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Turkeys

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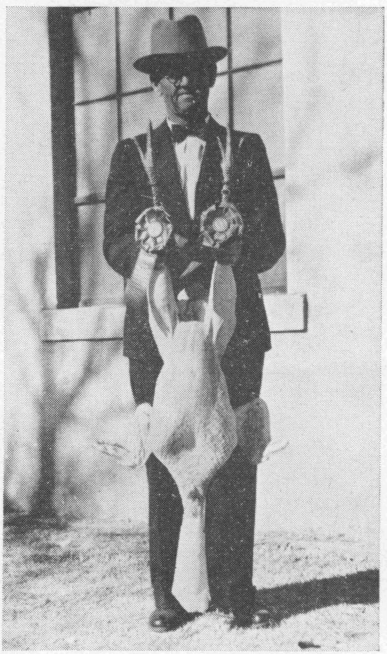


TURKEYS

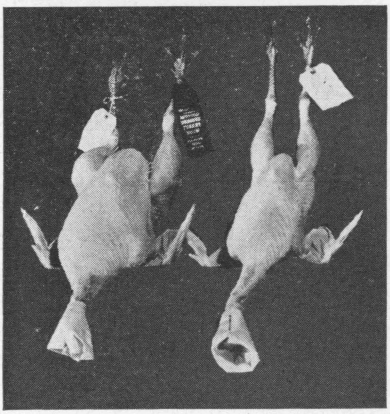
By Geo. P. McCarthy, Extension Poultry Husbandman

THE production of turkeys in Texas has been a very important factor in agricultural income for over a quarter of a century. Like other livestock enterprises of the state, turkey production has expanded and today represents approximately ten million dollars annually to Texas producers. Along with this development has come the need for better marketing and improvement in quality.

Although Texas has been known as the turkey state it is giving ground to other states that are developing large commercial flocks. There are only a few large flocks of turkeys produced in this state, the majority of market turkeys coming from small flocks of 100 or less birds. Regardless of the size flock the demand today is for a quality turkey that is well finished as far as fleshing and fat are concerned. The poorly developed turkeys that find their way to market continue to hold the price down. The improvement of quality is definitely on the upgrade and must continue to be so to keep up with other regions thereby preventing eastern markets from refusing our turkeys. Many sections of Texas are known for the improvement work they are doing. This is being accomplished through careful selection of broad breasted breeding stock and following good management practices in brooding, feeding, disease control and marketing. By following a definite improvement program and placing better turkeys on the market, the present price differential on southwest turkeys as compared to northern can be equalized.

The time of selection, type, age and maturity of the breeders are very important. Breeding is in simple language "Like begets like," so we should have the kind and type of turkey we wish to market definitely fixed in mind. Unfortunately many turkeys kept over for breeding stock are cull birds. By that I mean hens and toms that failed to mature in time for the Thanksgiving and Christmas markets and have been held over and later used as breeders. Such breeders are undersized birds, slow in maturing, and lacking in that important factor "vitality."

Turkey breeding stock should be selected during the latter part of October or the first of November. Select the best birds in the flock for breeders. These will be the individuals that have developed faster than the others and are free from pin feathers and would normally be ready for Thanksgiving market.



The turkey at the left represents the goal of Texas turkey breeders.

In selecting birds for breeding purposes, keep several points definitely in mind. First the turkey is primarily a meat bird and we must satisfy the consumer by giving him a turkey that carries a broad breast and good quality flesh. In addition to fleshing it must be smooth and free from pin feathers. Next keep well fixed in mind the type of turkey you wish to breed. The desirable type is one with a broad back, heavy drum sticks and medium length legs and neck and a smooth compact body. Last consider the standard qualities of the breed and have it conform as nearly to the standard of perfection as possible.

When time comes to make the selection confine the birds in a small pen. Small underdeveloped birds may be cut out before they are driven into the pen. It is a good plan to separate the sexes. Handle each bird separately and examine it carefully. The breast should be wide. The more width the better. The keel should be straight, free of curves, dents, knobs or keel tip dents. The length of breast should conform closely to the length of the shank. Select a breast that is set well forward, not extending between the legs when the bird is suspended by its feet and should be as near parallel to the line of the back as possible. Do not save any birds for breeders that have narrow or crooked breasts or birds of low vitality.

If the age of the birds is known try to select those individuals that were hatched by May 1 and have the inherited ability to mature early. Do this by folding back the feathers along the breast and legs to see if there is an even distribution of fat. This is important and should always be considered in the selection. Turkeys that do not have the ability to put on fat early are late maturing individuals and

expensive to raise. At the same time the bird is being examined for fat, notice the pin feather development. If the pin feathers are through the skin and are taking on fan-like tips, then the individual is mature. If the pin feathers are under the skin or just protruding with fine pointed tips, the individual is late in developing these feathers and should not be kept as a breeder. Pin feather development and fat have been considered as a cold weather development. This is not altogther true since selection is a very important factor and should be carefully followed. It is not advisable to keep turkeys for breeders that are hatched after May 1.

Pen Up Breeders for Early Eggs

After breeders are selected they should be penned separately from the market birds. It is well to leg band them or mark them in some manner so that they will not be accidentally sold. After they are penned they should receive a developing feed but not a fattening feed. If the market birds are confined to small areas for finishing, let the breeders be allowed to range.

After the birds are selected for breeders they should be given a thorough treatment for internal parasites, and where fowl pox has been a problem, they should be vaccinated against this disease.

Land plowed and planted to green feed makes excellent range for breeders.

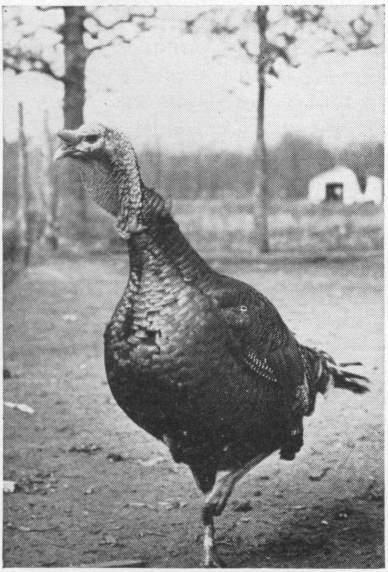
The breeding birds should not be fat. They should carry sufficient flesh but not a surplus fat. If this happens poor fertility and poor shaped eggs are likely to occur. If the breeders are too fat when they are first selected they should be placed on a restricted feeding with large quantities of green feed.

If early hatched eggs are desired the birds should be confined to small yards allowing at least five acres for each 100 turkeys. Place them on a good grade of laying mash (chicken laying mash may be used) by the middle of December. Keep this before them at all times. The better the mash the more eggs the birds will lay. In addition to the mash, sufficient grain should be given to maintain good body weight. The amount fed depends upon the condition of the birds and ability of the feeder.

Fresh green feed should be given them each day if their range is depleted. If green feed is not available, alfalfa hay may be used. If the mash that is being fed does not contain milk, it will pay to mix a wet mash once a day with milk and feed them. Keeping milk in open containers will help in maintaining good fertility and hatchability. Keep clean fresh water always before them, also keep a good supply of oyster shell and hard granite grit available in open hoppers. The breeders need to be protected against cold winds and even against cold rains. A cheap shelter can be constructed over the roosts to turn the rain and a windbreak made of boards and placed on the north side will help keep off the cold winds. The roosts should be low, not more than three feet off of the ground and two feet high is more desirable.

Use Care in Selecting a Tom

The male bird is half of the flock, so the same care should be taken in selecting toms as was taken in selecting pullets and hens. By all means select a male that has all of the qualities outlined earlier on selection. Toms and hens should not be related unless they are of good vitality and type. For insurance it is always best to have two toms should one not prove to be a good individual. One male can, under ordinary conditions, be used with 12 to 15 females. When large flock matings are desired it has been found more profitable not to run more than 50 head to the pen and to rotate the toms.



Use the same care in selecting toms for breeding purposes as that used in selecting hens.

Handle Hatching Eggs Carefully

A turkey likes to lay in protected places, such as in the brush or weeds. If no brush is available then place nests around and darken the openings with sacks, leaving only enough opening for the birds to go in and out conveniently. Many producers like to use barrels, turned on the sides and tilted enough to prevent surface rain water from running in. Where barrels are used they should be staked to prevent their rolling. Nests can be made from boxes or even constructed from 1″ x 12″ material. The nest should be at least 18″ front, 24″ depth and 18″ high. Where nests are made in this manner no bottom is used and the birds nest on the ground. A small amount of nest litter should be scattered inside each box.

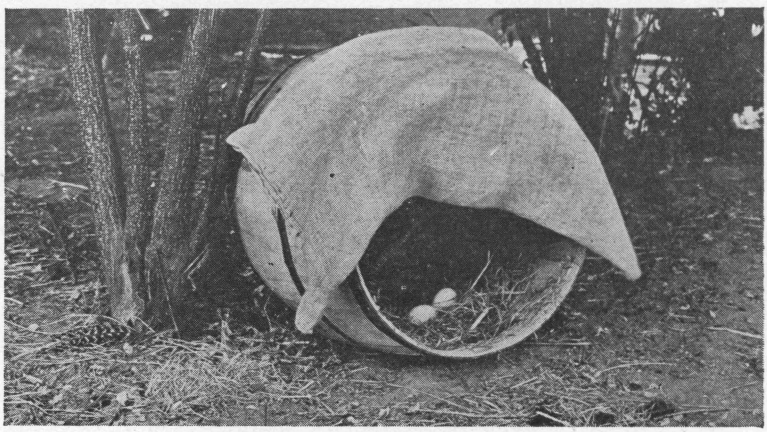
Eggs should be gathered at least twice a day during the laying season and kept in a cool room where the temperature is below 65 degrees. A basement or cellar makes an excellent place for holding eggs. During extremely cold days eggs should be gathered frequently to prevent their freezing. Hatching eggs should never be kept more than ten days before setting. Turn hatching eggs daily during the holding period.

The first setting of eggs should be checked closely for fertility and should a high percentage of the eggs be infertile then it is well to change toms. Many producers still use the natural method of incubation and brooding. Where this is done the brood hens should be thoroughly treated for both external and internal parasites before being given the eggs. This is important to prevent the poults from becoming infested with parasites and also to prevent losses from disease, especially blackhead. The brood coop should be thoroughly treated with carbolineum before brooding to get rid of any mites, bluebugs, or other insects that may be present.

Not more than eight eggs should be placed under a chicken hen. A turkey hen can usually take care of 15 to 18 eggs. It is best to scoop out a small place in the ground, preferably in a shady place, moisten with water, cover with a good litter and place the brood coop over it. A moist place is desirable in holding the humidity up and will result in a better hatch. Feed and water should be kept before the brood hens so that they can have access to it whenever they leave the nest.

Artificial Incubation Rapidly Increasing

The "A" type brood coop is generally recognized as superior to any other type of construction. It is easily constructed and turns rain better than the others. Many turkey raisers use these brood coops for laying houses as well as for hatching and brooding.



A coarsely woven sack partially covering the opening of a nest is good.

The brood coop should be made large enough to permit the turkey hen to exercise and to stand erect without touching the coop. It should be constructed of durable material to last several seasons yet light enough to be moved. The usual size is five feet long, three feet wide at the bottom and three feet high measured perpendicular from the top to the base. Two feet of one end of the coop should be covered with wire or slats. It is a good plan also to have one side covered with woven wire under the regular wooden side. The wooden side should be removable or hinged at top. A door should be made in the open end to allow the hen to pass in and out during the laying period.

Artificial methods of hatching and brooding of turkeys has been gaining rapidly in popularity among turkey producers. They are able to get more eggs from their hens and raise more uniform flocks of birds. There is less mortality and less danger of disease.

Where turkey eggs are hatched in the incubator, the conditions are very similar to those for hatching hen eggs. The main difference is in the length of time, 28 days being required for turkey eggs. In order to secure good hatches from turkey eggs in an incubator, four very important conditions must be taken into account—proper regulation of temperature, proper moisture in the incubator and hatching chamber, and correct ventilation and proper turning of the eggs.

The optimum temperature for incubating turkey eggs is around 100 degrees. A slight variation is found in the different types of machines and heating elements, and for this reason the person operating an incubator should always follow the instructions of the manufacturer.

Moisture is a very important factor in good hatchability. Moisture is as essential to the embryo as it is to the hatched poult. The egg is about 66 percent moisture at the time it is laid, and if this supply is conserved, there is sufficient for normal development of the embryo.

Some incubators are equipped with moisture regulators, some are not. On those machines not having regulated moisture adjusters, it is a good practice to supply moisture by sprinkling the eggs. This should be done every other day from the fourteenth day until hatching time. Ventilation adjustments should be considered in connection with humidity since the rapid movement of air, low in humidity, will cause too great a loss of moisture from the egg.

Turning of turkey eggs is recommended in order to prevent the embryo from drying and sticking to the shell membrane. It is also believed that turning the eggs aids development by stimulating cell activity. Eggs should be turned at least twice a day. The turning should be discontinued after the twenty-fourth day of incubation.

Don't Crowd Poults When Brooding

Brooding of turkey poults is closely related to the artificial brooding of chicks. It is best to move the brooder house to clean ground that has been freshly plowed and planted. The brooder house should be thoroughly cleaned and made ready for the young turkey poults. Any brooder stove that is satisfactory for brooding of chicks can be used.

One safe rule to follow in brooding of poults is not to crowd too many into a house. The average 10 x 12 brooder house will take care of 150 poults. Fine gravel or coarse sand is a satisfactory litter. The sand should be replaced at regular intervals and raked daily with a fine tooth rake. Poults should be brooded at a slightly lower temperature than chickens. Overheating is very harmful and will result in high mortality. A low wire netting should be placed in a circle approximately two feet from the outer edge of the hover for the first few days until the poults have become accustomed to the heat. This can gradually be enlarged and finally removed within a week if weather conditions permit.

Strict sanitation should be practiced as poults are very susceptible to diseases of filth-borne organisms. A very satisfactory yarding system often used is the "four leaf clover method." This consists of stretching a small wire fence on one side of the brooder house. The poults are allowed to range on this ground for one week. The fence is moved to another side for the second week and so on until they have ranged on all four sides. If convenient, the brooder house can then be skidded two hundred feet and the operation repeated. This method keeps the poults on clean ground and prevents contamination. After the poults are three or four weeks old they should be taught to roost. This can be accomplished by placing small roosting racks near the hover. The poults readily take to the roost at this age. Early roosting prevents crowding, a common cause for poult mortality.

Feed Turkeys Properly for Profits

Young turkeys are delicate animals and need to be fed properly if they are to live and grow into profitable market birds. The young poults should be taught to drink by dipping their beaks in milk or water. If sand is being used on the floor it should be covered with paper or sacks for a few days until the poults learn how to eat. Otherwise they will have a tendency to eat too much sand. They need grit however and it should be supplied to them by sprinkling a little on the paper or sack for them to pick up the first few days. After this place it in a hopper where they have access to it as needed.

For best results it is recommended that the producer start the poults on a good grade commercial turkey starting mash. The turkey starter is a higher protein feed than chick starter and the young poults make better growth and development on this feed than one of lower protein content. The turkey starter should be kept before the poults all of the time. Sometimes poults are slow in getting started eating. Where this is experienced it is well to place a few baby chicks that have learned to eat readily in with the poults.

If green feed is not available in the runs around the brooder house then fresh green feed should be chopped and fed to the poults daily. Green feed is very essential in the diet of young turkeys and should be supplied.

After the young turkeys are six to eight weeks of age they should be moved to a clean range. Feed should be kept out for the birds on the range until they can start adjusting themselves. After this a limited feeding a day should be given and this is best given in the evening so as to teach them to return to their roosting quarters at night.

The economy of feeding turkeys a mash throughout their growing period is a question that is still debatable. The average turkey producer who raises only a few turkeys as a part of his farm operation will perhaps find it most economical to plan his crops to take care of the turkeys' feed during the summer and fall. This can be done by planting peas, beans and similar crops in with their regular crops and leaving these for the turkeys to harvest. Turkeys running in the corn fields after the corn has been harvested pick up considerable grain. This practice will reduce the feed bill considerably, yet keep the turkeys developing and in condition so that they can easily be finished for market in the fall.

Shade and Clean Water Important

A good practice that will pay dividends is to provide the growing birds with plenty of shade and clean water. Turkeys spend most of the afternoon under a shade and if water is not available for them under the shade, they will wait to drink until they reach the house in the evening. On a farm where a condition such as this exists, it is almost impossible to produce a top grade turkey, because an ample supply of water is necessary for growth.

There are a number of turkey producers in the state that are raising turkeys in confinement or small enclosures. These producers feed a balanced feed from the time the poults hatch until they are marketed. They show excellent gains, low mortality, and produce the highest quality market bird at a profit. These producers are finishing their birds for market at approximately $1.75 per bird feed cost. Where one is handling turkeys in this manner mash should be kept before them, green feed supplied if none is available in the runs, and oyster shell and grit should also be kept in hoppers for free choice feeding. This system of raising turkeys is increasing in popularity because of the demand for better quality of turkeys and because a higher percentage of poults reach maturity and sell as top grades and at a premium price.

Provide Plenty of Roosts

Roosts for turkeys should not be more than two feet off of the ground. This, however, is impossible in sections where varmints are a menace. In this case it is often best to build a wire enclosure around the roost to protect the turkeys at night. A lantern hung near the roost at night also helps keep varmints away.

The roosting quarters should be moved several times during the growing season or else the ground raked at least once each week.

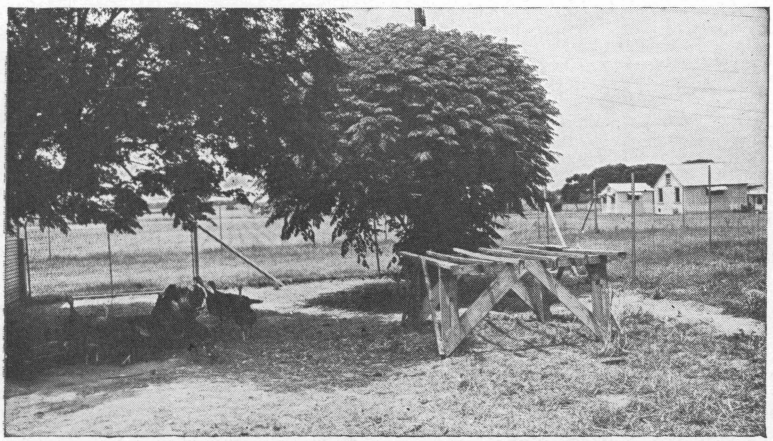
The best size perch is of 1″ x 4″ or 2″ x 4″ material with the 4″ side turned up. This allows better distribution of the body on the roost and helps prevent dents and crooked breasts that are the direct results of roosting. Proper roosts will not prevent crooked breasts that result from mineral deficiencies or breeding.

Beware of These Turkey Diseases

Most diseases of turkeys can be attributed to soil contamination. With this in mind, then, the best control measure is sanitation. Sanitation consists of keeping the feed and water containers clean, keeping the ground around these containers from becoming contaminated by moving the feeders a few feet each day, and keeping the turkeys on clean ground. Clean ground is ground that has been plowed and planted and on which no poultry has run for several months.

Sanitation in terms of turkeys means keeping them away from chickens, the carriers of blackhead organisms. If a turkey producer will conscientiously follow a sanitation program, such diseases as blackhead, coccidiosis, and typhoid can be prevented. Such pests as intestinal worms and bluebugs can be controlled.

Where an outbreak of blackhead occurs, the birds should be immediately treated for intestinal worms and moved to clean ground and a strict sanitation program followed. No vaccine is effective against blackhead. If one will always examine turkeys suspected of blackhead by opening the body cavity and examining the liver, the disease can be detected and immediate treatment followed. A turkey affected with blackhead will always have necrotic areas or "rotten spots" on the liver.



Shade, water, and low roosts make this an ideal spot for young turkeys.

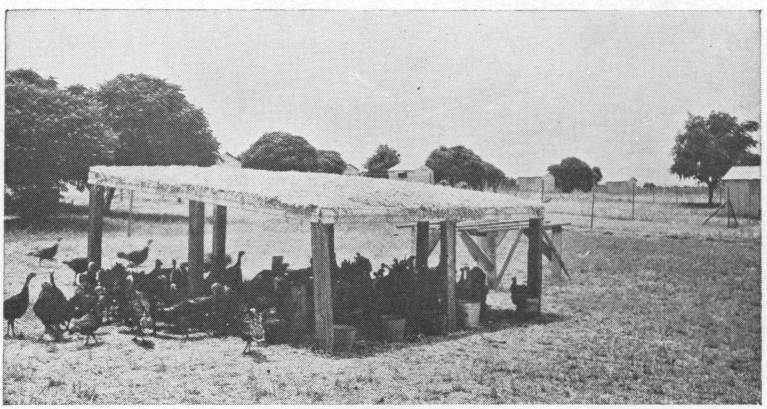
Coccidiosis in turkeys should be treated similar to the way in which it is treated in chickens. Poults should be confined to a house. The floor and feed and water containers should be cleaned each morning. A liberal feeding of milk will help to flush the intestinal tract and also aid in building up the cell structures injured by the coccidia organism.

Fowl pox is another disease that is giving considerable trouble in some sections. Where outbreaks of pox occur each year in a flock, it is best for the producer to vaccinate the entire poult crop with pox vaccine using the feather follicle method. The best age for vaccinating is between one and three months. To apply the vaccine, a few feathers are plucked from the thigh and the vaccine applied to one or two follicles. Precaution must be used to see that the turkeys do not receive too severe a dose.

Finishing Turkeys for Market

If turkeys have been on range and have received a very little feed except that which they have picked up, then they should be placed on a fattening feed in the fall so as to develop flesh and fat. About October first should be the time to start the feeding period.

Before any range turkeys are placed on feed they should be given a thorough treatment for internal parasites. Range birds are usually heavily infested with tape worms and will not make desired gains unless a thorough worm treatment is given before the feeding period. Begin fattening your turkeys early and get them on full feed before October 1.



Artificial shade is easily built. It should be five to six feet high and large enough for all the birds. Food and water should be easily available.

To finish the birds for market, they should be placed on restricted range to prevent their wandering. The range should have good shade. Mash should be supplied in open hoppers.

The mash can be a good grade growing or fattening mash. A good practice to follow is to give two wet mash feedings a day, one during the forenoon and another in the afternoon. Feed wet mash in the amounts that the turkeys will readily clean up within a short period. Never allow wet mash to remain in the troughs and sour as this will cause the birds to go off feed. Whole grain should be fed in the evening in the amount they will clean up readily. Never allow these birds to go without water even for a short period.

Handle Birds Carefully Before Marketing

Turkey meat is very tender and considerable damage may be done on the last day while the turkeys are being caught for marketing. The grower should make a convenient pen in which the birds can be confined. A catching crate can then be placed along side of it and a few birds driven in. This crate should be made large enough to allow the turkeys plenty of head room. This is an aid in driving them in. A good size for a turkey catching coop is 2 feet wide, 2½ feet high and 6 feet long. The sides may be covered with wire. The top is best covered with a heavy canvas or sack. A slit should be down the center for removing the turkeys. In removing the birds, catch the legs or wings firmly with one hand and run the other under the breast. This affords ease in handling the birds and prevents the breast from striking the ground and bruising.

In carrying live birds to market, place them in a regular size turkey crate. Do not try to overcrowd them into a crate, as this will cause rubbing and will discolor the skin. Never bind the wings of live birds as this discolors them and often leads to broken wings. A little precaution in handling the birds from the farm to the market will place a better grade of turkeys on the market.

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