and length when compared to the bird on the right. Even more so, the left bird exhibits more fleshing in the breast and thighs.

4. **Question:** By evaluating the following two birds, which bird would you keep and which one would you cull?



4. **Answer:** Keep the bird on the right and cull the bird on the left. The bird on the right more accurately represents the ideal breast shape and finish.



TIME:

- Variable

MATERIALS NEEDED:

- Toy bird
- Bird cage

OBJECTIVES:

The 4-H member will:

- Learn how to properly present birds for the show.

DO:

Activity: Bird Handling/Showmanship

Preparation: Place a toy (plush) bird in a cage and have 4-Hers practice proper poultry handling techniques by taking the bird out and placing it back in the cage. Place the bird in a practice pen and have 4-Hers demonstrate how to properly catch their birds. Discuss the importance of handling and showmanship.

REFLECT:

- Why is it important to handle your birds properly?
- What should you do in order to prepare your bird for show?
- What is important to have a great attitude when showing?

APPLY:

- How does this apply to other livestock projects?
- How will this information help you prepare for show season?
- How can you help other prepare for the shows?

REFERENCES:

- <https://posc.tamu.edu/wp-content/uploads/sites/20/2012/08/ps-5145.pdf>
- [https://www.canr.msu.edu/uploads/resources/pdfs/4-h_poultryshowingcurriculum_2018_final-web_\(1\).pdf](https://www.canr.msu.edu/uploads/resources/pdfs/4-h_poultryshowingcurriculum_2018_final-web_(1).pdf)

EXPLORE THE CONTENT:

Handling

Proper handling is important for both the safety of you and your birds. When catching your birds, never pick them up by the wings or one leg as this can severely injure them. You should gently move them into a small area then grab both shanks of the bird's legs and quickly lift the bird off the floor. In this position, the bird's head should face down while its back rests against the holder. The bird may frantically flap its wings so you need to make sure you are not close to any objects that might cause the bird to bruise or break its wings. When carrying your bird, never grab it by its wings or drumsticks. You should always put your arm over the wings and hold onto the shanks. It is essential to remember to hold your birds gently and to take caution when transporting them as they can easily be bruised or injured.

Personal Appearance

It is important for exhibitors to dress neatly and professionally. Caps, hats, t-shirts, shorts or ripped jeans are not recommended in the show ring. Appropriate attire for showmen includes button-down collared shirts, nice jeans, a belt, and boots.

Attitude

Always show your animals with confidence. During the contest, it is important to be respectful of other exhibitors as well as the judge. If the judge asks you questions, respond to the best of your ability and always be polite.





MARKING INSTRUCTIONS

CORRECT: ● INCORRECT: ✗ ⊗ ⊖ ⊕

4-H Explore
Project Book Evaluation - Poultry

1. Please read the statement in the left column of the table below. For each item listed below, mark the number in the left column for your level of understandg BEFORE the program; then mark the number in the right column for your level of understanding AFTER the program.

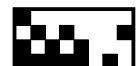
LEVEL OF UNDERSTANDING: 1 = Poor, 2 = Average, 3 = Good, 4 = Excellent	BEFORE				AFTER			
As a result of participating in the Poultry Project lessons and activities...	1	2	3	4	1	2	3	4
I understand the skills needed for the poultry project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the difference between showing chickens and turkeys.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the proper space that is needed for poultry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand proper show etiquette.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I understand the steps needed when preparing for a new pen of poultry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. For each statement below, fill in the bubble that best describes you.

INTENTIONS TO ADOPT: As a result of participating in the Poultry Project lessons and activities...	Yes	No	Unsure
I can decide if the poultry project is right for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will use what I have learned to decide to raise chickens or turkeys.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to provide the proper space needed for my poultry project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to have all of my supplies ready for a show.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can make a plan for the next show season.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. For each statement below, fill in the bubble that best describes your level of agreement with the following statements.

BEHAVIOR CHANGES: As a result of participating in the Poultry Project lessons and activities...	Strongly Disagree	Disagree	Agree	Strongly Agree
I am more comfortable working in a team.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more willing to listen to others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more comfortable speaking with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more confident in my abilities as a leader.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more comfortable in preparing for a poultry show.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am more confident in my abilities to properly care for a chicken or turkey.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



MARKING INSTRUCTIONS

CORRECT: ● INCORRECT: ☒ ☓ ☐ ☑

3. What is the most significant thing you learned in the Poultry project guide?

Please tell us about yourself.

Gender: Female Male

I consider myself to be: African American White
 Asian American Other
 Native American

I consider myself to be: Hispanic Non-Hispanic

Grade: 3rd 5th 7th 9th 11th
 4th 6th 8th 10th 12th

Most of the time, you live . . .

Farm or ranch Suburb of city between 50,000
 Town less than 10,000 Central city/urban center with more than 50,000
 City between 10,000 - 50,000

Please provide any additional comments below.

