# AGRICULTURAL AND MECHANICAL COLLEGE OF TEXAS

# EXTENSION SERVICE

B-65 (Revised)

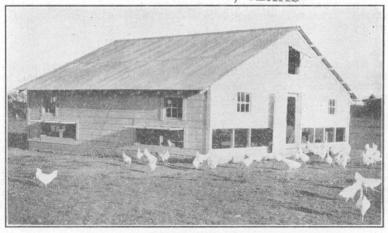
College Station, Texas

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# Poultry Houses

# for Texas

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COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

(The Agricultural and Mechanical College of Texas and the United States Department of Agriculture Cooperating)

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O. B. MARTIN, Director

# Poultry Houses for Texas

By E. N. HOLMGREEN and M. R. BENTLEY

NOTE.—In remodeling or building a poultry house, it is suggested that the county agent or home demonstration agent be consulted first.

The Extension Service has detailed blue prints of all plans shown in this bulletin.

The supply of these blue prints is not sufficient, however, to comply with the many requests for complete sets of all prints. It is therefore suggested that the selection of a poultry house be made from this bulletin, and the particular blue print will be sent on request.

Success in the poultry business is dependent on many factors, one of the most important of which is the housing facilities given the flock.

Because of the mild climate of Texas, it is decidedly wrong to think that hens can be allowed to roost in the trees or in poor houses. In winter especially, egg production is in direct proportion to the degree of comfort given the flock. Haphazard methods of housing and management seldom return a profit on labor and investment. Therefore, if poultry production is to be an important part of the farm business, the construction of a good poultry house will be an economical investment.

The plans herein given are those found most successful and best adapted to Texas farm conditions.

#### ESSENTIALS IN POULTRY HOUSES

The essentials in any type of poultry house are: sunlight, dryness, good ventilation, freedom from drafts, labor saving arrangement, and sufficient floor space to permit the flock freedom and comfort. Any house that meets these requirements should prove satisfactory.

#### LOCATION

Drainage is positively the most important factor in the location of a poultry house. Poorly drained locations result in cold, damp quarters, which in turn lead to poor production, sickness and disease. In remodeling old sheds, etc., it is often found advisable to move them to better locations... Whenever possible, the house should face the south or southeast to permit the greatest amount of sunlight to enter. This is especially important during the winter when sunlight is most needed.

#### FLOOR SPACE

The number of square feet of floor space per bird is another important factor. Crowded houses sooner or later lead to a diseased flock. From three to four square feet of floor space should be allowed for

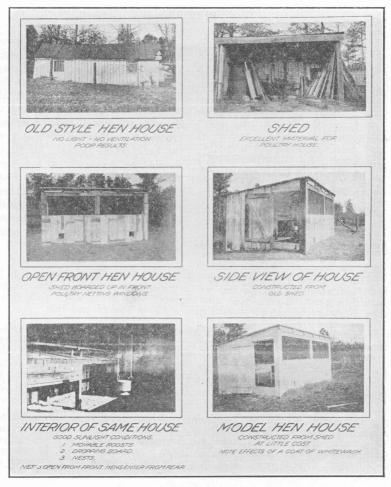
each bird where the flock is kept under close confinement.

From two and one-half to three square feet of floor space per bird is sufficient under average farm conditions, or where adequate range is provided. However, never figure on less than two and one-half square feet of floor space per bird.

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#### REMODELING OLD BUILDINGS

There are many sheds, old poultry houses, and other buildings of various sorts, which can be converted into good poultry houses at little cost and a small amount of labor. Figure 1 shows how old buildings already on the farm may be utilized. In remodelnig them, the essentials of a good poultry house, as previously given, should be kept in mind.



(Courtesy of the U. S. Department of Agriculture)
Fig. 1—Remodeling Old Buildings into Good Poultry Houses.

#### CONSTRUCTION OF HOUSE

#### Foundation

The foundation should be of concrete (see figure 2) as its use lends stability and permanence. Moreover, it prevents rats and other animals from getting under the floors, serves as an anchor for the building and greatly lengthens its life. The foundation walls should extend about eight inches above the ground line.

#### FLOORS

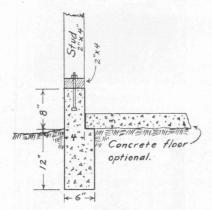


Fig. 2—Detail of Concrete Founda- easier.

The main essentials for a good floor are dryness and ease in keeping clean and sanitary. Hard clay, wood or concrete may be used. The floor should slope one and one-half to two inches toward the front to keep the litter well distributed and prevent hens from scratching it to the back of the house. All floors should be covered with litter. When so covered most of the filth, feathers, droppings, etc., is collected in the litter which can easily be removed and burned, thereby making sanitary measures much

Dirt: Dirst floors made of clay, wetted and well tamped will be found satisfactory though for sanitary reasons a layer of three inches should be removed each year and replaced with fresh soil. Dirt floors should always be raised several inches above the ground line.

Wood: Wood floors should be made from tightly fitting lumber such as shiplap in order to avoid cracks and crevices as much as possible. Wood floors close to the ground make rat harbors and soon rot out. In order to prevent this, the floors should be raised at least eight to ten inches. When raised as high as eighteen inches the floor will furnish an excellent shade in hot weather. A wood floor is recommended for brooder houses.

Concrete: Is the best material and is generally recommended because the floors are permanent, easy to clean, rat-proof and impervious to vermin. This kind of floor will be more satisfactory if underlayed with cinders, small stones, etc., for thus constructed it will be warmer and dryer. This type of floor should be well covered with litter at all times.

If desired a concrete floor can be added later if the house is properly constructed with concrete foundation walls as in figure 2.

#### WALLS

Drop siding nailed to 2 x 4 studs is used a great deal for walls. Another wall that is cheaper in some localities is made with 1 x 12 boards run vertically, with the cracks stripped with 1 x 4's or other battens. A very good wall can be made by running shiplap or flooring vertically from the sills to the roof plate. When the wall boards are run vertically, most of the studs may be left out. Sometimes composition roofing is nailed over shiplap to make an extra warm house.

Concrete and hollow clay tile are excellent materials for walls but their cost must be taken into consideration.

#### ROOF

Shingles make good roofs on poultry houses that have a roof pitch of 1-3 (eight inches to one foot) but they are not satisfactory if the roof pitch is less.

A very good roof is one that is made of shiplap and covered with a good grade of roofing paper. This type will serve on a nearly flat roof. When either of the above roofs is used, it is a most excellent practice to thoroughly paint the lumber with carbolineum which is a good preservative and is also one of the best destroyers and repellents of vermin.

Corrugated iron has proven excellent as a roofing material. It is vermin proof, lasting and reasonable in cost. Where the house is constructed exactly in accordance with the plans herein given regarding ventilation, this type of roof will be found most satisfactory.

#### ROOSTS

The roost should be placed at the back of the house away from the front opening. Two by two material slightly rounded on the upper side and set 12 inches apart, makes excellent roosts. They may run either lengthwise or across the dropping board, and should be 6 to 8 inches above it. The roosts should be firmly attached to 2 x 4 supports, which may be suspended from the rafters by crossed wires (see figure 24) or may be hinged at the back so they may be raised to facilitate cleaning. From 8 to 10 inches roosting space should be allowed each bird.

All poultry houses should have dropping boards under the roosts. The dropping boards should be made from closely fitting material and extend forward 6 inches from the front roost. The dropping board should be 3 feet from the floor.

One of the very best investments in the whole poultry house is the money expended for a sufficient amount of carbolineum with which to thoroughly paint the roosts and dropping boards. Lice and mites will positively not harbor in places painted with this substance and its repelling effects last several months. It is also an excellent wood preservative.

#### NESTS

There should be one nest for each four hens. The nests should not be less than 12 inches square and 14 inches high. They may be placed at the end wall or partitions in layers one above the other or under the front of the dropping boards. The nests should also be painted with carbelineum.

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#### GABLE ROOF HOUSE

For 200 to 250 Hens

The house shown on the front of the bulletin, and in figures 3, 4, 5, and 6, is an excellent farm poultry house. By reason it its straw loft, it is coal in the summary and warm in the wayster.

and 6, is an excellent farm poultry house. By reason of its straw loft, it is cool in the summer and warm in the winter. It is ventilated exceedingly well and designed to admit abundance of light. This plan may be used in remodeling old gable roof buildings.

Figure 6 shows how the ceiling joints serve to strenghten the roof and also support the slatted ceiling on which the straw is placed for the

straw loft.

The sides of this house, which are not shown, have ventilating shutters and windows similar to those shown in the picture on the front page.

With exactly the same design, the size of the house may be in-

creased or decreased for the following capacities:

100 to 125 hen capacity—house 18 feet by 18 feet—Blue Print No. 116

300 to 350 hen capacity—house 30 feet by 30 feet.

500 to 600 hen capacity—house 30 feet by 50 feet.

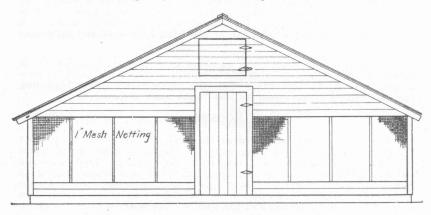


Fig. 3-Front or South View of Gable Roof House,

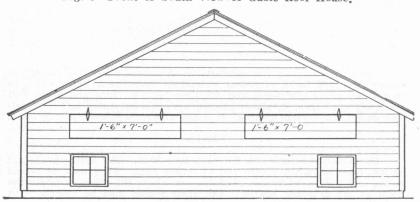


Fig. 4-Back View of Gable Roof House.

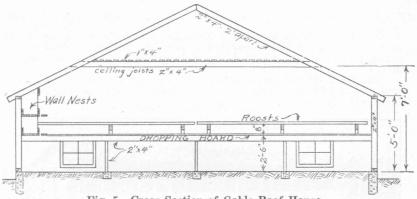
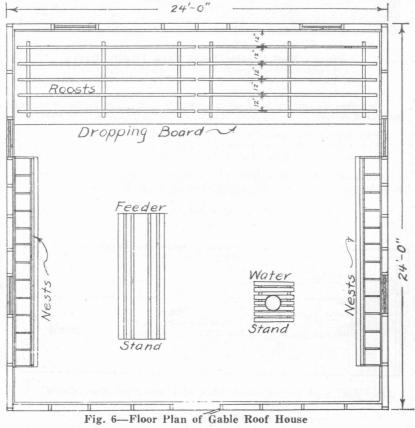


Fig. 5-Cross Section of Gable Roof House.



# LARGE SHED ROOF HOUSE

For 200 to 250 hens.

Blue Print No. 120

The house shown by picture in figure No. 7 and in figures 8, 9, 10, and 11, is the most popular Texas farm poultry house. It is cheap and easy to construct, admits a maximum of sunlight and is well ventilated.

The design shown herewith is one built of  $1 \times 12$  inch boards nailed vertically and stripped with battens. Shiplap may also be used or drop siding, run horizontaly.

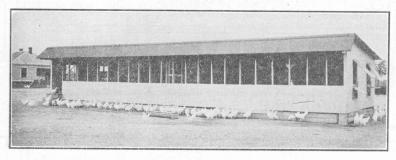


Fig. 7—Most Popular Texas Farm Poultry House. (Front varies slightly from accompanying plans)

A house 20 feet wide is most desirable and if the capacity is to be increased it should be done by lengthening the house as follows:

For 260 to 325 hens—house 20 x 40 feet. For 325 to 400 hens—house 20 x 50 feet. For 400 to 500 hens—house 20 x 60 feet.

To avoid drafts in longer houses partitions that extend from dropping boards to roof should be placed each 20 or 30 feet.

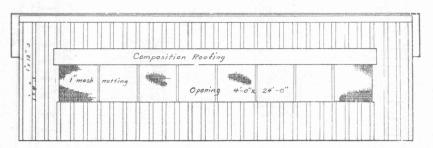


Fig. 8-Front or South View of Large Shed Roof House.

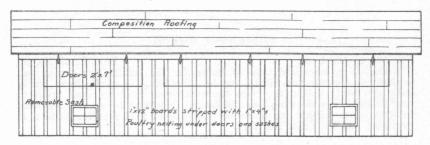


Fig. 9—Back View of Large Shed Roof House. (Note Ventilating Shutters)

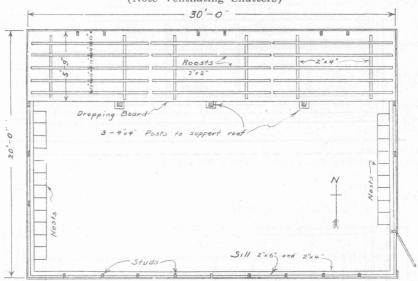


Fig. 10-Floor Plan of Large Shed Roof House.

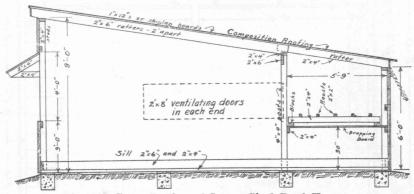


Fig. 11—Cross Section of Large Shed Roof House

### SHED ROOF HOUSE

For 100 to 125 hens.

This is an excellent type of house for the small flock owner and is shown in figures Nos. 12, 13, and 14. The house is small, cheap, easily built and well ventilated. Note the small roof over the open front to prevent rain from blowing into the house. Iron roof is not recommended for this house. Plans for house of this type 12 x 16 feet for 65 hens is available in Blue Print No. 17.

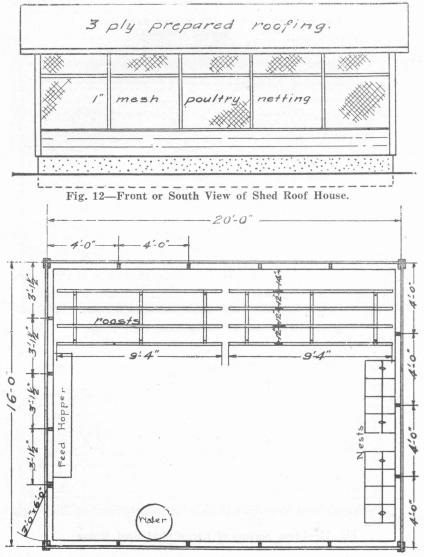


Fig. 13—Floor Plan of Shed Roof House.

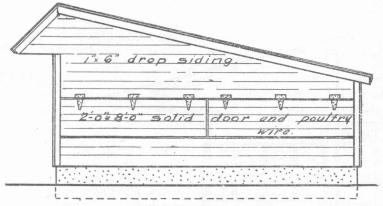


Fig. 14—End View of Shed Roof House.
(Note Ventilating Shutters)

# SMALL SHED ROOF HOUSE

For 25 hens. Blue Print No. 75
The house as shown in figures 15, 16 and 17 is the one used at the

Texas National Egg Laying Contest, College Station, Texas.

It is suitable for the back yard poultry keeper and for other owners of a few hens. It is also an excellent house for the breeder in trap nesting and pedigree work. The house may be built on skids so that it can be moved about.

Note that in figures 16 and 17 two plans of front construction are given, figure 17 giving house with completely open front and therefore

more ventilation.

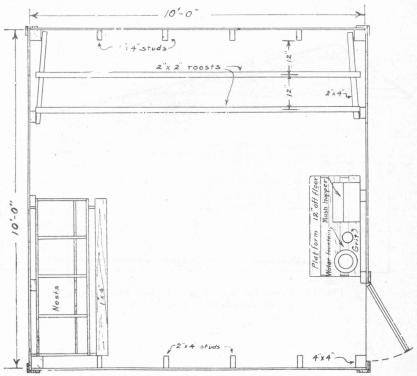


Fig. 15-Floor Plan of Small Shed Roof House.

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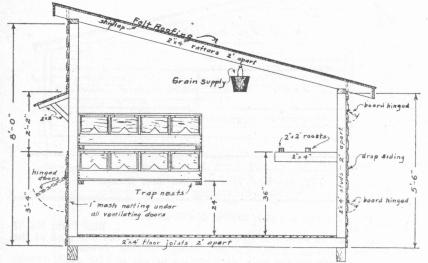


Fig. 16—Cross Section of Small Shed Roof House.

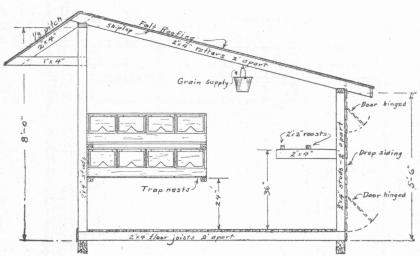


Fig. 17—Cross Section of Small Shed Roof House.
(Note completely open front)

### LARGE BROODER HOUSE

1000 chick capacity.

Blue Print No. 123

Fig. 18—Cross Section of Large Brooder House.

This house is designed for the use of two hovers. Its maximum capacity would be 1000 chicks. If it is not to be movable, 2 x 6 pieces may be laid flat instead of the 6 x 6 runners.

The door is placed in one end, and 30 x 36 inch windows may be placed in each end of the house.

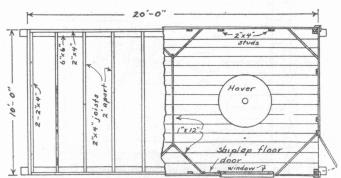


Fig. 19-Floor Plan of Large Brooder House.

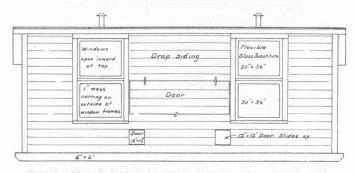


Fig. 20—Front or South View of Large Brooder House. (Note that glass substitutes are used in windows instead of glass.)

500 chick capacity.

Blue Print. No. 111

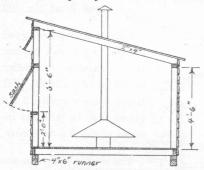


Fig. 21—Cross Section of Small
Brooder House
(Note this house may be placed on
runners and moved about)

The brooder house should be so constructed that it can be easily kept warm and also well ventilated. Sunlight in the house is very desirable. A house of this size will accommodate one large hover or two small ones.

Figure 22 shows a desirable south front for a brooder house. The sashes which are hinged, will admit sunlight when it is too cold to have the doors open.

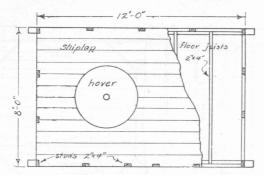


Fig. 22-Floor Plan of Small Brooder House.

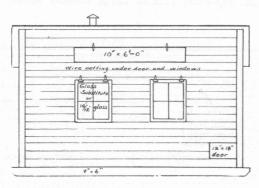


Fig. 23-Front or South View of Small Brooder House.

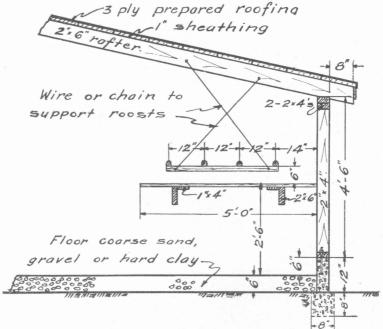


Fig. 24—Roost Construction Showing Roosts Suspended by Crossed Wires.