

Update on USDA/CSREES Agrosecurity Activities

Robert M. Smith, DVM, PhD
National Program Leader
Agricultural Homeland Security
USDA/CSREES/PAS



Agricultural Homeland Security

- USDA's Office of Homeland Security
 - Located with the Deputy Secretary
 - www.usda.gov/homelandsecurity
- Agricultural Research Service
- Food Safety Inspection Service
- Animal & Plant Health Inspection Service
- Cooperative State Research, Education, and Extension Service

National Animal and Plant Diagnostic Laboratory Network

Overall Objective:

To establish a functional national network of existing diagnostic laboratories to rapidly and accurately detect and report pathogens of national interest



High Priority Agents (USDA)

- ✓ **Highly Pathogenic Avian Influenza**
- ✓ **Exotic Newcastle Disease**
- ✓ **Classical Swine Fever (Hog Cholera)**
- ✓ **African Swine Fever**
- ✓ **Foot and Mouth Disease**
- ✓ **Rinderpest**
- ✓ **Lumpy Skin Disease**
- ✓ **Contagious Bovine Pleuropneumonia**

Ultimate goal – Deploy rapid, molecular based assays for detection of foreign animal disease and other agents of biosecurity concern

Animals

- **13 Locations**
- **5 - Core Labs**
- **7- Satellite Labs**
- **1 – Sub-contract Lab**

Plants

- **6 Locations**
- **5 - Regional Labs**
- **1 – Support Lab**

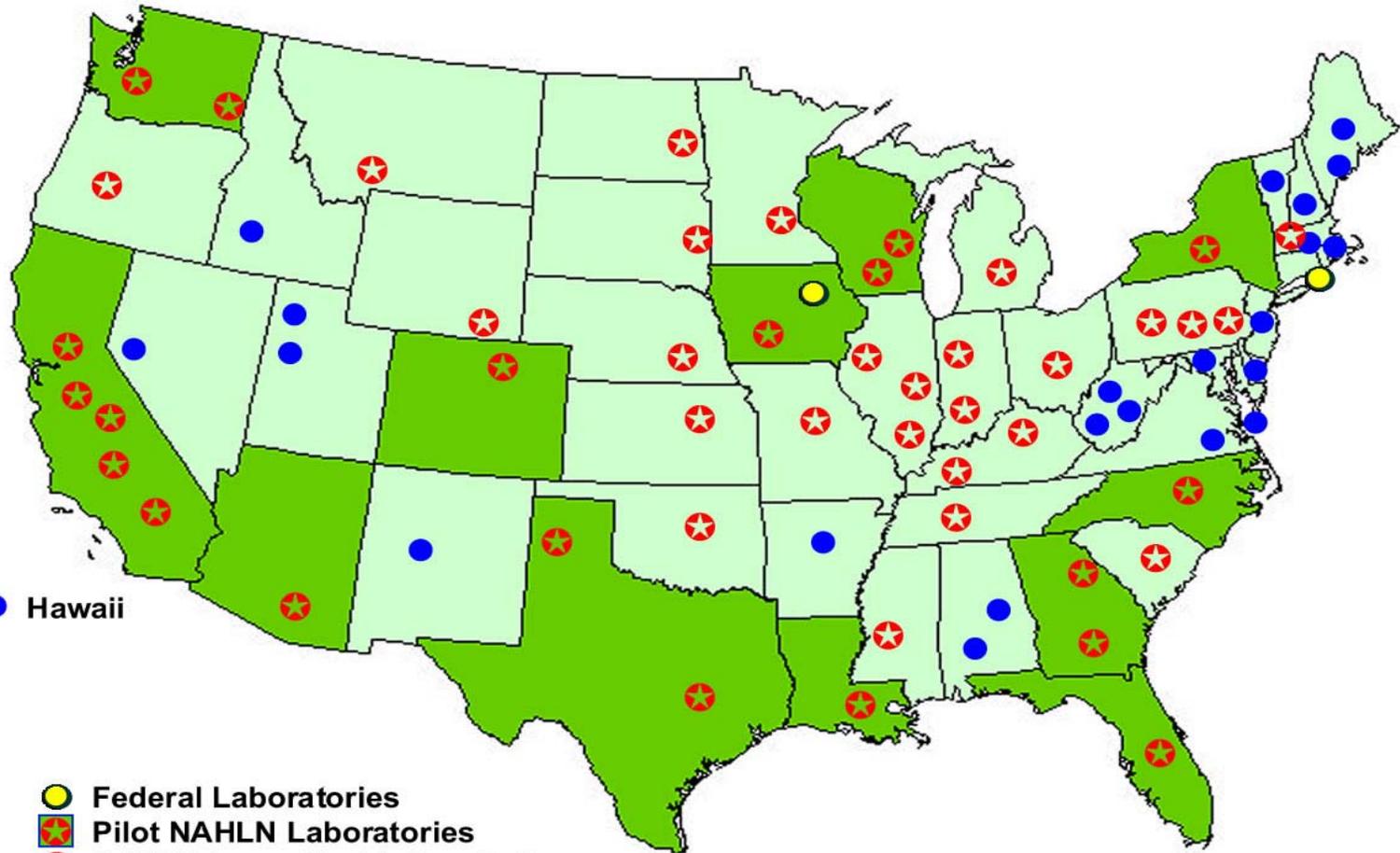


The potential of the nation's diagnostic resources

● Alaska

● Hawaii

- Federal Laboratories
- Pilot NAHLN Laboratories
- AAVLD Accredited Laboratories
- Non-AAVLD Accredited Laboratories

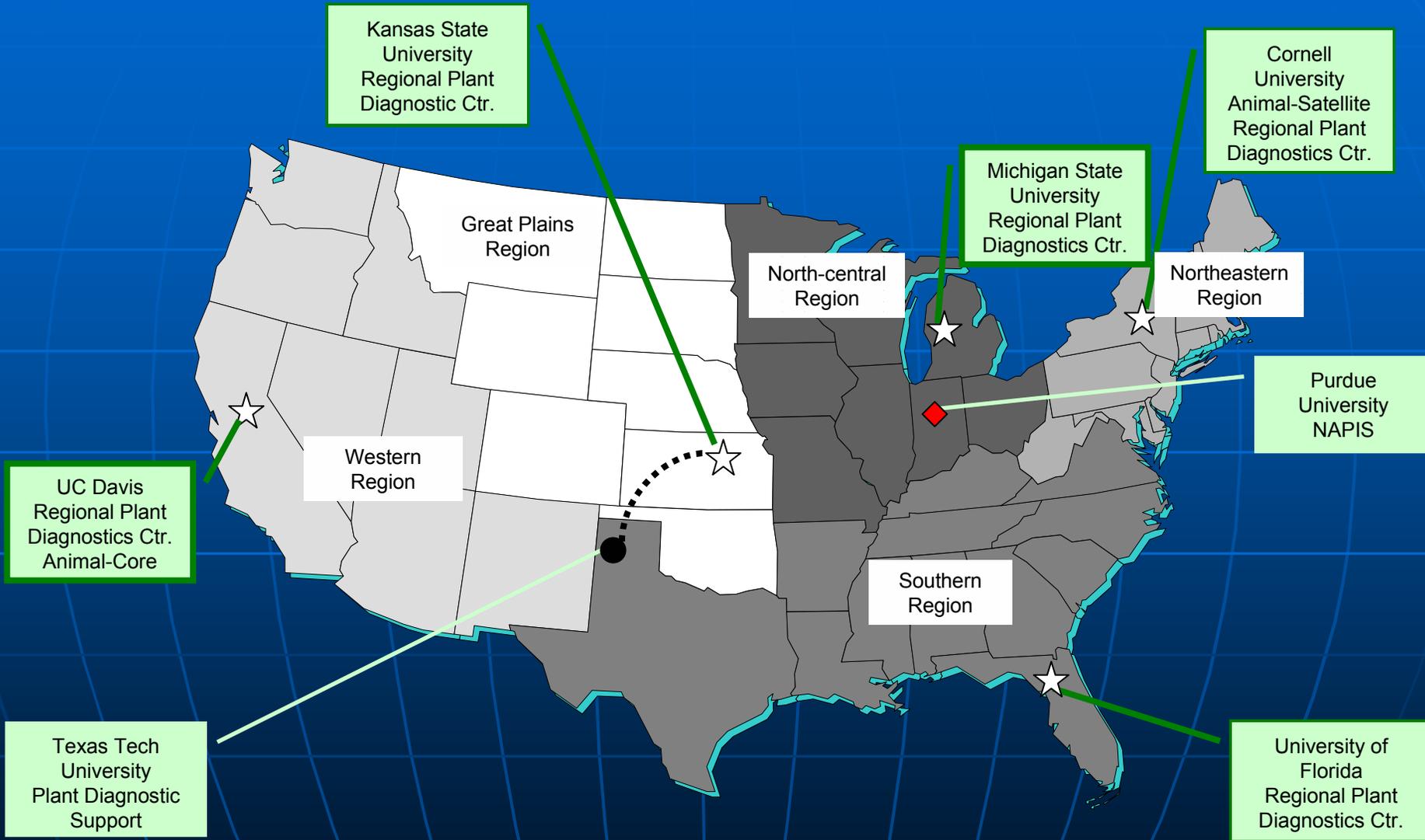


National Animal Health Laboratory Network



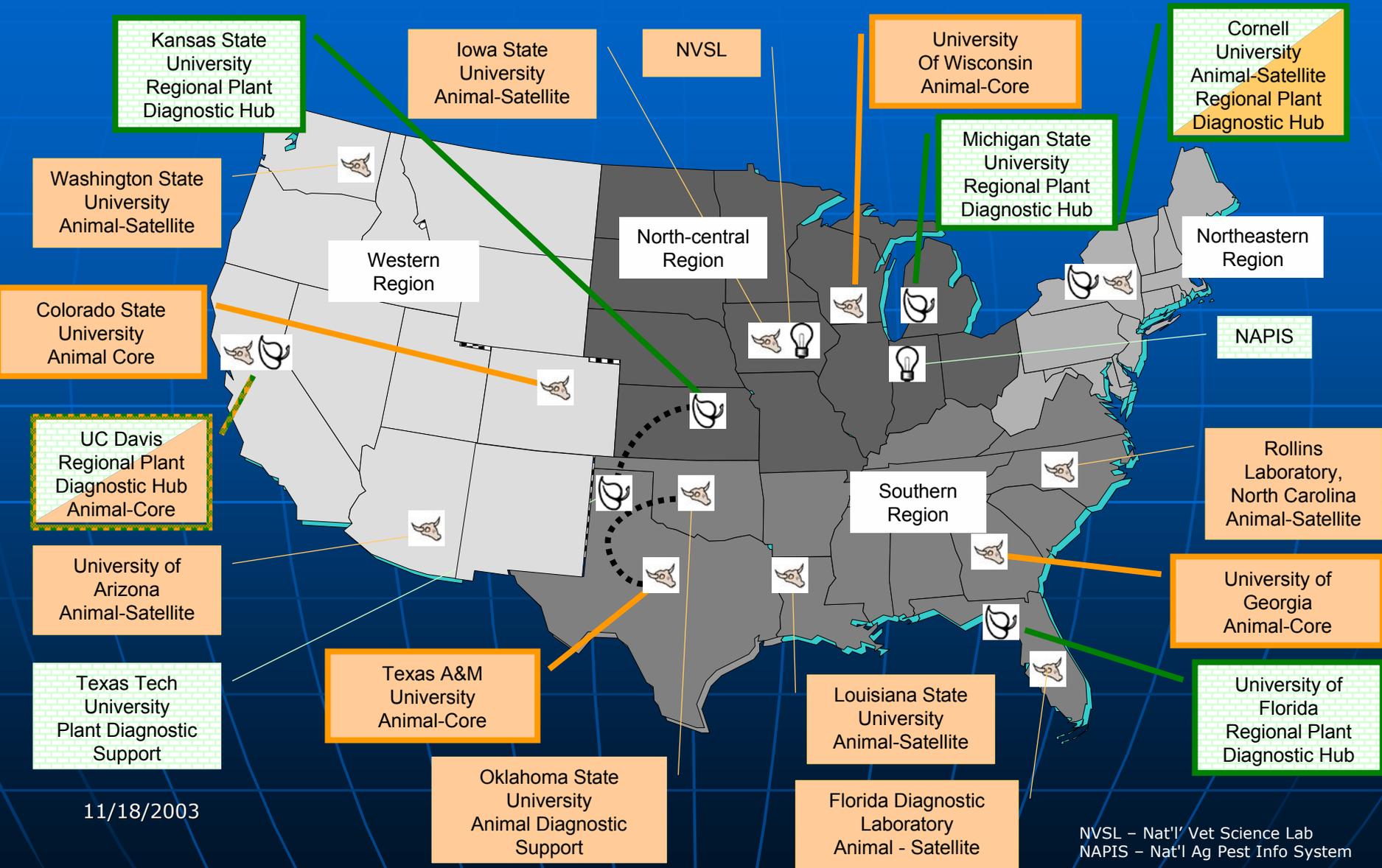
11/18/2003

National Plant Diagnostic Laboratory Network



National Animal & Plant Diagnostic Laboratory Networks

 Animal Network
  Plant Network
  Information Center
  Great Plains Plant Diagnostic Region



11/18/2003

NVSL - Nat'l Vet Science Lab
 NAPIS - Nat'l Ag Pest Info System

Objectives for Animal Diagnostic Laboratories

- Train personnel
- Expand standardized rapid/sensitive testing capabilities
- Improve BSL-3 capability
- Assure quality standards and proficiency testing
- Improve communications to share data



Objectives for the 5 Regional Plant Diagnostic Centers

- Coordinate activities with stakeholders within regions and across the country
- Coordinate regional detection and diagnostic resources
- Establish national standard operating procedures for diagnostics, sampling and reporting
- Provide inter-regional communication
- Create a national database for monitoring disease and pest outbreaks



Coordinating Communications

- Diagnostic Laboratories
- State Governments
- Federal Government
 - USDA: APHIS, ARS, CSREES, FSIS
 - FDA
 - HHS (CDC and the LRN)
 - Others



Future

- Maintain the current network
- Expand communication capabilities
- Increase the number of laboratories within the Network
- Expand diagnostic capabilities



Future

- Incorporate extension network
- Enhance toxicological capabilities
- Build in flexibility to work with different samples (food, human, etc.)
- Enhance surveillance
 - Become more “user friendly”
 - Cost-share with producer
 - Become more accessible to producer



National Research Initiative (NRI):

- FY2003 Appropriation = ~\$166 million
 - FY2002 Appropriation = ~\$120 million



National Research Initiative (NRI):

- FY2003 NRI Integrated Program RFA:
 - Letters of intent were received: **June 30, 2003**
 - Proposals were received: **July 30, 2003**
 - Panel Review of Proposals: **Oct-Dec, 2003**
 - ~\$30 million. Priority given to:
 - Integrate agricultural research, extension and education projects; or
 - Multistate, multi-institutional, or multidisciplinary projects

www.reeusda.gov "funding opportunities"
www.reeusda.gov/nri



FY2003 NRI Integrated Programs:

- Functional Genomics (\$8 million)
- Air Quality (\$5 million)
- Human Nutrition & Obesity (\$8 million)
- Animal & Plant Biosecurity (\$7.5 million)
- National Training Program for Agricultural Homeland Security (\$0.5 million)
 - Plant pathogens and plant pests
 - Coordinated with APHIS & USDA plant disease diagnostic network



FY2003 NRI Integrated Programs:

- Animal Biosecurity (\$4 million)
 - Awards up to \$4 million
 - Avian Influenza (Fowl Plague) virus
 - Johne's Disease (*Mycobacterium avium*)
 - PRRS Virus (Porcine Reproductive Respiratory Syndrome)
- Plant Biosecurity (\$3.5 million)
 - Early detection, diagnosis and monitoring for plant pathogens/pests



FY2003 NRI Integrated Programs:

- Eligibility:
 - Federal research agencies
 - National laboratories
 - Colleges or universities or a research foundation maintained by a college or university
 - Private research organization with an established & demonstrated capacity to perform research or technology transfer
 - State agricultural experiment stations



Criteria To Be Used In The Review Of Protocols

- **Relevance** - to critical emerging agricultural and rural issues. Stakeholder input.
- **Merit** - on scientific, extension, or educational uniqueness, clarity of objectives, feasibility, and probability of success.
- **Quality** - of individuals, institution, partnerships and collaborative efforts, administration and oversight of project, and planned dissemination of information.

The Critical Role of Extension and EDEN

- Collaborators for integrated projects - contributing relevance, merit and quality
- Educating first detectors & responders - local, regional, and state (citizens, agencies, and organizations)
- Helping to Build Disaster Resilient Communities - providing disaster management education
- Consequence Management - serving as liaison between Federal & State agencies and the local communities.

Mechanisms and Tools for Training

- Training-the-Trainer
 - Center for Food Security & Public Health
 - National Assoc. of County Ag Agents
 - NPDN, NAHLN, NRI, and other initiatives
- EDEN Web-site
- Plant Management Network
www.plantmanagementnetwork.org

CAB International

(www.cabi.org)

- A not-for-profit organization specializing in sustainable solutions for agricultural and environmental problems
- A consortium of global partners that share information: 3 compendia (CD and web)
 - *Animal Health & Production*
 - *Crop Protection*
 - *Forestry*
- CSREES to make access available to LGUs

Questions?

Contact information:

Voice: (202) 401-6861

FAX: (202) 401-6156

E-Mail: rsmith@csrees.usda.gov

