

## CHAPTER 6

## Facilities, Shelters, and Fencing

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### Brooding areas

When raising turkeys, producers must learn to adapt to the environment and facilities at hand. Among the very basic requirements is to maintain a draft-free, well-ventilated room for brooding. A room that will maintain a temperature of 95° F. for the first week will save turkeys and money. Insulate brooding areas to prevent drafts. Plan on keeping the birds in the brooding area until they are four weeks old (See Chapter 2, *Brooding and Brooder Pens*, for more detailed information on brooding poults.).

The size of the brooder will depend on the number of poults to be raised at a given time. Most social problems in the flock are caused by crowding; to avoid pecking problems among the poults allow one square foot of floor space per poult up to six weeks of age. From six to twelve weeks of age increase this space to two square feet per poult.



*Poults in brooder. Photo by Frank Reese*

Brooders come in many forms. A simple wooden box may be sufficient for small-scale production. If the brooder is square, round out the corners by adding semi-circular pieces of material (cardboard, wood, or sheet metal) secured in each corner. This reduces the likelihood of poults piling into corners and suffocating the birds at the bottom of such piles. Small wading pools with 12- to 14-inch sides are very functional. A simple circular cardboard barrier around the perimeter of the pool can be used to keep larger poults from jumping out of the enclosure and can be discarded and replaced between batches of poults.

Keeping the brooder clean is essential for successfully raising poults. To keep the care of the birds simple and efficient, build the brooder and other turkey facilities with cleaning in mind. Change bedding regularly to ensure the birds are kept clean and healthy. Elevated brooders with wire flooring simplify cleaning for larger flocks. Wire mesh flooring works well as it aids with disease prevention and overall cleanliness. Use wire mesh with openings no larger than one-quarter inch by one-quarter inch for the first 3 weeks. After three weeks, birds may be moved on to half-inch by half-inch mesh until they are old enough to go outside. Using half-inch by half-inch wire for poults under three weeks of age can result in knee joints getting caught in the flooring, which can lead to lifelong leg problems.

Keeping poults raised about 36 inches off the floor will lower heating cost as only the air, and not the ground will need to be heated. Running a 36-inch ceiling fan on low and moving air toward the ceiling will warm air trapped near the ceiling and circulate air, preventing cool spots from occurring in the brooding area without creating a draft on the poults.

### Sun porches

When poults reach six weeks of age they may be allowed limited outdoor access during the day, but coop the poults at night until they are at least 8 to 12 weeks old. This access can be in an elevated enclosure called a *sun porch*. Sun porches are typically connected to



*Poults in sun porch. Photo by Frank Reese*

the outer wall of the brooding area and are raised up off the ground so that young poults are not exposed to soil-borne pathogens that pose a risk to their health. Keep in mind that poults take 8 to 12 weeks to develop their immune systems to a point when many consider it safe for them to begin venturing on the ground and into pasture areas. Sun porches give young turkeys the benefit of fresh air and sunshine while they reside in a relatively clean environment until they are ready for pasture. Young birds should not be allowed out in the sun porch in rainy conditions because the oil on their feathers is not thick enough to work as a “raincoat.” Water will penetrate the feathers instead of beading off, causing body core temperature to drop. Poults easily die of hypothermia when chilled.



*Poultry range shelter. Photo by Jeannette Beranger.*

## Housing on Pasture

Turkeys on pasture face the challenges of weather and predators. To protect birds against predators, many producers choose to close the birds into shelters for the night. With larger flocks, enclosing birds may be problematic so fencing becomes the primary defense against predators, but shelters remain necessary for protection from weather conditions that may be hazardous, such as extreme heat, heavy rain, hail, and snow.

The primary purpose of the shelter is to offer refuge for the entire flock without overcrowding. The minimal space allowance in a shelter for adult-sized turkeys is three square feet per bird. Shelters can be as basic as a carport in the center of the pasture, or as complex as one can imagine.

Mobile poultry housing offers secure protection for the flock and allows the producer to move the coop, thus reducing the environmental impact of heavy traffic around a shelter. Mobile shelters and coops have advantages – like distributing manure. With the assistance of a tractor or truck, mobile shelters can be moved relatively easily especially if constructed on wooden skids. Lightweight buildings will need to be staked down to prevent them from flying off during storms or high winds. Natural windbreaks, such as corn rows, trees, etc., near any shelter offer additional protection for the birds against strong winds and stormy conditions.

An inexpensive and commonly used mobile shelter is a 10-foot by 12-foot building whose framework is comprised of two-by-six inch base boards or skids and three hoops of one-inch electrical conduit for the



*Outdoor turkey shelter. Photo by Mike Walters.*



*Mobile turkey tractor. Photo by Jeannette Beranger*

roof and walls, enclosed with chicken wire to protect against predators. This is covered with a tarp to protect the turkeys from the elements when needed. The entire unit is lightweight and can be easily moved by hand. The shelter needs to be staked down when not being moved due to its minimal weight. Birds can be allowed free-range on the pasture during the day, but enclosed at night for protection against nocturnal predators. Keeping feed and water in the shelter at all times keeps the birds eager to enter the shelter and makes it easier for the producer to gather the birds in the evening. Gathering the turkeys is best done no later than an hour before sundown.

Another type of mobile coop places the housing on top of a frame with wheels. The floor is wire mesh so that droppings fall to the ground, keeping the house clean for the birds and requiring minimal work by the producer. The turkeys graze during the day and are locked in the mobile unit at night. The coop is then moved so manure does not accumulate in any one place.

For larger flocks, a 20-foot by 40-foot RV shelter can serve up to 400 birds. This shelter has 10-foot sidewalls that are open, allowing good air circulation while still providing adequate protection against the elements.

Remember that turkeys want to return to the same location night after night. A coop can be moved incrementally down a field with reasonable success. If a significant move is made, the turkeys should remain cooped for several days so they become accustomed to the new location of their night-time home.



*Turkey roosts. Photo by Frank Reese*

## Roosts

In the wild, turkeys roost in trees to sleep or when they sense danger. Domesticated standard varieties of turkeys also roost, so providing perches will ensure the birds are comfortable and have a clean environment in which to sleep. Young poults begin to perch at four to five weeks of age. Older toms will not roost due to their heavy mature weights and will not require perches.

Roosts are best built all on the same level to reduce competition for the highest perch. Perches need to be 15 to 30 inches off the ground and at least 24 inches apart. Use two- to four-inch diameter poles or planks laid with the four-inch side parallel to the ground or at a slight angle. Roosts for mature birds require sturdy materials that will not break under their weight. Allow 10 to 15 inches of roost space per bird. Consider putting chicken wire six inches under the roosts to keep the birds from getting into the droppings below the roosts. Roosts should be placed far from fence lines so that birds are less likely to soar over the perimeter fence when they take off from the roost.

## Fencing

The main function of pasture fencing is to exclude predators and to confine turkeys *most* of the time. Most standard turkeys are able to fly. Lighter weight hens and young birds fly more than the heavier toms and can easily clear six-foot fences. If the birds are comfortable and have ample food, they tend to stay within their enclosure. When they are threatened or excited they are more likely to fly. Once out, turkeys will often spend the rest of the day trying unsuccessfully to get back in. Wing feather clipping is an option to deter flight in some of the birds. Only the “rogue” birds, those that routinely fly out of the enclosure, need to be clipped.



*Turkeys in covered yard. Photo by Mike Walters*

Clip the primary flight feathers on one wing: This puts the bird off balance when it tries to fly. Repeat this every two to four weeks, as needed.

The most commonly used fencing materials for turkeys are portable electric fencing and permanent field wire fencing. Both have advantages and pitfalls that should be considered before making the financial commitment to one or the other. Portable electric poultry fencing is typically 42 inches high and is very easy to move and set up. Electric fencing can be powered by a nearby electrical source or solar-powered batteries. The charger must produce sufficient current to maintain an effective charge. Consult a fence company or other reliable source before purchasing a charger to ensure the fence will be amply supplied with the proper amount of voltage for the situation.

Prepare the pasture before setting up portable electric fencing. Mow where the fence will be so that vegetation does not short-circuit it. Another option is to lay weed-blocking material under the fence so that the area will not need to be mowed for the entire season. To get in and out, simply turn off the current and bend/walk over the fence to gain entry.



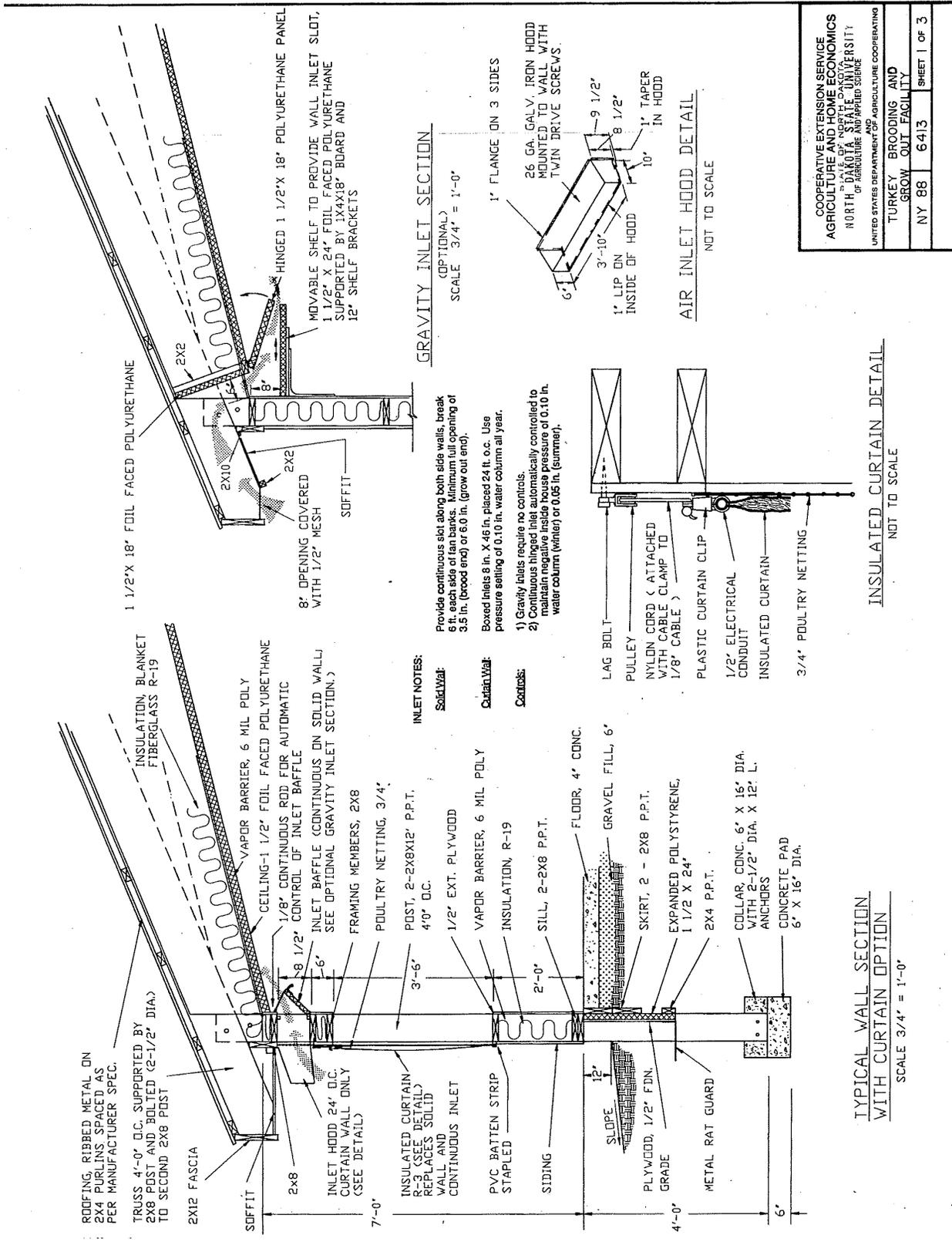
*Turkeys in fenced yard. Photo courtesy of the Ridley family*

Permanent fencing for turkeys is constructed with wire mesh. Woven mesh is preferable to welded and will have a longer lifespan. To be effective against large predators such as dogs or coyotes, use 16-gauge wire that is six feet high with openings no larger than six inches square. Fence posts are spaced every 10 feet with a cross bar every 100 feet to maintain tension.

Many turkey farmers supplement the defenses of their permanent fence with one or more strands of electrified high tensile wire. Often one strand is placed along the top of the mesh fence and a second strand is placed six inches off the ground along the outside of the fence line.

Outside of secure housing and enclosures, the most effective preventative measure against predators is diligence. Make it part of the daily routine to check the housing inside and out and to check fence lines for any gaps or weaknesses. Predator activity can often be detected before a problem occurs. (For more on protection against predators, see Chapter 8, *Predator Management*.)

**HOW TO RAISE HERITAGE TURKEYS ON PASTURE**



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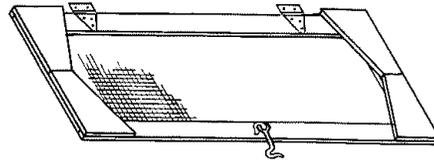
TURKEY BROODING AND  
 GROW OUT FACILITY

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HOW TO RAISE HERITAGE TURKEYS ON PASTURE

BILL OF MATERIAL		DESCRIPTION
NO.	REQD.	SIZE
6		2 1/2 x 14'-0"
9		SILLS, PLATES
10		2 1/2 x 12'-0"
18		2 1/2 x 10'-0"
4		4 1/2 x 8'-0"
4		1 1/2 x 16'-0"
36		1 1/2 x 16'-0"
18		1 1/2 x 12'-0"
4		1 1/2 x 10'-0"
2		1 1/2 x 12'-0"
1		1 1/2 x 10'-0"
1		1 1/2 x 12'-0"
4		3"
10		3"
8		3"
20d		COM. NAILS
1		4d
3		3/4"
1		1" MESH
600 SQ FT		POULTRY NETTING

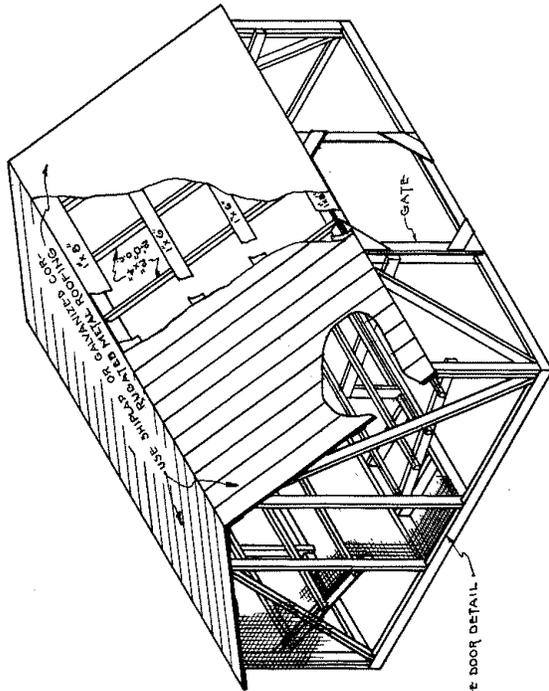


DETAIL OF DOOR  
SCALE 3/8" = 1'-0"

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TURKEY RANGE SHELTER

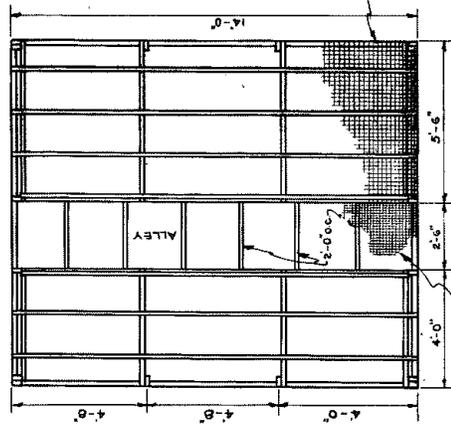
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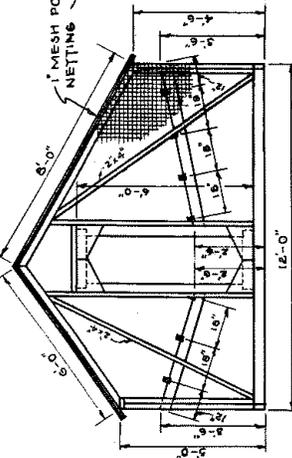
ISOMETRIC VIEW

SEE DOOR DETAIL

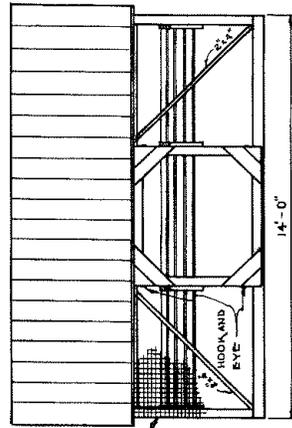
1" MESH POULTRY NETTING UNDER ROOSTS AND OVER THE SIDES AND ON FLOOR OF ALLEY



TWO LAYERS OF POULTRY NETTING ALLEY OR ON ALLEY  
PLAN SCALE 3/8" = 1'-0"



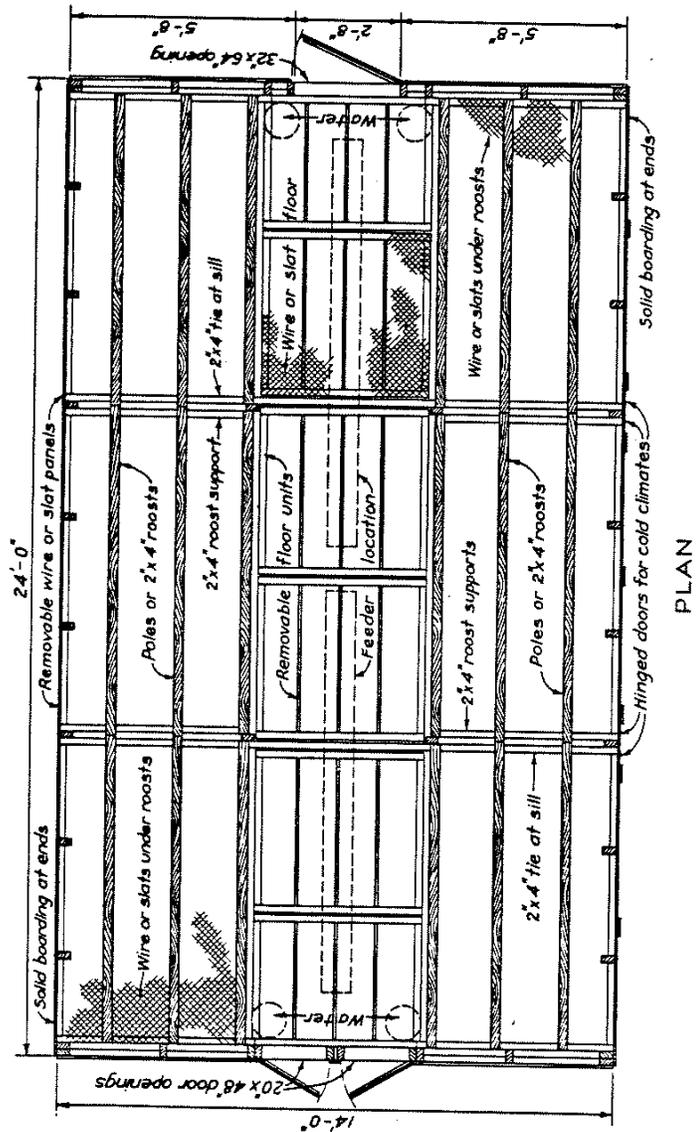
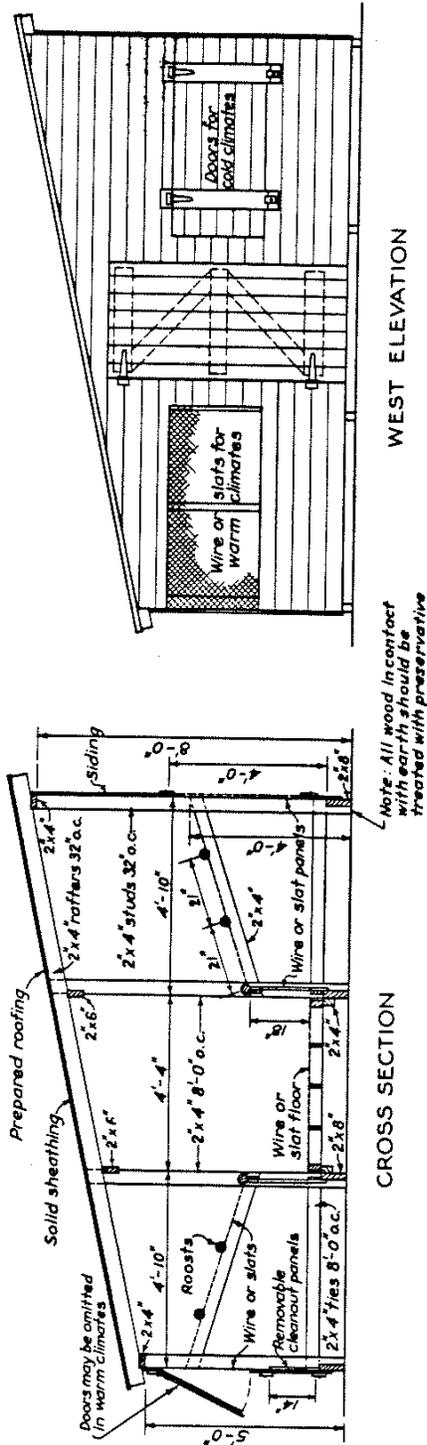
END VIEW  
SCALE 3/8" = 1'-0"



SIDE VIEW  
SCALE 3/8" = 1'-0"

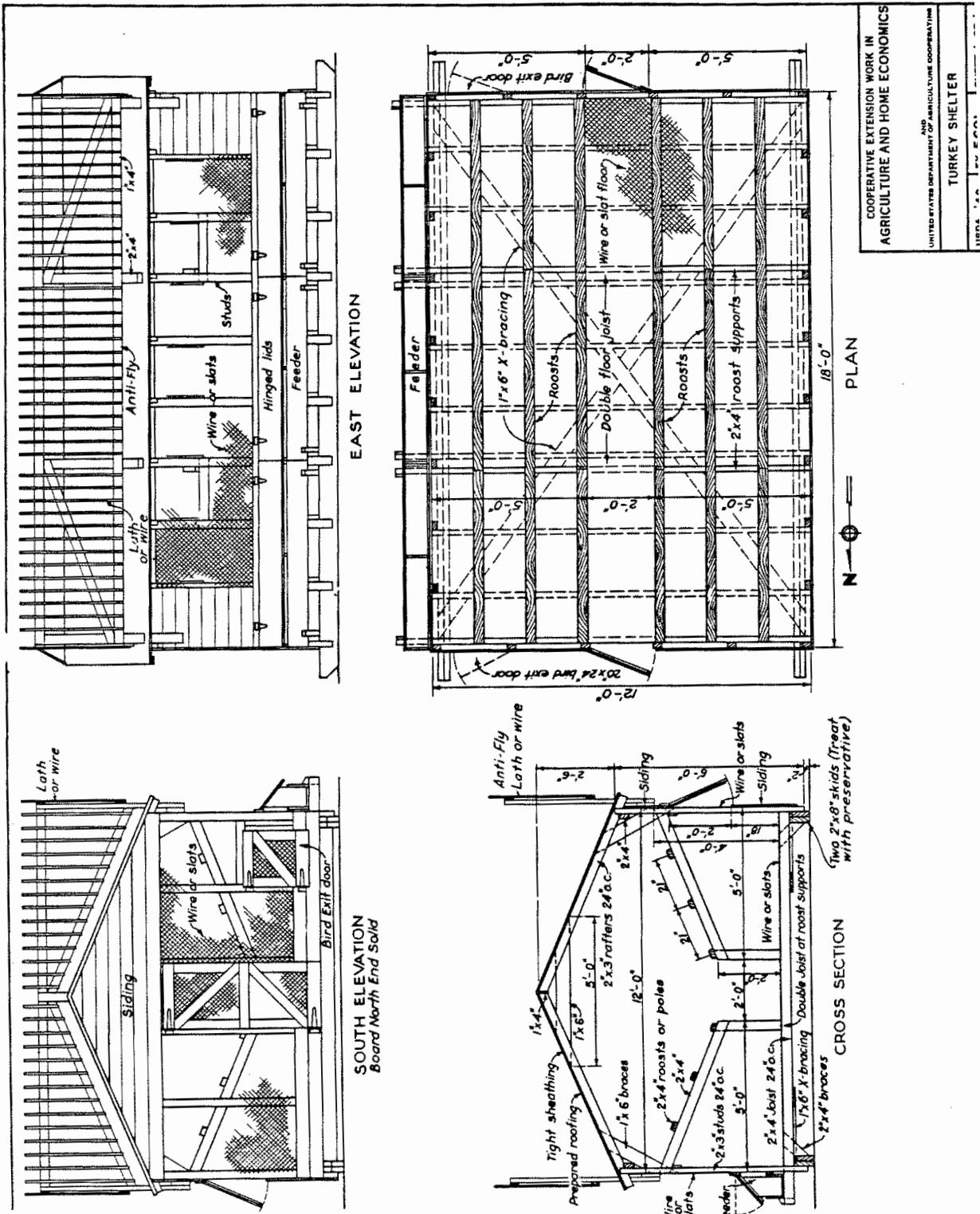
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TURKEY SHELTER	
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## Resources

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*NDSU Extension Ag & Biosystems Engineering, Poultry Plans: North Dakota State University*, [www.ag.ndsu.nodak.edu/abeng/poultryplans.htm](http://www.ag.ndsu.nodak.edu/abeng/poultryplans.htm), NDSU Extension Service, Morrill Hall 315, PO Box 5437, Fargo, ND 58105-5437, (701) 231-8944, fax (701) 231-8520.



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