

## Poultry Growers

### Lighting

Advancements in lighting technologies make it easy to save lighting energy.

- Compact Fluorescent Lamps (CFLs) can replace any regular incandescent bulbs. Replacing a 60 Watt bulb with a CFL will save 47Watts of energy per bulb, resulting in annual savings of over \$25 per replaced bulb. Bulbs are also readily available for 75 and 100Watt applications. Payback periods are less than six months with the added benefit of longer bulb life. If a dimmable bulb is required be sure to purchase dimmable CFLs.
- LED replacements are also available for incandescent bulbs. LEDs will use only 1 Watt of energy as compared to an equivalent 60Watt incandescent bulb. The annual savings are estimated to be \$35 and payback periods are about one year.

Check out [www.agriLEDlight.com](http://www.agriLEDlight.com)

### Heaters

- For heaters with a standing pilot light, keep at least ½ of the pilots off until needed. Light the pilot lights as needed as the birds grow and fill the house. A single standing pilot will consume 24 gallons of propane per year. For a 20 heater house controlling the standing pilots can result in savings of over \$200 per year at a cost of \$1.75 per gallon. Keep the pilots adjusted per the manufacturer's specifications.
- Consider converting heaters with standing pilots to spark ignition heaters. This will save about \$40 per year per heater.

- Have a good heater maintenance program. A sooty heater indicates inefficient burning of fuel that wastes gas and gives off excess carbon monoxide. Keep the burner orifices clean. Use the proper size reaming needle to avoid altering the orifice size and wasting fuel. Keep reflectors clean.
- An upgrade to radiant tube heaters. These will, on average, save 20% in gas use.

### Gas Distribution System

- Periodically inspect the system for leaks. Use soapy water in a spray bottle and spray joints to reveal leaks. Repair leaks immediately.
- Maintain proper gas pressure throughout the system. Check pressures at every heater and correct as necessary.

### Fans

- All fans and shutters should be cleaned preferably between every bird placement.
- Lubricate fan bearings and all shutter joints after cleaning.
- Replace failed fan motors with high efficiency motors.

### Miscellaneous Items

- Seal all infiltration points. A single 1/8" crack along the length of the house is equal to a 10 sq. ft. open hole in the house's side.

- Lubricate fan bearings and all shutter joints after cleaning.
- Keep curtains in good shape. Repair holes and eliminate any cracks between the curtain and the house.
- Insulate all possible surfaces. Keep insulation in good condition and repair all damage as soon as possible. Foam insulation is preferable because it also seals cracks.
- All weather-stripping should be kept in good repair.
- Consider placing a vapor barrier on the inside surfaces to control humidity.
- Keep waterers and water lines in good repair. Water leakage will cause excess litter moisture which requires both ventilation and heat to remove.
- Maintain timers and thermostats. Generally a good cleaning will restore them to proper working order; however if cleaning fails to restore them to working order, replace as soon as possible.

## Poultry Information Sites

[www.msstate.edu/dept/poultry/index.html](http://www.msstate.edu/dept/poultry/index.html)

[www.thepoultrysite.com](http://www.thepoultrysite.com)

[www.poultryhouse.com](http://www.poultryhouse.com)

[www.alabamapoultry.org](http://www.alabamapoultry.org)



- Consider double brooding for the first 14 days and then split the brood between two houses. This strategy if possible, should save substantial energy.
- Between litter change-outs pile the litter lengthwise to the center of the house. This will allow the litter to compost which will build up a heat reservoir and reduce heat needs at chick placement.

*Note: Some of the information in this sheet was provided by Mississippi State University Extension Service*