

## *National Poultry Technology Center Accomplishments & Impacts - 2012*

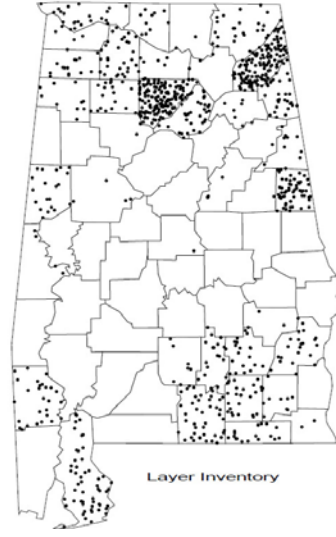
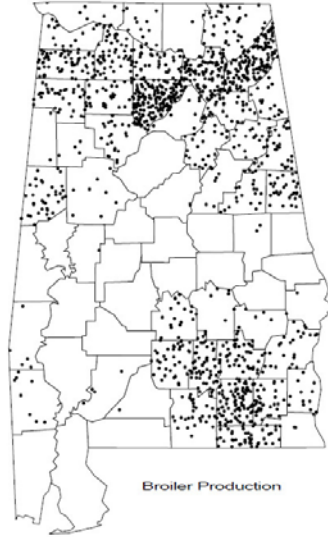


7/1/2012

## ***NPTC Mission***

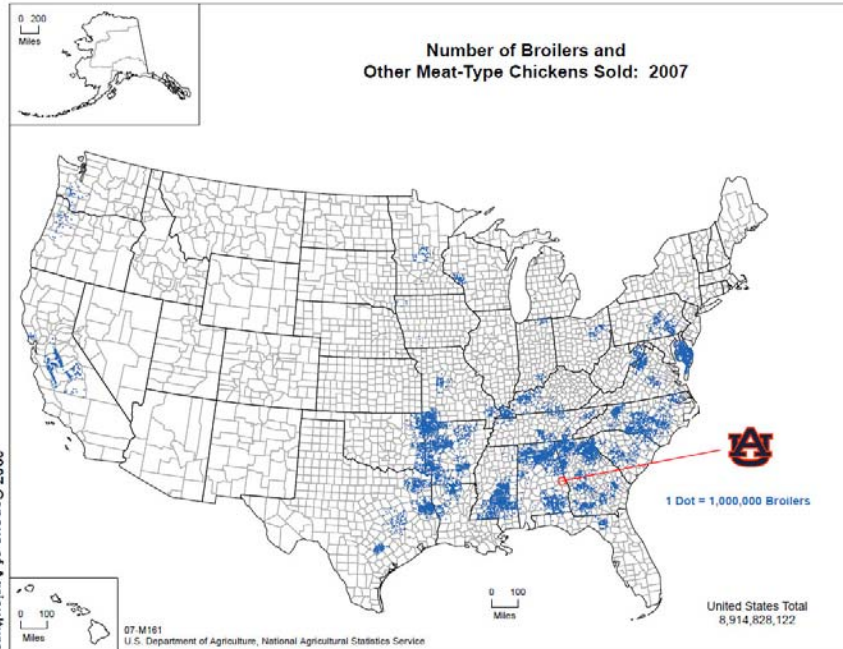
**Improve Bottom Line Profitability Of  
The Live Production Sector Of The AL  
Poultry Industry By Providing Timely  
Applied Research And Education  
Resulting In Increased Efficiencies In  
Housing, Equipment, Energy, And  
Environmental Control.**

# Location Of Alabama Poultry



**NPTC**  
National Poultry  
Technology Center  
ASHLEIGH UNIVERSITY

## Number of Broilers and Other Meat-Type Chickens Sold: 2007



## ***NPTC Background Information***

- **We Are A Unique Unit In The USA**
- **The Center Is About 5 Years Old, But Engineering Programs For Poultry Have Been In Existence For 40 Years**
- **We Affect The Cash Flow And Profitability Of Every Grower In The US**
- **We Affect The Cash Flow And Profitability Of Every Integrator In The US**
- **Demand For Our Unbiased Engineering/Economic Analysis Is Nationwide**

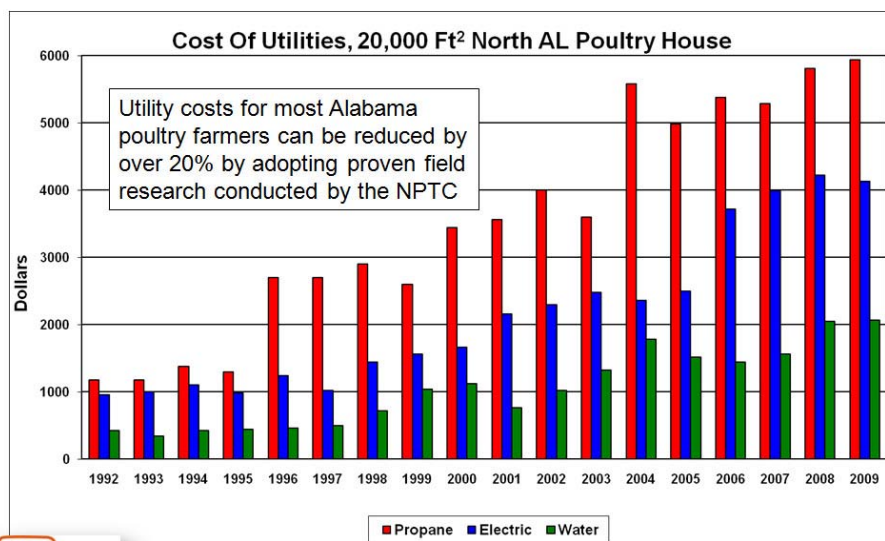
## ***Estimates Of Service Delivered - Past Year***

- **Direct Input To Over 20 Major Integrators**
- **Installing And Monitoring 8 Major Applied Research Efforts**
- **Development And Dissemination Of 6 Newsletter Releases And Maintenance Of 2 Web Sites**
- **Presence At The International Poultry Expo**
- **Invited Presentations Throughout The Poultry Belt**

## *Value Of Poultry To Alabama*

- **Poultry Generates \$10+ Billion Dollars & 80,000 Jobs For Alabama's Economy.**
- **Poultry Growers' Profitability Is Essential For This Industry To Survive. ~3,500 Alabama Growers**
- **Prices Of Inputs Have Exploded Over The Past 8 Years - Fuel, Electricity, Water, Feed Up From 60%-300%**
- **Profitability Can Be Greatly Improved By Application & Adoption Of New Technologies**

## **Typical Alabama Poultry House Utility Costs**



## ***Economic Impact - Energy Conservation***

- **Gas Saved On Avg. Hse. @ \$2.00/Gal     \$2,100**
- **Elec Saved On Avg. Hse. @ .11/Kwhr     \$900**
- **Total Savings 40 X 500 House             \$3,000**
  
- **11,000 Houses = \$33,000,000 Annual Savings**
- **@ 30% Adoption +/- \$10,000,000/Year Value**

## ***Economic Impact – Bird Performance***

- **Better Environment Improves Feed Efficiency**
  - **1,000,000,000 5.6 Lb Birds Per Year - Alabama**
  - **Improved FC From 1.8550 To 1.8200**
  - **Saves 98,000 Tons Of Feed /Year**
  - **98,000 Tons @ \$350/Ton = \$34,300,000**
  - **@ 30% Adoption Rate +/- \$10,000,000**
- Economic Impact To The Industry's Live Sector**

## ***Economic Impact –Structural Improvement***

- **Insurance Underwriters Data For 2006 -2011**
- **Reduction In Damage Caused By Improvement In Structural Design Approaches \$48 Million For The 5 Year Period, Including Framing, Foundations, Bracing, Electrical, Etc.**
- **\$48 Million/5 Yrs = Avg \$9.6/ Million Per Year Contribution To Growers And The Industry**



## ***Total AL Economic Impact***

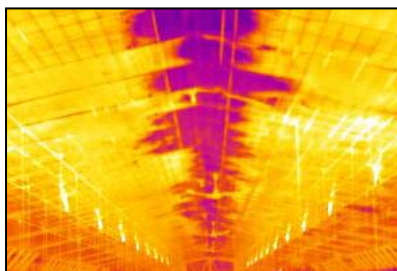
- **Combined Economic Input From Extension And Applied Research Efforts For The NPTC To The State Of Alabama Is Over \$30 Million.**
- **With An Economic Multiplier Of 3.937, That Equates To A Total Economic Impact Of \$120 Million/Year On Alabama's Economy!**



## *Areas Of Applied Research Having Short Term Impact*

- **Energy Efficiency In House Tightness &Insulation**
- **Energy Efficiency In Lighting**
- **Retrofitting Techniques To Extend Useful Life of Structures**
- **Construction Standards Adoption By Insurance Industry**

## *Re-Blowing Attic Insulation*





## *Energy Conservation Demonstrations*



## *Evaluation of New Insulation Technologies*



**Same Insulation As  
Txt 2 Plus Installing  
R-19 Fiberglass Batts  
Behind Exterior Metal.**





## *Construction Standard Demonstration*



## *Impact Of Construction Standards*



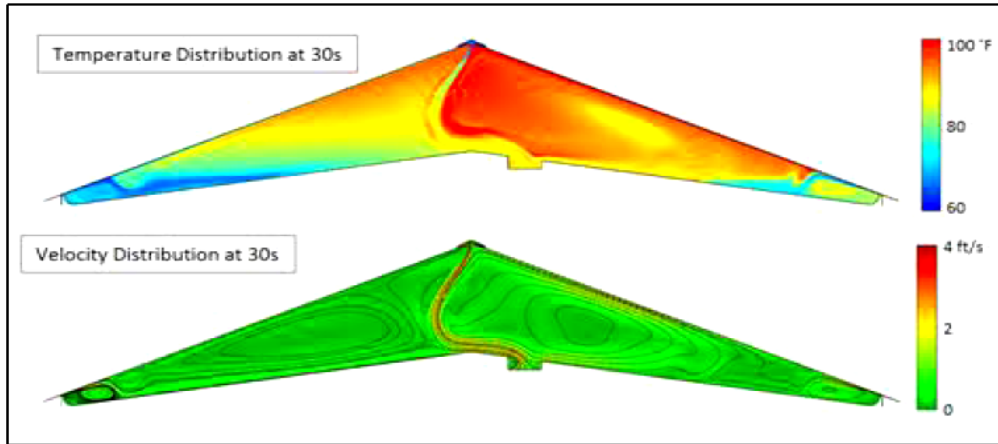
## *Areas Of Applied Research That Could Be “Game Changers”*

- **Development Of Solar PV Energy Potential For Poultry Housing**
- **Development Of Designs & Controls To Extract Maximum Energy From Poultry House Attic Air**
- **Further Refinement Of Rainwater Harvesting Technology**
- **Development Of Colony Housing Designs For Broiler Production**

## *Solar Power Generation - Demonstration*



## *Instrumented Attic Keller Farm – North AL*



Credit: Dr. J. Purswell, USDA/ARS, Mississippi State University

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## *Rainwater Harvesting & Conservation*



## *Colony Housing – Broilers In Cages*



## *Examples of Outreach Activities & Events*



**NPTC**  
National Poultry  
Technology Center  
AUBURN UNIVERSITY

## *NPTC Action Plan Next 3 Years*

- **Stabilize Funding**
- **Develop A Further Feeling Of Shared Ownership-  
The NPTC Is A Winner For All Concerned**
- **Get Our Staff In The Right Seats On The Bus**
- **Focus On Transition To New Faculty And New  
Center Leadership**