

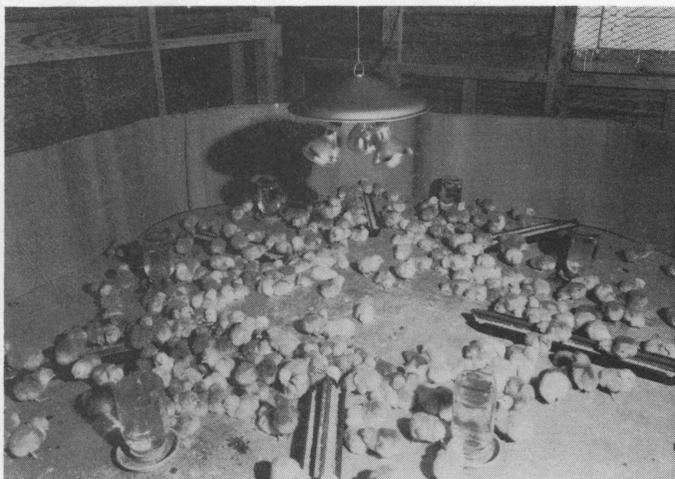
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BROODING CHICKS WITH INFRARED LAMPS

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About half of the energy from the sun that strikes the earth is infrared energy. On cold sunshiny days we may be comfortable when this infrared or heat energy strikes our bodies. The infrared lamps used in brooding supply the same infrared energy as that from the sun. The chicks are kept warm and comfortable even though the air in the room is not heated.



Farmers and poultrymen who have used infrared brooders say that this type of brooder: (1) makes it easy for the operator to see the chickens at all times; (2) is relatively inexpensive; (3) is easy to handle and store; (4) furnishes plenty of light in the brooder area; (5) keeps the litter dry; (6) requires a minimum of labor for care and maintenance; (7) provides good air circulation around the chicks; and (8) provides heat under the brooder only, thus permitting the chicks to feed and exercise in a cool room where they will grow and feather rapidly.

SELECTING THE BROODER UNIT

1. The most common sizes of commercial and homemade brooders for using infrared lamps are one, two, three, four, and six lamp units. A six lamp brooder is usually recommended for 500 chicks.
2. The most common sizes of infrared lamps are 125 and 250 watts. They may be ordinary glass or a special hard glass (usually red). The hard glass lamps are more expensive but are less likely to be damaged by water splashing on them when hot. They both give off the same heat.
3. The 250 watt lamp is ordinarily selected for use in brooders. However, for early fall, late spring, or in areas where the temperature is not expected to go below 50 degrees, the 125 watt bulb will give plenty of heat.
4. Infrared brooders may be wired for manual or automatic control.

INSTALLING THE INFRARED BROODER

1. Infrared brooders are usually operated on 115 volts. It is desirable to have them on a separate circuit of two No. 12 or larger wires. They should not be put on a circuit with such equipment as water pumps and automatic feeders.

2. Suspend the brooder unit from the ceiling with small chains or wire so the bottoms of the lamps are 18 inches above the floor or litter.

3. Place a guard of poultry netting, cardboard or other material around the brooder to prevent the chicks leaving the brooder area and getting chilled. The guard should be 12 to 18 inches high and not more than 24 to 36 inches away from the brooder. The guard may be removed after the first four to seven days.

4. If one, two or three lamps are used, each lamp will be on a separate switch allowing you to control the heat as needed.

5. If four or six lamps are used, the lamps will usually be divided into pairs and one switch will control each pair.

6. On automatically controlled brooders, one switch will be kept for manual operation and the other switches will be replaced by thermostats which respond to the air temperature in the room. The thermostats should not be located where they will be affected by the radiation from the lamps.

OPERATING THE INFRARED BROODER

1. Turn on all of the lamps for the first 24 hours. After that time, when the chicks appear too warm, turn off a lamp or pair of lamps and observe the chicks for a few minutes. If they appear to have plenty of heat, leave them until there is some evidence of more heat than is needed before turning off additional lamps. Whenever the chicks appear to be chilly, turn on more lamps.

2. If you use thermostats, adjust them to do the same thing as described in step one above. To do this: (a) when you notice that there is more heat than needed, adjust the thermostat on a lamp or pair of lamps until they go off; (b) then as the weather begins to warm up and the chicks move away from the lamps, adjust the second thermostat to turn off another lamp or pair of lamps. The lamps on the manual switch will be left on at all times when heat is needed.

The thermostats will need to be readjusted about once each week as the chicks need less heat.

3. At the end of the second or third week, raise the brooder three inches and at the end of 4 to 6 weeks, raise it another three inches and leave it there for the remainder of the brooding period.

4. Manage the infrared brooder so that the chicks are comfortable at all times rather than watch the thermometer. Let the chicks be their own thermometer.

For additional information on chick management you can obtain the following bulletins from your county agricultural or home demonstration agent:

1. Broiler Production B-204
2. Growing Chicks for Flock Replacement C-298

TEXAS AGRICULTURAL EXTENSION SERVICE

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