# **POULTRY**

Allen County 4-H Due June 30 in the Extension Office





## *Level 2 – Grades 6-7-8*

#### What you will do in this project:

- •Enroll in the 4-H program by January 15.
- Complete the project by answering at least two of the activities in this activity sheet and turning it into the Extension Office by the last business day of June, June 30 or earlier. This activity sheet consists of activities, and a record sheet.
- •Attend County 4-H Poultry workshops when offered.
- •Refer to the Allen County 4-H Rules Book for a complete listing of all regulations concerning this project.
- •You can exhibit in all 10 Classes that are offered, no more than 2 pens per class.
- You may exhibit a Poultry Education poster in addition to the birds.
- •All birds must be in your possession by May 15 with the exception of broilers that are hatched at the end of May.
- •Complete FairEntry online by published deadline.
- To exhibit beef cattle, dairy cattle, swine, sheep, meat goats, dairy goats, poultry and rabbits, 4-H members must be certified through the Youth for the Quality Care of Animals program. This is an annual program that can be completed via online modules or in-person trainings. For more information about in-person trainings in your county, please contact your County Extension Office. More information about YQCA is available at http://yqca.org/. Attach a copy of YQCA card.

#### **Management Tips:**

- Provide clean, freshwater to your birds at all times. In the winter, warm (but not hot) water will be needed. Birds on average will drink 1-2 cups a day. Check their water at least twice a day – more often on hot days.
- •One chicken eats about 2 pounds of feed each week. 12 chickens eating two pounds a week would eat 24 pounds week. (12 birds x 2 lbs = 24 lbs)
- •A feed ration of at least 16% protein for the mature chicken is needed.
- Put at least a 4 inch layer of bedding on the floor for your birds and keep dry. Spread fresh bedding on the top. Clean area completely at least once a year with a solution of 2 tablespoons of chlorine bleach into 2 gallons of boiling water. Scrub with a broom. Ventilate well to dry.
- Birds should be washed before bringing to the fair with a solution of warm water and 2 table spoons of chlorine bleach in a five gallon bucket.

| 4-H Member:                             | 4-H Club:                               |  |
|---|---|--|
| Grade in School (January 1, 2021)       | Years in this project                   |  |
| Signature of 4-H Member verifying tha   | at you have completed these activities: |  |
|   |   |  |
|   |   |  |
| Signature of Parent that you have revie | ewed this information:                  |  |
| Signature of Parent that you have revie | ewed this information:                  |  |

#### 4-H Animal Care:

The Indiana 4-H program strongly supports positive animal care and strongly opposes animal abuse. 4-H is also dedicated to the mission of developing youth and volunteers through "Learning by Doing" programs.

- 4-H livestock projects teach life skills such as acquiring knowledge, making decisions, and applying leadership skills.
- When working and caring for animals, it is important to insure that appropriate safety measures are in place for both the animals and the persons who care for them. Therefore, there is no substitute for knowledge, common sense, and experience.
- Animal handlers should study and learn to anticipate an animal's reaction and try and avoid problem situations. It is most important that 4-H members understand an animal's behavior so one can "outsmart" not "out-muscle" an animal. Foremost in the 4-H'er mind should always be safety of the handler and the animal. Moving animals is more of an art than a science. Movement of animals requires planning and knowledge to accomplish it with the least amount of time, effort and stress to the animal.
- An animal's good health is often directly related to the environmental factors associated with its living space. The presence of predators, dust, odors, pests, temperature, and humidity has a direct effect on an animal's well-being.
- Animals react favorably to daily care and comfortable housing. Consideration should also be given to specific animal needs such as size of their housing space, lighting, and ventilation. The best facilities and equipment cannot and should not be a substitute for daily observation and careful attention to signs of illness, injury, and/or unusual behavior.
- Frequent consultation with your veterinarian is a must. Reasonable attention must always be given to the use of drugs and their approved withdrawal times.



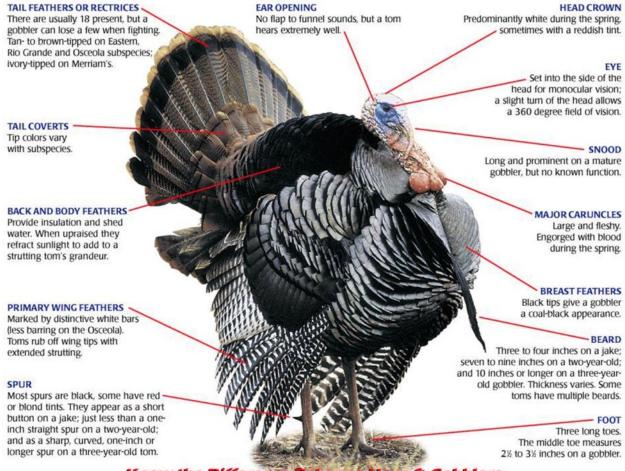
The turkey is the largest bird on the farm. The male turkey is called Tom or cock. The female is called a hen and the baby is called a poult. A young male is called Jake while a young female is called Jenny. The male turkey has a long wattle at the base of the bill and additional wattles on the neck. Tur-

keys are omnivores. They feed on insects, plants, corn, wheat and seeds. It also has a prominent tuft of bristles projecting downwards from its chest. The male will raise its tail feathers to form a vertical fan shape when it is courting the female. It also does this when as a show of aggressive display towards its enemies. As it grows older, it also gets more aggressive. The males get into fights among themselves for access to the hens or females. Male turkeys are also more colorful than the females, like most birds. Their plumage comes in a variety of bronze, green or reddish colors. The chest feathers on the males are coarse. Wild turkeys can fly. They fly and roost (sleep) in trees.

However, commercially bred turkeys are usually white. Their colors have been purposely bred out because the pigment from the feathers would discolor the turkey's skin during dressing. They cannot fly because their breast are thicker and heavier.

Turkeys do not like water and the cold. Commercially bred turkeys are kept warm with heat lamps. In the wild, turkeys build their nests with dried leaves and grasses in places that are not easily seen on the ground. They can lay about 9-18 eggs in a clutch (a set or cluster of eggs). Their eggs look creamy white with red-brown speckles all over. Baby turkeys or poults live in a brood (group of young birds/fowl).

Turkey meat is very popular during certain festivals in certain countries, like Thanksgiving in the United States and Christmas dinner in most European countries. Turkeys are the only breed of poultry native to the Western Hemisphere.



Know the Difference Between Hens & Gobblers
It's easy to distinguish a gobbler from a hen by differences in their size, color, heads, and other characteristics.

What is another name for Major Caruncles?

What are the differences in a tom and a hen?

Do turkeys have ears?

What is the most common turkey in the United States?

Describe the vision of a turkey.

What is a Jake?

Which one are more colorful males or females?

How many tail feathers does a male turkey have?



Feathers act as a protective covering for fowl, protecting it from cold, rain, sun and injury. It is important for the feathers to be relatively broad, with a web of good firm texture, a strong shaft, the barbs, barbules, and barbicels closely and tightly knitted together. This is the desired feather type for most breeds; however, there are some exceptions.

Feather patterns and color serve as a valuable aid in identifying numerous varieties of fowl. This is used in conjunction with skin and leg color, body shapes, combs, and beaks.

The descriptions for the various colors and color patterns are described in the following paragraphs.

The plumage for a fowl is classified as "white" is white in all sections. While the surface of a fowl classified as "black" is a lustrous, greenish black with an under color, except where otherwise specified dull black in dark-legged varieties and slate in yellow-legged varieties. Fowl that are "buff" are a medium shade of orange-yellow color with a rich golden cast, but not so intense as to show reddish cast, nor so pale as to appear lemon or light yellow.

Feather colors help to differentiate between males and females in most fowl.

**Barring** is the alternate transverse markings of two distinct colors on a feather. It may be regular or irregular depending on the breed.

**Frizzle feather** is a term used to identify feathers that curl and curve outward and forward. The **laced feathers** have a border of contrasting color around the entire web of a feather.

Mottled feathers have a variable percentage of black feathers that are tipped with white.

**Penciling** applies to several types of lines or marking on female feathers, the crosswise bars on feathers, the narrow concentric linear marking inside the edge on the web of the feathers. This should be characteristically narrow, uniform in width, sharply defined and continue in an unbroken line following the contour of the feather. When multiple, they should be equidistant from each other, conform to the contour of the feather. Each feather in the back, breast, body, wing bows and thighs should have three or more penciling. The penciled variety male is more colorful that the female.

Peppered feathers are sprinkled with small dots of black or gray and are a defect.

The **Spangled feather** has a distinct marking of contrasting color at the extremity of a feather, proximally shaped like a well-defined 'V' with a rounded end in some varieties and curved sides or pear-shaped in other varieties. Others are half-moon shaped. The spangle always are black in color and are found in combination with silver or gold ground color or white in color and separated from bay or brown ground color by a black bar. Spangling can be diagonal elongated black marking on the web.

**Edging** is a narrow band or lacing of contrasting color around all or part of a feather, as is characteristic of the hackle feathers of the Columbian varieties.

Here is a collection of nine different types. Label each of the feathers using the descriptions given above.



| 1. |  |  |
|----|--|--|
| 2. |  |  |
| 3. |  |  |
| 4. |  |  |
| 5. |  |  |
| 6. |  |  |
| 7. |  |  |
| 8. |  |  |
| 9. |  |  |

What are the plumage classifications for fowl?

What do the feathers do for the birds?

What type of feathers do your birds have?



Birds require proper nutrition, just like other animals. The health and performance of a bird depend on the feed or nutrients it eats. The amount and type of feed a bird consumes greatly influences its performance. Special rations are produced for each type and age of bird. These rations contain many different ingredients to provide specific nutrients.

Six types of nutrients are required by all animals. They are:

Water
 Carbohydrates
 Minerals
 Proteins
 Lipids
 Vitamins

Water is made up of hydrogen and oxygen, in a two to one (2:1) ratio. This means one oxygen is attached to two hydrogens. You may see it represented as (H2O). Water is one of the cheapest nutrients. Often it is also the one given the least amount of attention. Most of the body fluids are water based, such as blood, sweat, tears, saliva, urine, etc. The bird's body is 92% water. Birds need a constant, clean source of water. Water is required for many bodily functions, such as

- 1. Maintenance of body temperature
- 2. Production of eggs
- 3. Digestion and absorption of feeds
- 4. Lubrication of feed by saliva
- 5. Transport of nutrients via blood

Proteins are used to form many body tissues such as muscle, red blood cells, feathers and toenails. Proteins are made up of individual building blocks known as amino acids. Amino acids contain carbon, hydrogen, oxygen and nitrogen. The combination of amino acids, in different ways and amounts, determines the specific protein. More than 1000 proteins are found within the animal body. For the bird's body to use these proteins, they must be broken down into amino acids during digestion. The amino acids are absorbed and reformed into proteins within the body cells.

Carbohydrates are made up of carbon, hydrogen and oxygen. The basic unit for most carbohydrates is glucose. Sugars are one common type of carbohydrate. Refined sugar like table sugar is known as sucrose. Fruits taste sweet because of the carbohydrate fructose. Starches are another type of carbohydrate. Starch is the primary component of corn, milo, potatoes, beans, breads and pasta. Carbohydrates are primarily used for energy. Energy can be thought of as power or ability to do work. Energy is required for such activities as walking, clucking, producing eggs, digesting foods, etc.

Lipids, also known as fats, are made of carbon, hydrogen and oxygen. The basic unit of all fats or lipids is fatty acids. Just as amino acids are common to all protein, fatty acids are common to all lipids. Lipids contain two and one-half times as much energy as carbohydrates but are more difficult to digest and use.

Vitamins are special compounds needed in small amounts for specific bodily activities. Vitamins help regulate many processes. Vitamin D is necessary for bone and shell formation. Vitamin K is required for proper blood clotting. There are two general types of vitamins: those which can be dissolved in water (water-soluble) and those dissolvable only in fat (fatsoluble).

### Water-soluble

Vitamin C

B-complex vitamins

### **Fat-soluble**

Vitamin A

Vitamin E

Vitamin D

Vitamin K

Minerals are also divided into two general groups based on the relative amount needed by the body. Macro-minerals are those minerals needed in relatively large amounts; micro-minerals are needed in small amounts. Examples of each are:

### **Macro-minerals**

Calcium (Ca) Phosphorus (P) Potassium (K) Sodium (Na) Chlorine (Cl)

#### Micro-minerals

Iodine (I)
Zinc (Zn)
Copper (Cu)
Cobalt (Co)
Selenium (Se)

### Complete the nutrient terms:

- \_\_\_\_ei\_
- 1. What are the six types of nutrients needed by all animals?
- \_ a r \_ \_ \_ y \_ \_ \_ \_ e
- 2. What is the difference in macro and micro?
- \_ i \_ \_ \_ \_ s
- 3. What are vitamins?
- \_ h \_ \_ p \_ \_ r \_ s
- 4. What are lipids?

 $\_\_t\_r$ 

5. Why is it important to properly feed your birds?



# ALLEN COUNTY 4-H POULTRY RECORD

Records serve as a way to measure your own success with a project. When answering these questions, you should be able to see where improvements can be made for next year and if you wish to continue with this project for another year.

<u>|\_\_\_\_\_\_i</u>



| Commercial                             |       |                |                     |               |                              |
|--|-------|----------------|---------------------|---------------|------------------------------|
| Class                                  | Breed | Date Purchased | Number<br>Purchased | Cost of Birds | Number of Birds<br>Dead/Lost |
| Broiler                                |       |                |                     |               |                              |
| Turkey                                 |       |                |                     |               |                              |
| White Egg Layer<br>(Over 6 Months)     |       |                |                     |               |                              |
| Colored Egg Layer<br>(Over 6 Months)   |       |                |                     |               |                              |
| White Egg Pullet<br>(Under 6 Months    |       |                |                     |               |                              |
| Colored Egg Pullet<br>(Under 6 Months) |       |                |                     |               |                              |

| Exhibition                |       |                |                     |               |                              |
|---------------------------|-------|----------------|---------------------|---------------|------------------------------|
| Class                     | Breed | Date Purchased | Number<br>Purchased | Cost of Birds | Number of Birds<br>Dead/Lost |
| Standard Exhibition       |       |                |                     |               |                              |
| Waterfowl                 |       |                |                     |               |                              |
| Clean Legged<br>Bantams   |       |                |                     |               |                              |
| Feather Legged<br>Bantams |       |                |                     |               |                              |

| Item                           |                                | Approximate Value                      |  |  |
|--------------------------------|--------------------------------|--|--|--|
|                                |                                |  |  |  |
|                                |                                |  |  |  |
| List the items you feed        | to your animals. Include ty    | pe of feed, quantity, costs            |  |  |
| Type of Food                   | Amount Fed                     | Expense - Value of Feed                |  |  |
|                                |                                |  |  |  |
|                                |                                |  |  |  |
|                                |                                |  |  |  |
| st veterinary expenses you had | with this project (vaccination | ons, illness, health certificates, etc |  |  |
|                                |                                |  |  |  |
|                                |                                |  |  |  |

Allen County, IN 2021

What resources did you use to gain more information about your animals? (List people, maga-

zines, newsletters, web sites, etc.)

| Did you give a demonstration in your local 4-H Club? Yes No If yes, list the date given, title of demonstration and number of people present.  |
|--|
| List any tours, workshops, clinics, etc you participated in relating to this project.  |
|  |
| You may exhibit in all ten classes offered Two Pen per Class.  |
| Educational Poster exhibit is due and judged on designated date in exhibit building, Watch the  Clover Chronicle for this date.  ** Copy of Receipt Showing date of purchase MUST be attached to these pages for Broilers, Pullets and Turkeys.  |
| I understand that the 4-H Livestock Committee may assign a specific location or pen for my animal(s). I understand that I may be subject to additional pen fees due upon time of unloading for my animals.   |
| I further understand that to exhibit at the Allen County Fair is a privilege and that I must adhere to all rules and regulations set forth by the Indiana Board of Animal Health for Exhibition, by the Purdue Extension Service 4-H Youth Development program and the Allen County 4-H Clubs, Incorporated. |
| 4-H Member Signature: Date:  |
| Completed v2.4honline enrollment by January 15, 2021  Completed Fair Entry on line by June 30, 2021  |
| Copy of YQCA Certificate attached  |