



**CAROLINA
LAND & LAKES**
RESOURCE CONSERVATION & DEVELOPMENT

**CAROLINA LAND & LAKES
RC&D MISSION IS TO IMPROVE
THE ECONOMIC,
ENVIRONMENTAL AND
RECREATIONAL OPPORTUNITIES
IN OUR SEVEN COUNTY SERVICE
AREA.**

Pellets for Pullets



Carolina Land and Lakes RC&D

Pellets for Pullets

- Pellets for pullets is an active experiment/demonstration sponsored by the NC Department of Agriculture Bioenergy Research Initiative. Research currently underway studying the indoor air quality ie: ammonia, CO₂, humidity to determine the benefits of wood heat vs. propane heat



Wood Pellet Furnace



Control Panel



Vent Pipe



Inside the poultry house



Hose inside the poultry house



Wood Pellet storage



Wood Pellets

Pellets for Pullets

Testimonial of Farmer A- "The difference in air quality is amazing, when the integrators deliver chicks they are amazed at the difference in the wood pellet heated house vs the propane house. Since starting the wood pellet furnace the mortality rate has dropped significantly . The energy savings is found in the air exchange, because the propane house has to be vented 3x as much as the pellet house wasting heated air."

Recent update 5-2-2016

- Farmer A's most recent results:
- Wood furnace house: cost to heat= \$950.00
- Propane house: cost to heat= \$1400.00
- Wood furnace house: Mortality= 1572
- Propane house: Mortality= 1652

Lee Energy Solutions

<https://www.youtube.com/watch?v=DFpzs4yhO1Q>



Pellets for Plants



Woodmaster Ultra 30 Pellet Furnace for Plants



Woodmaster Ultra 30 series Specs

- Force 30 specifications:
- Heat Output 102,000 BTU/hr
- Weight 320 lbs
- Measurement 13.39" w x 55h" x 22"d + burner and fan d = 53"
- CC smoke pipe from floor 52"
- Outside diameter flue pipe 6"
- Ventilation connection 12"
- Air flow 0-3400 m³ /h
- Ash box volume 2 cubic foot
- Power 120 VAC