What is Texas A&M AgriLife?

Bill Dugas
Associate Vice Chancellor and Associate Dean
Agriculture and Life Sciences
Coffee Conversations – Hot Topics in Higher Ed
9 November 2012
150 Years of the Land Grant Mission

Teaching

Research

Extension

Service
<table>
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<th>Act</th>
<th>Description</th>
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<td>1862 Morrill Act</td>
<td>Original Land-Grant Act Land-Grant Universities Each State</td>
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<td>1887 Hatch Act</td>
<td>Research at Land-Grant Universities</td>
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<td>1914 Smith-Lever Act</td>
<td>Cooperative Extension Services at Land-Grant Universities</td>
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The land grant university system is being built on behalf of the people, who have invested in these public universities their hopes, their support, and their confidence.

– Abraham Lincoln, upon signing the Morrill Act, July 2, 1862
Our Structure

Chancellor, TAMUS

Vice Chancellor for Agriculture and Life Sciences

Director, Texas A&M AgriLife Extension Service
Director, Texas A&M AgriLife Research
Director, Texas A&M Forest Service
Director, Texas A&M Veterinary Medical Diagnostic Lab

TAMU President

Provost

Dean, College of Agriculture and Life Sciences
Our Statewide Presence

- Texas A&M University and Agency Headquarters
- Texas A&M University System Agriculture Schools
- AgriLife Research & Extension Center
- Texas Veterinary Medical Diagnostic Laboratory
- Texas Forest Service
- AgriLife Extension Service County Office
Collectively We...

- Members of the Texas A&M System (4 of the 7 System Agencies)
- State-wide focus serving the people and the food, forest and fiber systems across Texas
- More than 3,500 budgeted employees and $0.4 billion/year in expenditures
- We partner to fulfill the land grant mission of:
  - Teaching
  - Research
  - Extension
  - Service
Video on AgriLife

http://youtu.be/NXSfoVsrGhQ
College of Agriculture and Life Sciences
College of Agriculture and Life Sciences

• Celebrated Our College Centennial: 1911-2011
• ~7,300 students
• Third Largest College at TAMU

• Highly Rated Departments
  - Agricultural Economics: #4
  - Agricultural Leadership, Education & Communications: #2
  - Biological & Agricultural Engineering: #3
  - Entomology: #1
  - Horticulture: #2
  - Poultry Science: #1
  - Recreation, Parks & Tourism Sciences: #3
  - Wildlife & Fisheries Science: #2 in Wildlife; #5 in Fisheries
  - No rankings for college or six academic departments
College Priority Areas

- Food Security
- Natural Resources
- Nutrition & Health
- Food Safety
- Bioenergy
- Youth & Communities
Texas A&M AgriLife Research
Our Statewide Presence
Texas A&M AgriLife Research

- Only state agency charged with conducting research in agriculture, natural resources, & life sciences
- Most scientists have joint appointments with TAMU or other universities (WT, TSU, Texas Tech, etc.)
- **Mission:** To develop new knowledge and tools through basic and translational research to benefit consumers and expand agricultural sustainability, profitability, and environmental stewardship

http://agriliferesearch.tamu.edu/
Research Program Highlights

- **Agricultural Competitiveness**
  - Developed new wheat, cotton and bioenergy crop varieties
  - Invented methods for high intensity shrimp production
  - Developing strategies for emerging diseases (e.g. Citrus Greening, Pierce’s Disease, and Zebra Chip)

- **Environment**
  - Developed technologies to remove heavy metals from water used for fracking, mining, power plants, desal, etc.
  - Preserve soil and water at Ft. Hood and other bases for training

- **Health**
  - Discovered compounds from animal research used in human clinical trials for arthritis, MS, and hepatitis
  - High throughput drug discovery for treatment of cancer, TB
  - Discovered that dietary omega-3 fatty acids (i.e. fish oil) provide a novel, life-saving tool in the fight against colon cancer
Budget: AgriLife Research

FY 2011 Budget: $184 M

Contracts & Grants: 46%
State Appropriations: 38%
Federal Appropriations (Hatch & McIntire-Stennis): 4%
Sales & Services: 12%

FTEs: 1,211
Texas A&M AgriLife Extension Service
Our Statewide Presence
Texas A&M AgriLife Extension Service

• Extension improves the lives of people, businesses and communities in the following areas:

  ➢ Agriculture (Food, Fiber, Fuel, and Green Industries)
  ➢ Natural Resources and Environment
  ➢ Health and Human Sciences
  ➢ Youth Life Skills Development (4-H)
  ➢ Community Economic Development

• Mission: Improving the lives of people, businesses, and communities across Texas and beyond through high-quality, relevant education.

http://agrilifeextension.tamu.edu/
Budget: AgriLife Extension

- FY 2011 Budget: $154 M
- County appropriations disbursed directly by county commissioner courts - $35 M
- Direct appropriations to agency - $119 M
- FTEs: 1,921
Extension Program Highlights

• Hurricane Ike Livestock Recovery
  ➢ Extension’s network, coordinating with other state agencies and groups, assisted moving cattle and horses and in procuring hay, feed, water troughs, fence panels, and vaccines for the hurricane-damaged areas. Savings resulting from these recovery efforts are estimated at $8.3 million.

• Food Protection Management Program
  ➢ Certifies food service managers and trains employees on safe food handling. According to an FDA model, the training resulted in 6,900 fewer cases and $4.2 million in savings.

• Feral Hog Abatement
  ➢ Mitigates the animal population across 75% of Texas counties resulting in a $4.4 million reduction in damages and reduced animal-borne disease risk

• Boll Weevil Eradication
  ➢ Extension experts play a key role in statewide education and efforts to avert pest damage and resurgence for the most costly cotton pest. In 2007, reduced yield losses and control costs gave producers an estimated raise of $247 million in total net returns
Video on AgriLife Extension

http://youtu.be/3WzPbwVXe1k
Texas A&M Forest Service
Our Statewide Presence
Texas A&M Forest Service

- **Conserve:** Texas Forest Service works to ensure the state’s forests, trees, and related natural resources are conserved and provide a sustainable flow of environmental and economic benefits.

- **Protect:** Texas Forest Service is the lead Texas agency for all-hazard responses, including the suppression of wildfires and the management of state disaster responses such as the 210-day wildfire season of 2008, Hurricanes Rita and Ike and currently one of the most active wildfire seasons in Texas history burning more than 2.5 million acres.

- **Mission:** Texas Forest Service provides statewide leadership to assure the state’s trees, forests, and related natural resources are protected and sustained for the benefit of all.

http://texasforestservice.tamu.edu
Budget: Texas Forest Service

- FY 2011 Budget: $65.5 M
- FTEs: 447

*Primarily pass-through dollars for state grant programs to volunteer firefighters, etc.
Texas A&M Forest Service Program Highlights

• Customers: Landowners, homeowners, industry, state & local government & volunteer firefighters

• Only state forestry agency recognized as a verifier of carbon sequestration

• Statewide Forest Inventory & Analysis
  - First time ever inventory for Central and West Texas
  - Critical information for biomass, carbon, wildlife, invasive species, and fuel loading

• Hurricane Ike – Timber Damage Assessment
  - $351 million in total stumpage damaged; 473,000 acres damaged
  - National model for providing accurate, real-time numbers to FEMA and D.C.

• Wildfire Protection and Response
  - Administers the Rural Volunteer Firefighter Department Assistance Program
  - 2008: 1.4 million acres burned and 172 homes lost
  - 2011: 3.5 million acres burned and 673 homes lost to date – 25,966 saved
    (08/28/11)
Video on Forest Service

http://youtu.be/IYt9LsgGDGI
Texas A&M Veterinary Medical Diagnostic Laboratory
Our Statewide Presence

- ★ Texas A&M University and Agency Headquarters
- 🟢 Texas Veterinary Medical Diagnostic Laboratory
Video on TVMDL

http://youtu.be/-Hrfh-Uc_Dl
Texas A&M Veterinary Medical Diagnostic Laboratory

• Only state agency dedicated to providing veterinary diagnostic services to the citizens of Texas

• Backbone of Texas animal and emerging/zoonotic disease surveillance program

• **Mission**: Promote animal health and protect agricultural, companion animal and public health interest in Texas and beyond, by providing excellence in veterinary diagnostic services.

[http://tvmdl.tamu.edu/](http://tvmdl.tamu.edu/)
Budget: TVMDL

- FY 2011 Budget: $16.8 M
- FTEs: 152
TVMDL Program Highlights

• Animal and Public Health Surveillance
  ➢ >800K tests in 2010
  ➢ Performed >291K tests in 2010 for agents of Bio or Eco-terrorism

• Emergency Preparedness, Response and Recovery
  ➢ Only state laboratory with capacity and facilities for responding to a high consequence and/or zoonotic/emerging disease event (e.g. equine piroplasmosis, Infectious laryngeotracheitis, melamine poisonings in pet food)
  ➢ Participates in test development and surveillance for high priority agricultural and public health diseases (foot-and-mouth disease, “mad-cow” disease (BSE), pH1N1 influenza, avian influenza, etc.)

• Nationally Recognized Services & Research
  ➢ One of twelve core members of the National Animal Health Laboratory Network Laboratories (NAHLN)
  ➢ Developing new technologies for rapid detection of emerging and zoonotic* diseases
    ➢ pH1N1 flu, Equine herpesvirus (EHV-1)
    ➢ tick and vector borne diseases (Epizootic Hemorrhagic Disease, Bluetongue)

*a disease transmissible from animals to humans
Summary

- Texas A&M AgriLife is a made up of TAMUS agencies (4) and the College of Agriculture and Life Sciences. One person is the ‘CEO’ for all of these.
- As a group, it is the 2nd largest (by far) entity within the A&M System (about 1/3 the size of TAMU).
- It serves the core functions of the ‘land grant mission’ of TAMUS and TAMU of teaching, research, extension, and service.
Summary

- Its programs span a wide diversity of issues (e.g. basic sciences, agricultural production, environmental stewardship, safety, human sciences, etc.)
- There are significant and meaningful connections between the agencies and TAMU (e.g. joint faculty appointments, shared facilities, etc.).
- TAMU and the agencies are both better off because of this close relationship.
Video on Land Grant Mission

Prepared by: AgriLife Advanced Leaders Program, Cohort 1
Thank You!