

Getting Set Up

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First things First...

- ▶ You need to have everything set up in advance
- ▶ Do not wait until the day you get the birds to set or even the day before
- ▶ Sooner you get birds settled in the better

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Basic Supply List during Brooding Phase

- ▶ 2 – 4 heat brooder lamps with clamps
 - ▶ Chain to hang them
- ▶ White heat lamps
- ▶ 2 – 4 gallon waters
 - ▶ Red trough
- ▶ 1 – 2 trough feeders
 - ▶ Scrap wood to raise off floor
- ▶ Multiple 'low' profile feeders
 - ▶ Egg flats, paper plates, crawfish pulp trays
- ▶ Slip resistant cover (during brooding)
 - ▶ Ex. Flat bed sheet, landscaping fabric



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Brooder Set Up – Only for 5-7 days

- ▶ Smaller space within you pen that keeps the birds warm
- ▶ Construction materials
 - ▶ Cardboard
 - ▶ Sheet metal, roofing metal, metal flashing, corrugated tin
 - ▶ Wood
 - ▶ Divider in the pen
- ▶ Rounded brooder or eliminate corners if square/rectangular



Example of a brooder ring

Example of feeders, waterers, and lighting layout



12'x12' downsized to 8'x8' brooder

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Brooder Set Up – Only for 5-7 days

- Brooder size
- ▶ 14 – 18" high
 - ▶ 50 birds
 - ▶ Minimum of 5' diameter
 - ▶ 75 birds
 - ▶ 8' diameter preferred
- Heat lamps
- ▶ Two 125-watt bulbs per 50 chicks
 - ▶ Secure with chain
 - ▶ Hang 18" – 24" above the litter
 - ▶ Safe for use with animals

- Temperature
- ▶ Optimum temp under heat lights or brooders = 92°F – 95°F
 - ▶ Never exceed 100°F
 - ▶ Gradually reduce temp 5°F each week till house temp is 65°F – 70°F

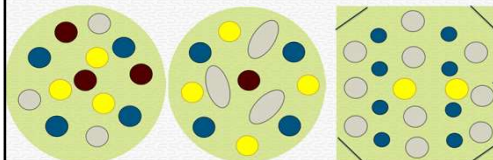
Waters – lights can crack/shatter is water splashes on them, keep away from heat lamps

Feeder – do not put directly under heat lamp; excessive heat can destroy essential nutrients (vitamins)

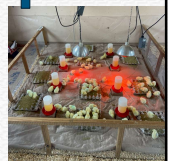
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Examples of 8' x 8' brooders for 75 birds

(6' x 6' brooder for 50 birds)



- Feeder
- Low profile feeder
- Waterer
- Heat light



- ▶ Have feeders and waterers placed evenly within the brooder so that the birds never have far to go to get what they need!!

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Placement of Chicks at Arrival

Example set up

- 8' x 8' pen for 75 birds
- Brood 5-7 days
- Plywood floors
 - Plastic sheeting and cardboard
- Sheet over shavings
- Egg flats only
- Red lights vs white lights
 - Windows with natural daylight

12'x12' downsized to 8'x8' brooder

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Be Ready for the Birds

- Make sure that the brooder is operating several days before arrival
 - Room, litter and water are warm when the chicks arrive
 - If litter and air are too cold → chicks internal body temp will decrease
 - Resulting in increased huddling, decreased feed/water intake, stunted growth and susceptibility to disease
 - Birds will start off behind and decreased the odds of placing higher up

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Preheating — 2 to 3 days before chicks arrive

- Preheat the brooder space
 - Helps increase the ambient temperature and warm the litter
 - Block off the corners

55°F in corner

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Be Ready for the Birds

- Set the pen up with fresh feed and water 12 – 24 hours in advance
- Check mill by date on feed back
- Temper water to room temperature for chicks for first couple weeks

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Bedding Materials

- Pine Shavings — light/fluffy, little to no dust, small flakes
 - Snowflake, Champion, Thoroughbred - (premium)
 - Suncoast, King, Tractor Supply
- Rice Hulls
- Sand
 - Clean sand, ex. play sand
 - Cons — harder to control pen temps, irritate the birds breast muscle
 - Outside sand may have diseases, bacteria, or other germs in it

Can all work but remember they need to be clean and dry!!!

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Shavings

Examples:

- Tractor Supply Premium Fine Pine Shavings (5.5 cu. ft) = \$5.29
- Showflake Ultra-Soft White Pine Shavings (12 cu. ft) = \$12.95

Shavings schedule example 1:

- Change ½ way point of broiler project
 - Top coat pen (~½ bag) at a time when you smell ammonia

Shavings schedule example 2:

- Never changed out
 - Barn/house has ideal ventilation and relative humidity control

People use all kinds and are successful → key is controlling moisture and ammonia

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Litter Management

- ▶ Use 4 – 6 inches of good quality litter
 - ▶ Pine wood shavings, Rice hulls, Coarse-dry sawdust, Washed builder's sand
- ▶ Stir the litter **daily** after **two weeks of age** to prevent wet litter
 - ▶ By hand, rakes, manure fork rakes, shuffle with rubber boots
- ▶ Remove wet or compacted areas
 - ▶ Replenish with fresh shavings in that spot
- ▶ If doing a complete change out → limit stress/dust

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Litter Management Continued

- ▶ Plenty/proper air flow and ventilation keeps it dry
- ▶ Controlling moisture from the floor up
 - ▶ Concrete flooring
 - ▶ Plywood, sand, or pebble/crushed rock flooring
 - ▶ Cover with tarp, plastic sheeting, rubber stall mats (also provide insulation if ground is cold from the current environmental settings)
 - ▶ Creates a barrier if moistures absorbed through the flooring
- ▶ Plenty of space provided for the number of birds raised
 - ▶ *Feces contains 75% moisture

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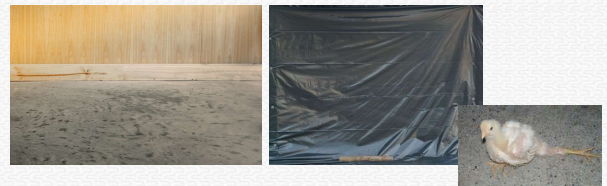
What Wet Litter Causes!



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Avoid Slick Surfaces

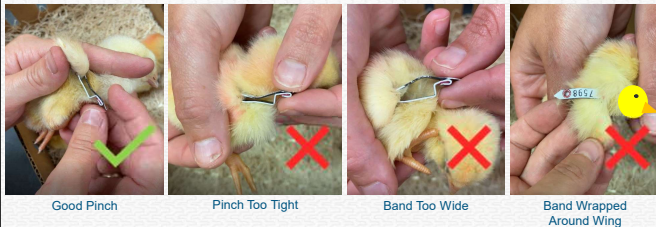
- ▶ Especially for turkeys but true for broilers as well



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Placement of Birds at Arrival

1. Inspect bands as you remove the birds from the box



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Placement of Birds at Arrival

2. Introducing birds to waterers (before food**)
 - ▶ Slightly dip beak into jug style waterers; be careful not to submerge past the nasal passages
 - ▶ Place beak on the nipple style waterer to trigger it



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Gallon Waterer vs Nipple Drinkers

- ▶ Gallon waterers provide full access to water
 - ▶ More water consumed = more feed consumed
- ▶ Support with wood scraps, concrete blocks, etc.






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Optional – Adding Feed Post Placement

- ▶ Waiting 30 – 60 minutes after placement
- ▶ Ensures birds have drank water
- ▶ Prevents food from compacting in the crop

**Dipping beaks in water at placement first ensures birds get on water first too



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Low Profile Feeders and Feeders

- ▶ Egg flats, paper plates, crawfish pulp trays
- ▶ Sink the metal feeders down in the bedding so birds can reach feed
 - ▶ Support them with wood blocks or concrete blocks so they don't fall over





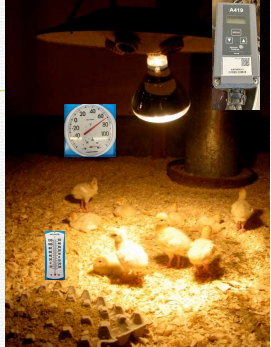

HEB - \$10 for 10 pk

\$17.00 each

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Infrared Heat Lamps

- ▶ Usually adequate and most commonly used
- ▶ Provide heat to objects through infrared energy
 - ▶ Do not "heat" the air
- ▶ Use thermometers and/or thermostats with probes when checking temps
- ▶ Should be removed as soon as birds are well feathered
- ▶ Do not place feed directly under lamps
 - ▶ If too hot chicks won't eat feed!!



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Ventilation & Temperature

- ▶ Evidence of appropriate temperature or deviations is easily determined by the behavior of the birds
 - ▶ House relative humidity and stocking density affects temperature settings
 - ▶ Seasonal temperature outside affects temperature setting

Age	Broilers	Turkeys
0 - 7 days	92° - 95°F	92° - 95°F
8 days till end of project	Gradually reduce the temp 5°F each until the house temp is 65°F-70°F	Gradually reduce the temp 5°F each until the poults are 3-4 weeks old or until the house temp reaches 70°F

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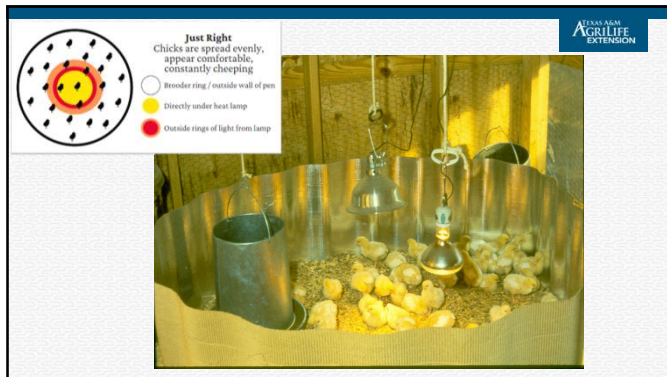
Guide: How High to Hang Heat Lamps

- ▶ First week 92-95 degrees
 - ▶ Still measure and check temps beforehand
- ▶ Then drop weekly 5 degrees until 65-70°F

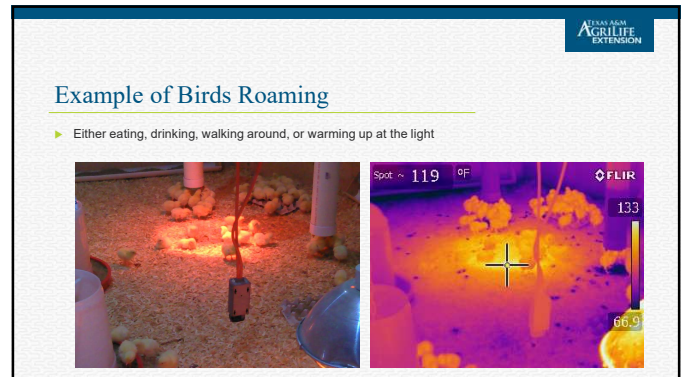
Age (days)	Height of heat lamp (125 watt, inches)	Temperature approximately
0-7	18	95
8-14	21	90
15-21*	24	85
22-28*	27	80
29-35*	30	70-75

* Heat lamps may not be needed in houses depending on the time of the year and housing set design

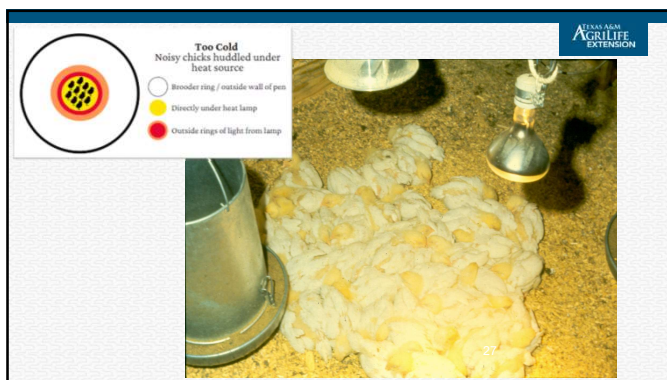
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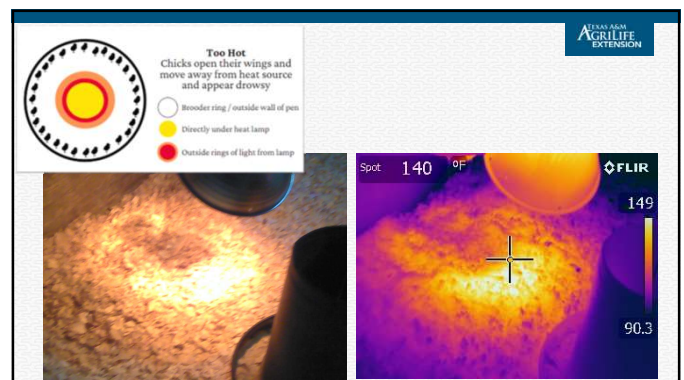
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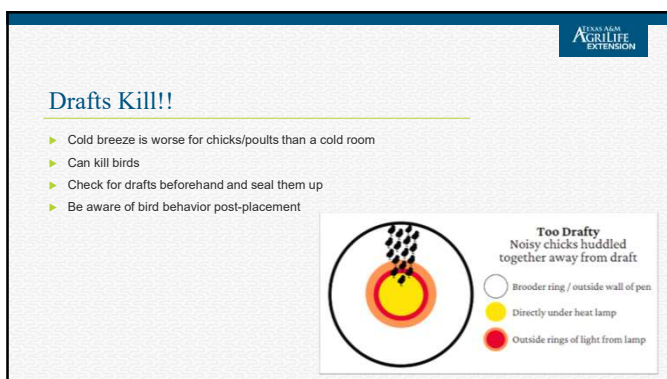
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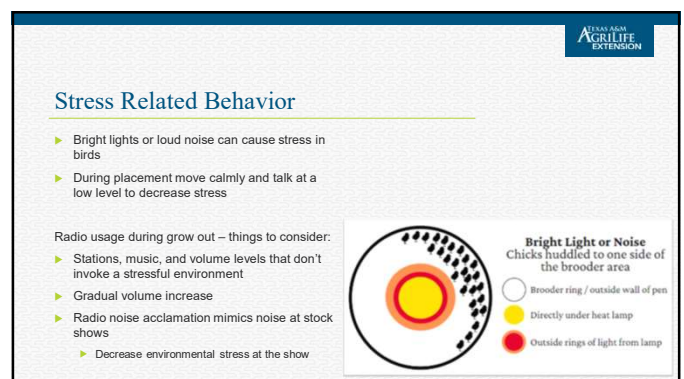
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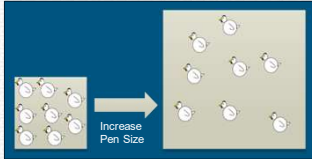
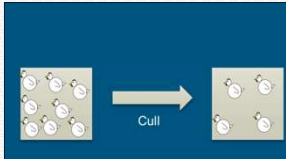


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Floor Space - Broilers

- ▶ Broilers
 - ▶ 2 ft² per bird up to 4 weeks of age
 - ▶ 3 – 4 ft² up to time of show


AND /OR


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Floor Space

- ▶ **More is better**
 - ▶ Better litter quality
 - ▶ Less changing of litter
 - ▶ Less competition at feeder
 - ▶ Easier for you to move around the pen with birds present
 - ▶ Easier to keep big birds cool
 - ▶ More air flow across birds
 - ▶ Litter where the birds sit gets hot
 - ▶ More space allows the birds to find a cool spot

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Summary: Getting Set Up

- ▶ Don't wait till last minute to buy all your supplies
- ▶ Preheat your building/brooder area in advance
- ▶ Have fresh feed and water 12 – 24 hours out in advance
- ▶ Check wing bands at placement
- ▶ Introduce water before feed
- ▶ Pay attention to bird behavior post placement for temperature adjustments



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