

# Poultry Flock Care During Dry Season

**Herbert C. Jordan**  
Associate Professor  
Poultry Science  
Penn State

Bird management in hot, dry, humid weather needs special consideration. Here are points to consider for drought or hot weather management.

Excessive rates of application or other past misuse of poultry manure on soil can cause depressed corn yields in dry weather. Seek all the help you can, to get only high quality manure incorporated into soils several weeks prior to planting.

Apply poultry manure to soils only as needed by annual soil test and crop needs. For consistent, high quality yields, manure use on each field should be planned years ahead of actual application.

Never use excess or poor quality poultry manure for crop production. Likewise, never use excess commercial fertilizer or municipal sewage sludges.

Never use commercial fertilizer and poultry manure together on soils unless it is prescribed to complement each other at controlled, acceptable plant nutrient levels.

Allow all birds to have fresh, cool unpolluted air and water during hot humid or hot dry periods.

Air inlets drawing air from a tree shaded side of a house can produce cooler air to enter a hot poultry house.

Reduce the level of toxic gases such as methane, hydrogen sulfide, or ammonia from anaerobic manure or litter to a level of zero to 10 ppm maximum. If you have no measuring device, estimate gas on intensity of ammonia odor. If birds pant, have pale skin, broken feathers, liquid droppings, poor egg production, poor shell quality, poor fertility, poor hatchability or no libido, reduce toxic gas by drying manure as it is produced or removing it daily.

At 80°F and 80 percent relative humidity, birds begin to suffer. At 90°F and 90 percent relative humidity, birds begin to die unless the following is true:

- All birds are healthy and trim with no excess fat on them.
- All birds are preconditioned to high temperatures before the onset of the hot weather. Young

birds that are well cared for from one to 16 weeks of age seem to stand stress better later.

During hot weather, adult birds have at least 30 square inches of floor space per pound of trim live weight and young growing birds have a minimum of 120 square inches of floor space per pound of trim live weight. This floor space can be in the form of added roosts or resting stools made 18 inches above the floor and accessible to birds.

Remove 200 pounds of corn per ton from any diet where corn is more than 56 percent of the ration and replace it with 200 pounds of high quality oats. Make the ration isocaloric with fat instead of carbohydrate. Fat calories seem to cause birds less heat stress than carbohydrate calories in a ration. In hot weather, fermentable carbohydrates fed to rabbits can kill them with gas in the GI tract.

Poultry and rabbits may be fed refrigerated water during hot days. Drinking water between 32°F and

55°F seems to reduce heat stress or mortality on hot days. Running an in-bound water line 36 inches below soil surface 20 yards before entering a building may reduce water temperature enough to help cool animals when they drink it. Have a contractor compute this length and depth of pipe before it is laid based on frost line in winter in the area.

Restricting drinking water by turning water off 1/2 to two hours at a time should not be done in hot weather. Water restriction done under the care of a capable person during normal pen temperatures may help dry manure if off and on times are carefully observed.

If foggers are used inside a poultry house, use high pressure and small nozzle openings. Also, reduce droplet size to the smallest possible size. Fog only cold water and do not allow foggers to run constantly or manure and/or litter will become wet, allowing anaerobic microbes to produce toxic gas later.

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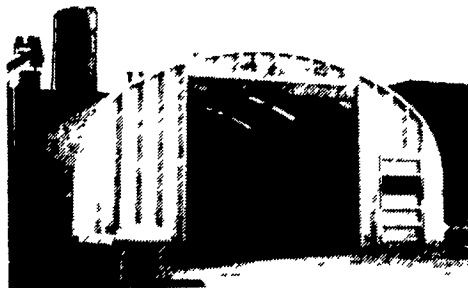
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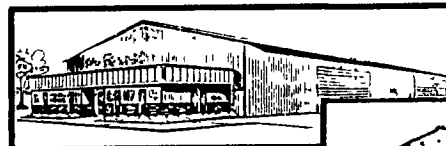
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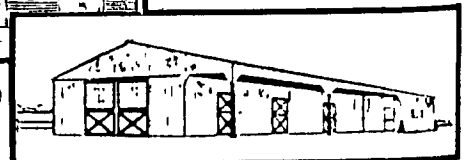
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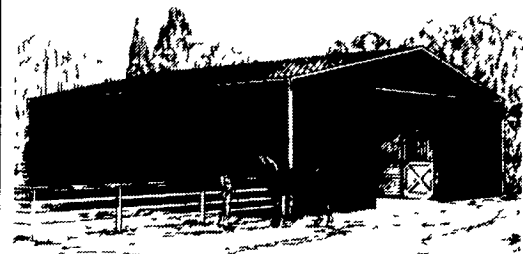
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