The University of Georgia
Cooperative Extension Service
College of Agricultural and Environmental Sciences / Athens, Georgia 30602-4356

RELIEVING HEAT STRESS

BY:
MIKE CZARICK
EXTENSION ENGINEER
MIKE LACY
POULTRY SCIENTIST

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Combating summertime heat is probably the greatest challenge for poultry producers. Mortality and decreased production efficiency are constant threats. Listed below are some ideas which you might want to consider during the months ahead to aid your birds in coping with heat stress.

1. Keep grass and weeds from growing around the house - they can restrict air flow into the house.

2. Bare ground around a house will actually reflect heat into the house. It is better to have low cut grass around the house to absorb heat.

3. A tree or structure will reduce air flow for a distance of 5 to 10 times its height down wind.

4. Curtain-sided broiler houses should have at least one 36" fan (1/2 hp, 11,000 cfm) for every 40' to 50' of house length.

5. Orient your circulation fans so that they blow with your prevailing winds.

6. Circulation fans should be placed side by side (6' apart) in stagnant areas, i.e. near end walls and the center of the house.

7. Turn fan thermostats down to 75°F during the day to insure that fans will run long enough into the evening to give the birds a chance to cool off.

8. Remove shutters from any fan which runs continuously. This will increase air flow through the fan by as much as 30 percent. Cover the fan with 2" welded wire to keep pests out of the house.

9. Make sure belts are tight. A loose belt can reduce fan efficiency by 30 percent or more.

10. Patch holes in ceiling tri-ply. Exhaust fans will pull hot air (130°F or higher) out of the attic into your house.

PUTTING KNOWLEDGE TO WORK

11. Clean sidewall screens. Just 1/8" of dust reduces air flow by as much as 20 percent.

12. In power-ventilated houses, make sure the wire covering sidewall inlets are clean.

13. Make sure roof ventilation openings are clean and unobstructed.

14. Roof sprinkling or painting can reduce heat buildup in houses with poor insulation.

15. Never use foggers when there are no fans running.

16. Never use any type of evaporative cooling (pads or fogger nozzles) between the hours of 10 p.m. and 10 a.m.

17. The lower flow rate nozzles (1 gallon/hour) put out a finer mist which evaporates more readily.

18. Use stainless steel fogger nozzles - they tend to last longer.

19. To clean fogger nozzles, soak them in vinegar overnight.

20. Consider buying a higher pressure booster pump. A 200 psi booster pump will put out more water and a finer mist than a 100 psi pump.

21. Protect fan and fogger thermostats from moisture put out by the fogging nozzles. If they get wet, they will shut off prematurely and your birds will suffer.

22. Inspect emergency generators, automatic curtain (or sidewall) drops and alarm systems to insure they are functioning properly.

23. Water is critical during hot weather. Inspect the watering system frequently to insure water flow is constant and unrestricted.

24. Water in plastic in a closed watering system will quickly approach the temperature of air around the pipe. Flush closed watering systems 2 to 3 times during the hot part of the day to remove warm water from the system.

25. Remove built-up and/or caked litter from the house. As litter decomposes heat is produced causing floor temperatures to exceed 100°F.

26. Quietly walking through the flock to keep birds spread out and to encourage them to get up and drink is recommended, but do not excite the birds during the heat of the day.

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