ARKANSAS
STATE PLANT BOARD

ANNUAL REPORT
2016 - 2017

THE

ARKANSAS STATE PLANT BOARD

MISSION

The mission of the Arkansas State Plant Board is to protect and serve the citizens of Arkansas and the agricultural and business communities by providing information and unbiased enforcement of laws and regulations thus ensuring quality products and services.

VISION

The vision of the Arkansas State Plant Board is to become a competent, friendly, cooperative, efficient agency that is willing and able to promptly serve the agricultural and business communities and the general public in a credible, professional manner.

GENERAL REMARKS

The following report covers in a brief way the work accomplishments of the State Plant Board during the 2016-17 fiscal year. Activities of the six administration divisions are covered. Each report covers only the most pertinent points.

FIELD WORK

The field work is divided into thirty work categories as follows:
1. Abandoned Pesticide Program, 2. Apiary, 3. Aquaculture/B Fish, 4. Boll Weevil SE, 5. Bureau of Standards, 6. Commercial Pest Control, 7. EPA Certification, 8. EPA Endangered Species Program, 9. EPA Enforcement, 10. EPA Ground Water Program, 11. EPA Worker Protection, 12. Feed, 13. Fertilizer & Lime, 14. Fruit and Vegetable Inspection, 15. GAP/GHP (Good Agri Practices/Good Handling Practices), 16. Grain Warehouse, 17. LLRice/GMO Rice (Genetically Modified Organism Rice), 18. Nursery & Vegetable Inspection, 19. Peanut Grading, 20. Pesticides & P.U.A.A., 21. Produce Safety, 22. Seed, 23. Survey & Quarantine, 24. CORE, 25. Emeral Ash Borer (EAB), 26. Forest Outreach (FIPO), 27. Honeybee Survey, 28. Imported Fire Ant (IFA), 29. Walnut Twig Beetle (WTB), and 30. Oak Commodity Survey (OCS).

A good balance of the workloads was maintained again this year. This was achieved through a program of goals for each of the thirty work areas. This program was established years ago and is based on the volume of products and services in each work area. Some of the goals have been altered to coincide with the available volume of products and to establish an equitable work load and flow of samples for the laboratories. A majority of the field staff met or exceeded their goals and the goals for all products and services were exceeded.

For cost accounting purposes, records are kept of the amount of time devoted to each work category. This, along with sample and inspection goals, helps to achieve a good balance of the work and helps to insure that all industries are served fairly and adequately.

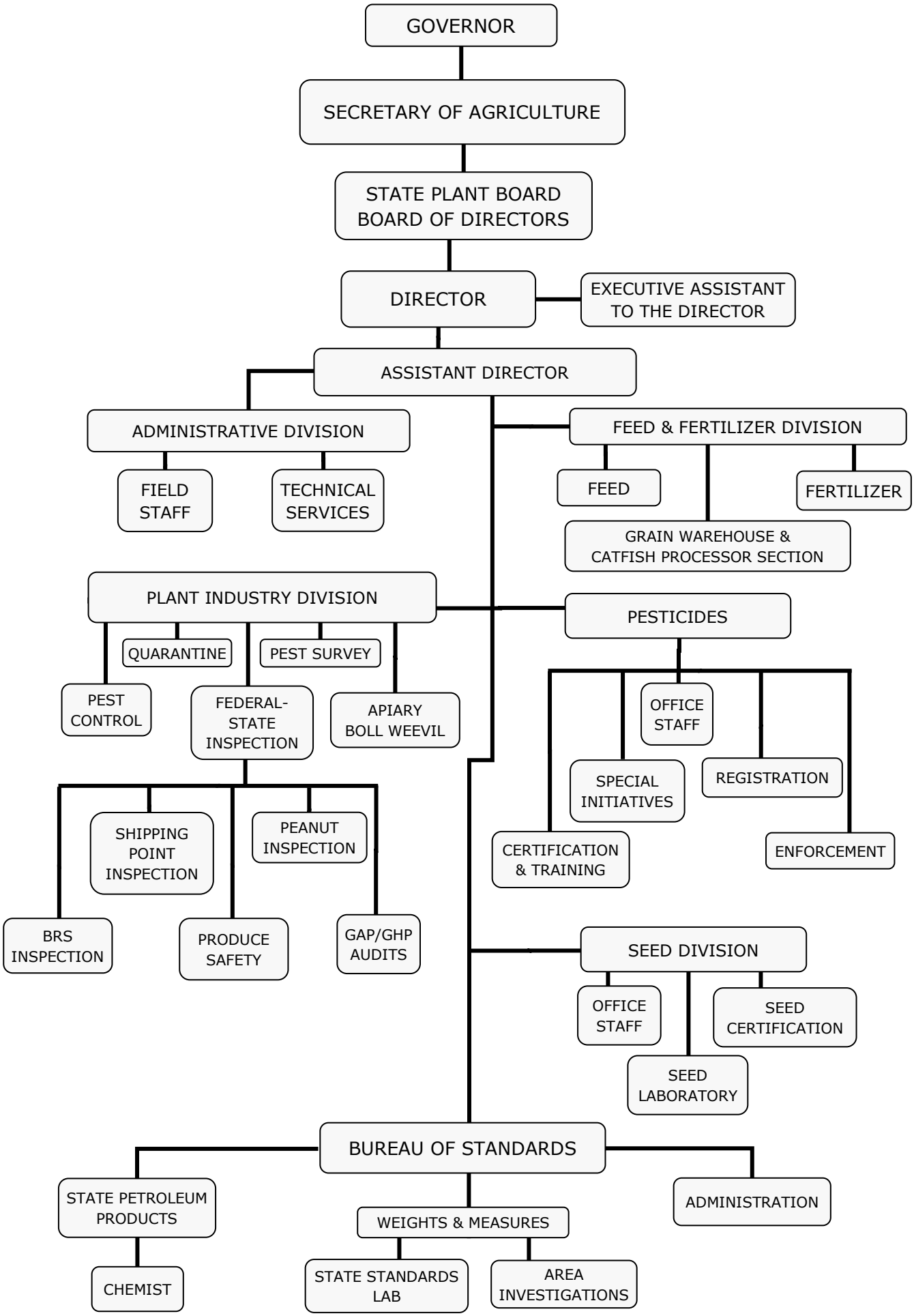
Bureau of Standards followed by seed programs dominated the work load again this year. Bureau of Standards programs involve responding to complaints and checking petroleum retailers for compliance as well as checking other retail vendors for accurate sales transactions. The metrology lab performs certification services for artifacts used by service companies to insure retail outlets operate in compliance with state requirements. Seed programs include seed certification, seed service, and seed regulatory enforcement. This was followed by EPA Enforcement, Feed, Pesticides and Pesticide Use and Application, and Fertilizer and Lime.

PERSONNEL

Agency Turn Over July 1, 2016 through June 30, 2017

This represents 34 changes out of a total of 131 full-time positions.

New Hires	**Rehires**	**Terminations**	**Retirements**	**Promotions**	**Demotions**	**Transfers**
10	3 **(Previously with other state agency)**	6	5	8	1	1 (Extra Help to Regular Hourly)


GOVERNOR
SECRETARY OF AGRICULTURE
STATE PLANT BOARD
BOARD OF DIRECTORS
DIRECTOR
EXECUTIVE ASSISTANT TO THE DIRECTOR
ASSISTANT DIRECTOR
ADMINISTRATIVE DIVISION
FIELD STAFF
TECHNICAL SERVICES
FEED & FERTILIZER DIVISION
FEED
FERTILIZER
GRAIN WAREHOUSE & CATFISH PROCESSOR SECTION
PLANT INDUSTRY DIVISION
QUARANTINE
PEST SURVEY
PEST CONTROL
FEDERAL-STATE INSPECTION
APIARY BOLL WEEVIL
SHIPPING POINT INSPECTION
PEANUT INSPECTION
BRS INSPECTION
PRODUCE SAFETY
GAP/GHP AUDITS
PESTICIDES
OFFICE STAFF
SPECIAL INITIATIVES
REGISTRATION
CERTIFICATION & TRAINING
ENFORCEMENT
SEED DIVISION
OFFICE STAFF
SEED CERTIFICATION
SEED LABORATORY
BUREAU OF STANDARDS
STATE PETROLEUM PRODUCTS
CHEMIST
WEIGHTS & MEASURES
STATE STANDARDS LAB
AREA INVESTIGATIONS
ADMINISTRATION

ORGANIZATION OF THE PLANT BOARD

(Fiscal Year 2016-17)

THE BOARD

Chairman — **Otis Howe, Little Rock**
Vice-Chairman — **Danny Finch, Jonesboro**
Secretary — **Larry Jayroe, Forrest City**

Walter "Bruce" Alford, Lewisville
Kyle Baltz, Pocahontas
Russell Black, Fayetteville
Russell Bragg, Fort Smith
Robert Campbell, Witts Springs
Dr. Rick Cartwright, Little Rock
Marty Eaton, Jonesboro
Terry Fuller, Poplar Grove
Greg Hay, Conway
Jerry Hyde, Paragould
Thomas Post, Harrison
Dr. Craig Rothrock, Fayetteville
Dennie Stokes, Earle
Jammy Turner, Gillett
Barry Walls, Harrisburg

Terry Walker, Director
Vacant, Assistant Director

Divisions and Personnel

1. Administration: Vacant, Assistant Director

   A. Information and Personnel: Vacant
   Executive Assistant to the Director: Linda Luebke

   Agri Program Coordinators: Robert Banks, Lake City
   David Fort, Beebe
   David Blackburn, Eureka Springs
   Wendy Spakes, Beebe

   Plant Board Agriculture Specialists: Steve Bostian, Fort Smith
   Kevin Cauley, England
   James Clark, Enola
   Ben Collins, Russellville
   Matt Davis, Jonesboro
   Scott Derrick, Atkins
   Lindsay Dobbins, Taylor
   Matthew Fields, McCrory
   Jerri Nichols Gann, Keiser
   Aaron Gifford, Wheatley
   Michael Greenway, Paragould

Greg Hearnsberger, Hampton
Zach Heathscott, Vilonia
Michael Hill, Osceola
Heath Holden, McRae
Tommy James, Greenbrier
Shawn Johnson, Jonesboro
Phillip Martin, Brinkley
Rick Qualls, Evening Shade
Jayla Ritchie, Dover
Lee Russell, Moro
Lonnie Smith, Hoxie
Cole Vanaman, Grady
Josh Wells, Batesville
Dan Wicker, Portland

B. Office Management Section: Linda Luebke, Head
Also Executive Assistant to Plant Board Director

C. Printing and Mailing Section: Vacant, Local Office Administrative Assistant

D. Laboratory Section: Michael Stage, Chemist Supervisor
Chemist: Carrie Binyon, Bart Davenport, Michael Miller, Martin Sharum and Xiumei (Mary) Xun
Laboratory Technician: Vacant

2. Pesticides: Susie Nichols, Agri Plant Board Division Manager

A. Product Registration: Brandi Reynolds, Agri Program Manager

B. Certification and Licensing: Dana McGinty, Agri Program Manager

C. Worker Protection, Endangered Species, Ground Water, Container/Containment and Abandoned Pesticide Program: Jason Robertson, Agri Program Manager

D. Enforcement: Leigh Gibson, Agri Program Manager

Plant Board Agriculture Specialist: Kandace Buckner, Jessica Jervis, Andrew Simpson and Jessica Walters

Plant Board Agriculture Specialist: Annelie Browder
Administrative Specialist II: Amy Coney and Tobi Rowley

3. Feed and Fertilizer: Jamey Johnson, Agri Plant Board Division Manager
Administrative Specialist III: Franz Oliver and Megan Winsor

A. Grain Warehouse Section: Mike Churchwell, Agri Program Manager
Program/Field Audi Specialist: Holly Benbrook and Kortney White
Administrative Specialist III: Dana Jones

4. Plant Industry: Scott Bray, Agri Plant Board Division Manager
Administrative Specialist III: Donna Wilkerson

A. Apiary Section: Mark Stoll, Agri Program Manager
Administrative Specialist II: Emily Rodriguez
Plant Board Inspector: Danny Brewer and Daniel Plyler

B. Commercial Pest Control Section: Seth Dunlap, Agri Program Manager
Administrative Specialist II: Charlee Howard, Tiffany Mays and Julie Wilson

Plant Board Inspector Supervisor: Vacant
Plant Board Inspector: Johnny Bell, Joshua Dement, Lyndall Hamilton and Ryan Nichols

C. Plant Inspection and Quarantine Section: Paul Shell, Agri Program Manager

D. Pink Bollworm Section: Mark Stoll, Agri Program Manager

E. Survey Program Section: Jake Bodart, Agri Program Manager

F. Special Projects Inspections: Steve Bowlan, Plant Board Agriculture Specialist

G. Aquaculture Programs: Mark Stoll, Agri Program Manager

H. Boll Weevil Eradication Program: Mark Stoll, Agri Program Manager

I. Produce Safety: John Lansdale, Agri Program Manager
Plant Board Agriculture Specialist: Tammy Winsor

5. Seeds: Mary Smith, Agri Plant Board Division Manager
Administrative Specialist II: Marchall Caster

A. Seed Certification Section: James Chastain, Agri Program Manager

B. Seed Laboratory: Aaron Palmer, Agri Program Manager
Senior Seed Analyst: Gordon Baldridge, Pamela Bingham, Karen Finney and Deborah Hill
Seed Analyst: Dominique Bingham

6. Bureau of Standards: Tom Pugh, AR Bureau of Standards Director
Administrative Specialist III: Sheila Carter
Administrative Specialist II: Tiffany Smith and Stormie Winsor

A. Laboratory Standards: Nikil Soman, Metrology Laboratory Manager
Metrologist: Charles Hawkins
Agri Program Coordinator: Randy Burns

B. Petroleum Quality: Wilford Jones, Chemist Supervisor
Chemist: Teresa Dillard, Daniel Greene, Fred Harris and Ronald Phillips

C. Weights and Measures: Roger Frazier, Plant Board Agriculture Specialist
Plant Board Inspector: Tammy Beck
Virgil Bellott
Tim Chesser
Michelle Cooper
Stanley Cottrell
Lowell French
Gary Howard
Michael Jones
Louis G. King
Shelby Mross
Jack Newberry
Donald Siefken
Richard Slater
Brian Terry
Tony Winsor
Larry Wornock

DIVISION OF ADMINISTRATION

This division is responsible for coordinating the work activities of the six divisions. The Director of Administration, with guidance and counsel of the agency Director, provides general supervision and direction to all employees. The Director of Administration works closely with the agency Director on matters relating to the budget, personnel, area assignments and program planning. The Director of Administration is the travel supervisor and must approve all travel claims. When the agency Director is away from the office, the Assistant Director assumes the agency Director's immediate duties.

FIELD STAFF

The field staff is comprised of 4 Agri Program Coordinators, 25 Agriculture Specialists, 5 Pest Control Inspectors, 2 Program/Field Audit Specialist, 2 Apiary Inspectors, and 15 Inspectors with the Bureau of Standards, Weights and Measures. Produce Inspectors and additional Apiary Inspectors are employed on a seasonal basis as needed.

The Agriculture Specialists work in all programs except the Bureau of Standards, the Grain Warehouse work, the Apiary work, and the Pest Control work which are carried out with separate staffs because of the specialized nature of the work and job duties.

The State is divided into 4 regions with from 4 to 9 Agriculture Specialists in each region depending on the work load. Their job duties include the inspection and sampling of seed, feed, fertilizer, pesticides and lime; monitoring the use and application of agricultural chemicals; investigating and documenting evidence in chemical complaints; inspecting vegetable plants and nursery stock; inspecting fields of crops for seed certification; carrying out insect and plant disease quarantine programs and inspecting fruits, vegetables and other agricultural products for grade.

The boundary lines of each region are determined by the amount of work to be done, the amount of travel required, the ability of the inspectors to provide adequate coverage and service to the area and to allow the inspector to be at home at night as much as possible. Economy and efficiency are major factors in determining areas, and the boundaries are changed as these and other factors dictate. When an inspector is away from his or her work area, or if for some reason cannot give immediate attention to the work duties, other inspectors are sent to give assistance. In this way, service is provided as it is needed.

Five Pest Control Inspectors were employed in the inspection of buildings, lawns, trees and shrubs for compliance with the Pest Control Law and Regulations and to enforce the EPA regulations. Each inspector was assigned to a work area and spent almost full time inspecting buildings and properties and carrying out other duties of this program. The Program Manager and Inspector Supervisor devoted considerable time to making inspections, checking out leads and gathering information on illegal operators and searching for unreported jobs. They also submit evidence to the Pest Control Committee and the Board for their consideration.

Two Apiary Inspectors devoted full time to the inspection of apiaries for insects and diseases of bees, issuing permits for moving bees, determining pasture rights, conducting education programs and making surveys for Africanized Bees and pests we do not have in Arkansas. The Head of the Apiary Section devotes a significant portion of his time to making inspections and investigating complaints.

Two Grain Field Auditors spent full time in auditing the records and verifying quantities of grain in grain warehouses to determine if stocks of grain were on hand or accounted for. The Head of this Section also spends time in the field making audits, assisting warehouses with record keeping and solving problems.

OFFICE STAFF

The Printing and Mailing Section is responsible for printing, packaging, and forwarding tags and labels. Preparing, posting, and sending out all mail and parcels; maintaining inventories of supplies for the field staff and providing them as requested; maintaining mailing lists according to postal regulations.

ANNUAL STATE VEHICLE REPORT

STATE OWNED VEHICLES

CATEGORY	COMPARATIVE FIGURES	
	2015-2016	2016-2017
Number of Passenger Cars	3	3
Number of Durango/Van	7	7
Number of Pick-Ups	60	62
Large Trucks	2	2
Total Number of Vehicles	72	74

PRIVATE OWNED VEHICLES

CATEGORY	COMPARATIVE FIGURES	
	2015-2016	2016-2017
Total Miles Traveled	124395.46	33760.53
Reimbursement Rate Per Mile	$0.42	$0.42
Total Amount Reimbursement for Miles Traveled	$52,246.09	$14,179.42

PLANT BOARD
MAN HOURS BY ACTIVITY

HOURS SPENT ON:	2015-2016	2016-2017
Abandoned Pesticide Program	923.00	837.00
Apiary	5,840.50	4,737.88
Aquaculture/B Fish	413.50	697.00
Boll Weevil SE	1,140.75	1,302.38
Bureau of Standards	4,184.95	2,861.66
Commercial Pest Control	11,320.01	10,352.71
EPA Certification	7,717.38	8,897.63
EPA Endangered Species Program	908.00	1,486.75
EPA Enforcement	22,763.50	21,310.50
EPA Ground Water Program	2,747.75	2,783.00
EPA Worker Protection	3,500.50	3,460.00
Feed	14,989.87	15,176.02
Fertilizer & Lime	13,240.02	11,658.69
Fruit & Vegetable Inspection	1,400.02	717.44
GAP/GHP (Good Agri Practices/Good Handling Practices)	602.00	388.00
Grain Warehouse	6,847.00	6,807.75
LLRice/GMO Rice (Genetically Modified Organism Rice)	699.00	539.00
Nursery & Vegetable Inspection	9,089.26	8,995.86
Peanut Grading	1,467.00	1,795.00
Pesticides & P.U.A.A.	13,277.01	12,812.59
Produce Safety	0.00	3,551.75
Seed	30,807.11	27,939.21
Survey & Quarantine	7,665.00	6,408.00
CORE	1,712.00	1,422.00
Emerald Ash Bore (EAB)	321.00	0.00
Forest Outreach (FIPO)	63.00	32.00
Honeybee Survey	215.00	28.00
Imported Fire Ant (IFA)	1,882.00	1,156.00
Walnut Twig Beetle (WTB)	477.05	321.50
Oak Commodity Survey (OCS)	596.20	397.50
TOTALS	**166,809.37**	**158,872.80**

BUREAU OF STANDARDS
MAN HOURS BY ACTIVITY

HOURS SPENT ON:	2015-2016	2016-2017
Grain Analysis & Research Lab	1,021.50	941.50
Precision Measurement Lab	5,197.50	4,299.25
Moisture Meter Inspection	698.00	849.50
Petroleum Analysis	1,814.00	1,655.50
Petroleum Maintenance	2,723.00	3,058.50
Petroleum Sampling	3,360.50	3,187.50
Petroleum Biodiesel Analysis	0.00	1.50
Petroleum Quantity	2,927.00	2,082.00
Package Inspection	9,707.00	10,612.50
Scanner Inspection	5,866.00	6,549.00
Advertising violations	114.00	417.00
Small Capacity Scales	1,166.00	1,171.00
Medium Capacity Scales	80.00	44.00
Large Capacity Scales	3,499.00	3,318.00
USDA Scales	0.00	30.00
Livestock Scales	0.00	-
Liquified Petroleum Gas Meter	535.00	765.00
Administrative/Miscellaneous	8,621.50	11,286.50
COOL Grant	1,212.00	932.00
TOTALS	**48,542.00**	**51,200.25**

AGENCY TOTAL 210,073.05

FIELD SPECIALIST'S HEADQUARTERS

EAST CENTRAL DISTRICT	HEADQUARTERS
WENDY SPAKES, (Supervisor)	Beebe
Kevin Cauley	England
Matthew Fields	McCrory
Aaron Gifford	Wheatley
Zach Heathscott	Vilonia
Heath Holden	McRae
Tommy James	Greenbrier
Phillip Martin	Brinkley
Lee Russell	Moro

NORTHEAST DISTRICT	
ROBERT BANKS, (Supervisor)	Lake City
Matt Davis	Jonesboro
Jerri Nichols Gann	Keiser
Michael Greenway	Paragould
Michael Hill	Osceola
Shawn Johnson	Jonesboro
Rick Qualls	Evening Shade
Lonnie Smith	Hoxie
Josh Wells	Batesville

SOUTHEAST DISTRICT	
DAVID FORT, (Supervisor)	Beebe
James Clark	Enola
Greg Hearnsberger	Hampton
Cole Vanaman	Grady
Dan Wicker	Portland

WESTERN DISTRICT	
DAVID BLACKBURN, (Supervisor)	Eureka Springs
Steve Bostian	Fort Smith
Ben Collins	Russellville
Scott Derrrick	Atkins
Lindsay Dobbins	Taylor
Jayla Ritchie	Dover

PEST CONTROL INSPECTOR'S AREA

AREA NUMBER	INSPECTOR	HEADQUARTERS
1	Joshua Dement	Clinton
2	Ryan Nichols	North Little Rock
3	Lyndall Hamilton	Subiaco
4	Vacant	
5	Johnny Bell	Marked Tree

LABELS PRINTED AND ISSUED

JULY 1, 2016 THRU JUNE 30, 2017

Non-Certified labels printed	.....	19,128
Non-Certified label orders	.....	37
Non-Certified label lots		24
Certified labels printed		95,972
Certified orders		423
Certified label lots		382
Certified blank labels issued		18,000
Certified blank orders		3
Company-printed labels from blank labels issued		32,781
GRAND TOTAL OF ALL LABELS PRINTED AND ISSUED JULY 1, 2016 TO JUNE 30, 2017		147,881

DIVISION OF FEED AND FERTILIZER

Jamey Johnson, Director
Franz Oliver, Administrative Specialist III
Megan Winsor, Administrative Specialist III
Alex Megan Johnson, Administrative Specialist II

PUBLIC GRAIN WAREHOUSE AND CATFISH PROCESSOR SECTION

Michael L. Churchwell, Agri Program Manager
Dana Jones, Administrative Specialist III
Kortney White, Program/Field Audit Specialist
Holly Benbrook, Program/Field Audit Specialist

This Division is organized into three areas whose activities are administered through the Director. The responsibilities of the Division include the administration and enforcement of the Feed and Fertilizer Laws and Regulations, Agricultural Liming Materials Act, Soil Amendment Act, Agricultural Consultants Licensing Act, 100% Natural Organic Fertilizer Act, Aflatoxin Act, Grain Warehousemen Act and the Catfish Processors Act.

The major activities involve registration approval after label review of various products covered; issuance of permits and licenses to manufacturers, blenders, vendors, grain warehousemen, catfish processors and consultants; subjecting feeds, fertilizers, and liming materials to continuous inspection and sampling in the field and chemical analysis in the laboratory to determine label compliance; inspecting medicated feed mills to determine compliance with FDA manufacturing practices; collection of fees and record inspections to determine proper payment; compiling statistical data for the use of industry and educational agencies. In addition, grain warehousemen and catfish processors must be properly bonded and insured.

Each year staff members will attend and participate in several meetings and seminars aimed at program development and evaluation, continuing education, and cooperation with the various agricultural associations.

Tonnage for feed, fertilizer, liming materials and soil amendments are reported each fiscal year. Agricultural consultants and feed facilities are licensed each calendar year. Fertilizer facilities and fertilizer manufacturers are registered and/or licensed each fiscal year. Grain warehousemen and catfish processors are registered and/or licensed each fiscal year.

FEED

Prior to distribution or sale, each feed company must purchase a feed facility license. All feed shipments, bulk or bag, must be properly labeled showing the required guarantees, list of all ingredients and drugs if the feed is medicated. Feeds may contain only approved drugs and antibiotics at proper levels and/or combinations to assure efficacy and safety. Most important is the withdrawal interval before slaughter to assure elimination from the tissues and thereby prevent illegal residues in meat, milk and eggs.

Under Act 726 of 1997, a total of 18 firms operating 25 feed mills were granted exemptions from the Feed Law. Such exemptions are available to a mixer feeding his own poultry or animals. This includes the company owning the mill, feed and poultry or animals. Under this integrated system no feed is actually sold. The feed ownership is retained by the manufacturer.

Sample collection and the number of analyzes were lower than the previous year. There was One Thousand Two Hundred Twenty Three firms have facility licenses. Total feeds reported sold amounted to **2,187,228** tons which was higher than the previous year. The percent of feeds mislabeled was higher.

Tonnage Sales Reported, Samples Analyzed and Violations, by Classification

Classes of Feed Formula Feeds	Tons	Violations
Broiler Feeds	**121849**	**0**
Turkey Feeds	**2918**	**0**
Starter-Grower (Egg-Type)	**33990**	**2**
Layer-Breeder (Egg-Type)	**20733**	**0**
Beef Feeds	**218933**	**61**
Dairy Feed	**8148**	**0**
Swine Feed	**7277**	**0**
Sheep Feeds	**6930**	**0**
Mineral & Vitamin Feeds	**23147**	**1**
Horse Feeds	**293978**	**52**
Pet Foods	**164928**	**8**
Fish Foods	**36249**	**4**
Miscellaneous Feeds	**121422**	**0**
Sub-Totals	**1060502**	**137**

Feed Ingredients	Tons	Violations
Alfalfa Products	**1470**	**0**
Animal Products	**174386**	**0**
Barley Products	**34**	**0**
Brewers Products	**7006**	**0**
Citrus Products	**55**	**0**
Cottonseed Products	**10943**	**0**
Distillers Products	**92254**	**0**
Fats and Oils	**71036**	**0**
Grain Sorghum Products	**179**	**0**
Lespedeza Products	**0**	**0**
Linseed & Flax Products	**33**	**0**
Maize Products (Corn)	**104180**	**0**
Marine Products	**2319**	**0**
Milk Products	**584**	**0**
Mineral Products	**37570**	**0**
Molasses	**1871**	**0**
Oat Products	**2281**	**0**
Peanut Products	**2446**	**0**
Rice Products	**53619**	**2**
Rye Products	**999**	**0**
Soybean Products	**51699**	**1**
Vitamin Products	**5996**	**1**
Wheat Products	**27790**	**1**
Miscellaneous Products	**12680**	**0**
Sub-Totals	**1126726**	**5**
GRAND TOTAL	**2,187,228**	**142**
2015-16	1955772	184
2014-15	1210621	156

Breakdown of Violations by Discrepancy

Crude Protein	83	Vitamin A	6
Crude Fat	43	Copper	15
Crude Fiber	27	Phosphorus	3
Calcium	15	Zinc	12
Salt	61	Amprolium	0
Urea Protein	0	Sodium	6

	2016-17	2015-16	2014-15
Percent of samples on which violations were issued.	**13.7%**	**10.84%**	**14.86%**
Samples Analyzed	**1977**	**1787**	**1806**

CHEMICAL LABORATORY ANNUAL REPORT 2016-17
(FEED AND LIMESTONE)

2016-17 Feed Analyses Reported
(Official Feed Samples Received: 1977)

Crude Protein	1942	Copper	371
Crude Fat	1940	Iron	11
Crude Fiber	1939	Magnesium	50
Urea	29	Manganese	76
Moisture	1977	Potassium	457
Ash	1317	Zinc	469
Phosphorus	1270	Aflatoxin	0
Calcium	1268	Amprolium	20
Salt	935	Carbadox	0
Sodium	192	Methoprene	4
Vitamin A	102	Sulfamethazine	5
		Ethopabate	0

TOTAL 14368

Unofficial Feed Samples: 17

Stop Sales Issued by Inspector

Reason For Issuance	Number Issued	Number of Bags	Number of lbs.
Improperly labeled	8	729	36450
Analysis (conflicting/absent)	6	211	10550
Not Registered	0	0	0
Other (Feed Law Violation)	4	251	12550
Other (Misbranded)	0	0	0
TOTALS	18	1191	59550

AGRICULTURAL LIMING MATERIALS

Each liming material must be registered by the manufacturer, importer or other guarantor prior to sale or distribution in the State. Any person or firm engaging in the spreading of liming materials on property other than their own must secure a lime vendor's license. Any liming material proven to be deficient from its statement of guarantee to the extent of 5% or more is subject to penalty.

Ninety Five firms registered 166 liming materials, and licenses were issued to 65 vendors operating 90 spreader trucks. One Hundred Nineteen samples were collected and analyzed which was higher than the previous year. Seven samples were found to be deficient. There were no stop sales issued on lime. A total of 196046, tons were reported sold which was higher than the previous year. Ten cents per ton of the fee collected accrues to the University of Arkansas for soil testing purposes. Fee collections were as follows:

Registrations (168 products @ $15.00 each)	$	2,520.00
Vendor's Licenses (65 @ $15.00 each)		975.00
Spreader Trucks (90 @ $3.00 each)		270.00
Tonnage Fees: 197102 tons @ $0.30 per ton)		59,130.60
Sample Deficiencies (7)		640.05

	$	63,218.85
Less University of Arkansas Portion	$	19,710.24
Net Amount to Plant Board		**$ 43,508.61**

2016-17 Liming Materials Analyses Reported

Official Limestone Samples Received: 119
Official Pellitized Limestone Samples Received: 17
Total Official Limestone Samples Received: 137

Analysis Performed	**# Tests**	**#Failed**
Calcium Carbonate Equivalent	136	0
10 Mesh Sieve Pass	136	2
Calcium	0	0
Magnesium	4	0
Moisture	136	0

Unofficial Limestone Samples: 1

AGRICULTURAL CONSULTANTS

(Calendar Year 2016-17)

Each person performing the functions of a licensed agricultural consultant, before advertising as such, must meet specific licensing requirements and obtain a license. Such functions being defined as providing advice or prescriptions for: the control or eradication of any insect or mite pest, any plant, pathogen (including nematodes), or any weed; and the use of fertilizer, lime and/or micro-nutrients based on soil classification and cropping systems and soil or plant tests. During 2016-17, there were 248 such consultants licensed which was lower than the previous year.

FERTILIZER

Each fertilizer brand and specialty product must be registered by the manufacturer or guarantor prior to sale or distribution. During the fiscal year, 283 manufacturers registered 3,683 brands and products. Sales totaled 1,014,624.21 tons, which was 162,811.8 less than the previous year. Sample collection and analysis was higher.

Monthly and annual statewide reports and an annual county consumption reports were published. The raw data is provided by manufacturers and registrants through the submission of monthly distribution summaries. The cost of the county report is supported by the University of Arkansas with a portion of the $2.40 per ton inspection fee collected for soil testing and related purposes. These reports are widely used by research, educational and industry groups to determine whether the soil testing laboratory's recommendations are being followed and to pinpoint the areas of greater fertilizer usage.

There was an increase in the number of bulk blending plants registered for 2016-17, and an increase in the number of liquid mix plants compared to the previous year. There were 170 dry bulk and 19 liquid mix plants in operation with 2 facilities licensed for bulk storage of anhydrous ammonia. There were 225 fertilizer facility licenses issued to those bulk storage and/or blending facilities located in the state. The mode of distribution is illustrated by the following data:

SUMMARY COMPARISON

	2016-17	%	2015-16	%	2014-15	%
Bagged	100,155.82	9.88	109,501.55	9.3	93,660.29	8.9
Dry Bulk	841,679.22	82.95	978,449.32	83.1	876,457.99	83.3
Fluids	72,789.17	7.17	89,485.14	7.6	82,258.93	7.8
Totals	1,014,624.21	100.00	1,177,436.01	100.0	1,052,377.22	100.0

There was a decrease in the percent of deficient fertilizer samples. Deficiencies amounting to $11,202.92 were assessed on 75 of 1314 samples or 5.7% of the total. The average penalty per ton was $52.83 as compared to $62.19 and $62.07 in the previous two years. Segregation continues to be a problem. This is reflected in dry blends being penalized approximately seven times the combined rate of other fertilizers. Under the Regulations, penalties are assessed when individual plant food is deficient by 10% or more of the stated guarantee or when the overall value of the fertilizer is more than 3% deficient.

2016-2017 SAMPLING AND DEFICIENCIES
(Only materials and top 10 blends listed individually)

KIND	OFFICIAL SAMPLES REPORTED	*PENALTY SAMPLES
Nitrogen Materials:		
Ammonium Nitrate	39	0
Nitrogen Solutions	1	0
Sulfate of Ammonia	46	0
Urea	180	0
Other Nitrogens	33	0
Phosphate Materials:		
Superphosphate - 45%+	47	0
Other Phosphates	1	0
Potash Materials:		
Muriate of Potash 60%	154	0
Other Potashes	16	0
Other Materials:		
DAP (18-46-0)	61	0
Micronutrients	1	0
Others	0	0
TOTAL MATERIALS	518	**0**

TOP 10 BLENDS:		
13-13-13	150	0
18-46-00	61	0
10-20-10	34	0
00-18-36	25	0
19-19-19	22	0
12-40-0-10S-1Zn	15	0
25-10-20	13	0
17-17-17	11	0
Other Blends	194	48
TOTAL TOP 10 BLENDS	**827**	**27**
GRAND TOTALS		
2016	**1043**	**71**
2015	**1314**	**75**
2014	**1214**	**127**

*NOTE - A fertilizer is subject to penalty when its total value is 3% or more below the guarantee, or when nitrogen, available phosphoric acid, potash or other guaranteed constituent(s) is 10% or more deficient. The unit values for the primary plant foods are: Nitrogen - $8.00; Available Phosphoric Acid - $10.00; and Potash - $6.00.

Summary Data for 2016-17 Fertilizer Samples
Deficiencies and Penalty Assessments for Current and Previous Years

Calendar Yr	Samples	Penalties	% Penalties	Total Value Penalties
2016	1043	71	6.8	$13,517.18
2015	1314	75	5.7	$11,202.92
2014	1214	127	10.5	$40,164.95

Breakdown of 2016-17 Penalty Samples by Deficiency

Deficiency	**Number of Samples**
Triple Value (exceeding 5% overall)	15
Actual Value:	
3-5% overall (N-P-K)	7
Nitrogen	20
Available Phosphoric Acid	10
Potash	23
Minor Elements (sulfur, iron, boron, etc.)	21
TOTALS	**96**

2016-17 Penalty Data - By Types of Fertilizers

	Samples Taken	NUMBER OF PENALTIES Triple	Actual Value	Total	% of Type Deficient	AVERAGE PENALTIES Per Ton 2014	Per Ton 2015	Per Ton 2016
Granular (pelletized)	21	-	1	1	4.7	-	-	$33.35
Dry Blends	587	15	55	70	11.9	-	-	$143.49
Liquids	13	-	-	-	-	-	-	-
Materials	422	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-
2016 (Total all samples)	1043	15	56	71	6.8	-	-	$184.25
2015	1314	18	57	75	5.7	-	$52.83	-
2014	1214	32	95	127	10.5	$62.19	-	-

Fertilizer Brands Registered	
2016-17	3,685
2015-16	4,685
2014-15	4,526

2016-2017 SOIL AMENDMENTS

Each product must be registered by the manufacturer or guarantor prior to sale or distribution in the State. The Act requires that the active ingredients be listed as well as proof of usefulness and/or value. During the fiscal year, forty-seven (47) manufacturers registered one-hundred-and-ninety-two (192) products that were approved for sale, which was more than the previous year.

2016 Calendar Year Fertilizer Analyses Reported - Chemical Laboratory			
Nitrogen	713	Chlorine	27
Phosphate	535	Copper	2
Potash	605	Iron	27
Moisture	967	Magnesium	7
Boron	23	Manganese	7
Sulfur	192	Zinc	69
Calcium	1	Pesticide	17
		TOTAL	***3192***

Additional Fertilizer Information

Blends.....587
Granular.....21
Liquids.....13
Materials.....5422
Other.....0

2016 CALENDAR YEAR UNOFFICIAL FERTILIZER SAMPLES

Unofficial Samples - The laws administered provide only for the analyses of official samples, i.e., those taken by Plant Board inspectors in accordance with established methods. Farmers, ranchers and other agricultural workers occasionally submit samples. As a matter of policy, these are checked as a service whenever this does not interfere with official work. Others are collected from opened packages by the inspection force. 3 Samples of fertilizer were handled in this manner.

Unofficial Samples Reported	
Fertilizer	4

PUBLIC GRAIN WAREHOUSE AND CATFISH PROCESSOR SECTION

Michael L. Churchwell, Agri Program Manager
Holly Benbrook, Program/Field Audit Specialist
Kortney White, Program/Field Audit Specialist
Dana Jones, Administrative Specialist III

July 1, 2016 - June 30, 2017

The Public Grain Warehouse and Catfish Processor Section is the overseer of the grain and catfish industries in the state of Arkansas. Overall this past year was a good year for our industry and our section. The Grain Dealer Law just completed its second year, the Public Grain Warehouse Law is well established and the Catfish Processor Fair Practices Act only has a marginal impact in our state at this time due to the lack of fish being grown and processed in our state at this time.

The Public Grain Warehouse and Catfish Processor Section perform four primary duties each year. Our first is to license and audit all state licensed public grain warehouses under Act 83 of 1979. This law was enacted by Legislature in 1979 and the Grain Warehouse Section was added to the Arkansas State Plant Board shortly thereafter. Then in 1987 Act 365 (the Catfish Processor Fair Practices Act) was enacted by legislature and we became the Public Grain Warehouse and Catfish Processor Section. Our duties with the Catfish Processor Fair Practices Act enable our section to register and audit all businesses that engage in the purchase and processing of pond raised catfish in our state. In 1995 we began auditing tonnage fees on seed, feed, fertilizer, and lime. This year Act 601 (The Grain Dealer Law) was enacted and we began licensing Grain Dealers in May 2015.

The Arkansas Public Grain Warehouse Law charges the State Plant Board, Grain Warehouse Section with the responsibility of licensing, bonding and auditing those grain warehouses that are not licensed with the federal government under the United States Warehouse Act. The principal objective is to protect depositors (owners) who want to store their grain commercially. This protection is given by insuring that warehouses are licensed and bonded as well as audited on a regularly unannounced basis. The Grain Dealer Law goes a step beyond the Grain Warehouse Law by licensing, bonding and auditing Grain Dealers who are buying grain in our state.

Although the Grain Warehouse program is basically a regulatory program, the enactment of Act 342 of 1983 (The Receivership Act) makes the staff a service organization by authorizing the Grain Warehouse Section to petition State and Federal courts for the appointment of the Plant Board Director as a receiver for the purpose of presenting a plan on the disposition of stored grain and the warehouseman's bond when grain warehouse failures occur. In addition, Act 401 of 1981 (Grain Ownership) provides that ownership of grain and

title to grain, in the possession of the public grain warehouseman, does not pass to such warehouseman, unless; the owner of the grain has, (by written document signed by the owner of grain or by being purchased by warehouseman), transferred title to the warehousemen.

During the licensing period, the office staff reviewed all records on file to assure everything was up-to-date. The particular areas of concern were on premise storage capacity, bonding requirements, insurance on stored grain and financial statements. Forty-five (45) licenses were issued covering approximately seventy-four (74) locations.

PROBLEM AREAS

As of June 30, 2017 the crops that are planted are looking very good, but the problem that has occurred this spring planting season has been the flooding across the state and the question is how much of the flooded crop land will able to be planted. As July is approaching each farmer must ask themselves whether or not there is enough time grow a good crop on their crop land that is just now drying enough to plant.

ARKANSAS GRAIN DEALERS ACT
(ACT 601 of 2015)

The Arkansas Grain Dealers Act was enacted to help protect the Arkansas farmers from unscrupulous business practices of some Grain Dealers in Arkansas. The failure of Turner Grain of Brinkley, Arkansas, a grain dealer in 2014, helped push this law into existence.

In our second year of the Grain Dealer Law most things have went well. We are still searching for new grain dealers and auditing the ones we have currently licensed. We also had one Grain Dealer failure this past year. Grand Prairie Agri-Marketing, LLC of Des Arc, Arkansas owned by Mr. Chris Taylor defaulted on payments to one farmer and subsequently his license was suspended and later revoked by our broad for non-payment to the farmer. He was levied $2,400 in fines and now is unable to work as grain dealer at this time. His surety bond was given to the farmer who was owed. This helped the farmer recoup approximately 45 percent of his losses.

This proves that our farmers still need to know who they are dealing with. Integrity needs to be found in the people they are handing over so much of their livelihood to.

ARKANSAS CATFISH PROCESSORS FAIR PRACTICES LAW
ACT 365 OF 1987
(As amended by Act 53 of 1989 and Act 764 of 1991)

This law was designed to protect catfish producers from unfair payment practices by processors. All catfish processors must be registered with the Grain Warehouse and Catfish Processor Section before they can operate within the state. Certain conditions written in the law determine whether or not processors are required to post security with the State Plant Board. In addition, the law requires processors not to discount for water and to weigh trash fish separately. Certain types of scales must also be used in the weighing of catfish if the processor processes more than 17,500 pounds per week.

PROBLEM AREAS

We now have two registered catfish processors in our state and these two are very small businesses. The catfish processor industry in our state is almost is at an all-time low.

FUTURE OUTLOOK

At the close of fiscal 16 our section was in a state of change. We now are fully staffed and training on new employees has gone well. By the end of fiscal 17 we hope to have everybody trained and cross trained on all types of audits that we oversee.

The staff is always ready to help with problems that occur in the grain warehousing, grain dealer and aquaculture industries. As usual; routine, group and follow-up audits will continue.

Our staff continues to help others by conducting seed, feed, fertilizer and lime tonnage audits. I hope we can be more active in these audits this year.

As of June 30, 2017, our staff consists of myself (Mike Churchwell) with 32 years, Dana Jones with 17 years, Kortney White with 1 year and Holly Benbrook with 8 months of experience. We hope that we can pass knowledge and skills on to our new employees and that our clients and co-workers feel that we are both fair and consistent in our duties for the Arkansas State Plant Board.

GENERAL GRAIN WAREHOUSE INFORMATION

CATEGORY	COMPARATIVE FIGURES	
	2015-2016	2016-2017
Number of Audits Performed	73	90
Number of Suspended License	0	1
Number of Grain Shortages Found	0	0
Violations Found and Corrected	6	35
Total Licensed Capacity (bushels) *	47,110,500	47,352,500
Number of Bins	1,645	1,523
Number of Storage Buildings	149	107
Number of Licenses Issued	47	45
Increased Storage Capacity	7	4
Total Amount of Securities Posted	$8,221,893	$8,135,053
Total Demands on Securities	0	0
Total Amount Paid Out	0	0
Number of Bond Cancellations	0	0
Increased Securities due to Net Worth Deficiencies	2	2
Total Insurance Certificates Posted (Est.)	$749,713,262	$482,614,336
Total Insurance Claims	None Reported	None Reported
Number of Insurance Cancellations	0	0
Number of Warehouse Receipts Issued	0	100
Indemnity Posted for Lost Warehouse Receipt	0	0

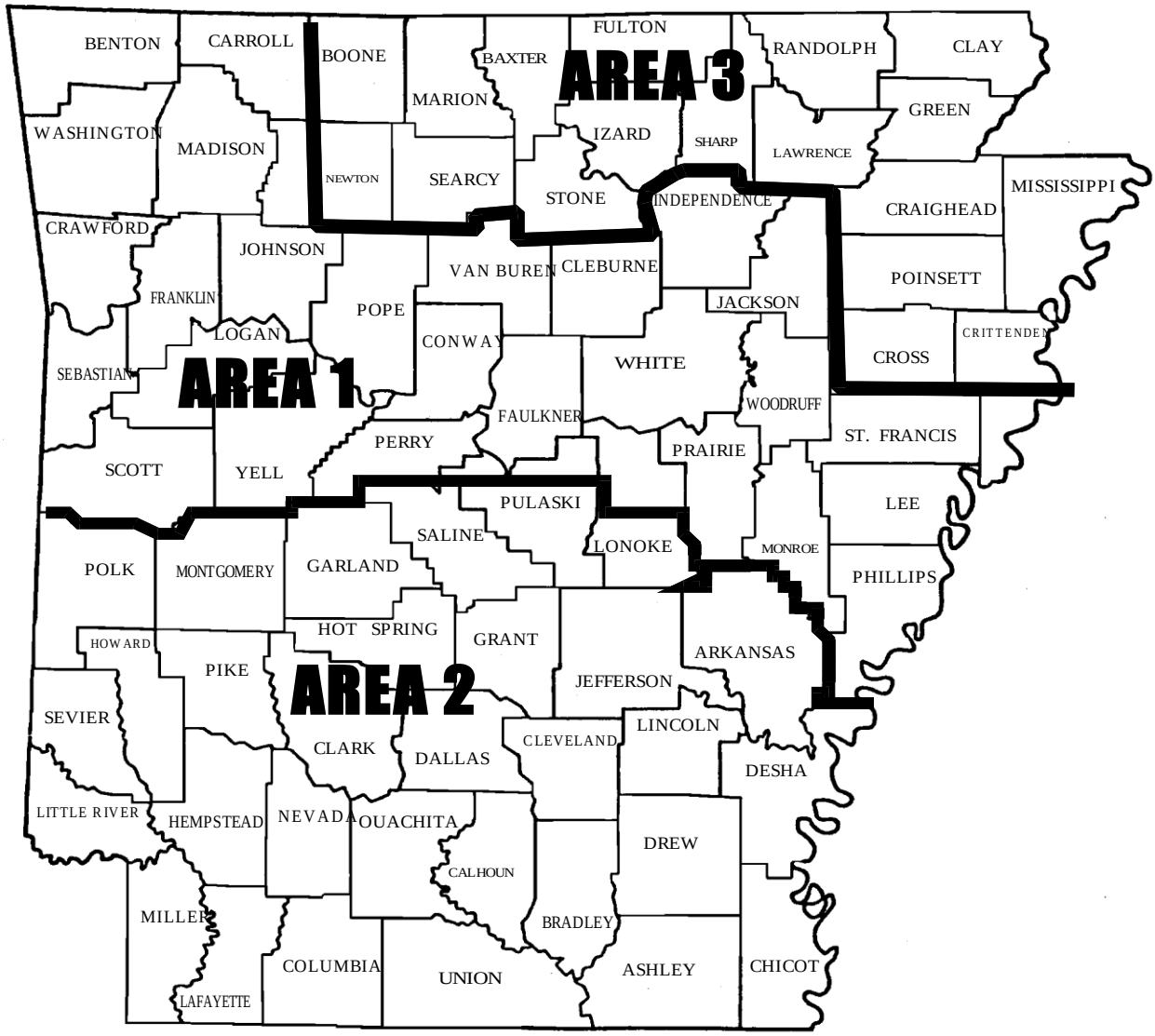
* This indicates all licensed facilities on-premises storage capacity. It does not indicate the total amount of grain handled by the facility. Usually a licensed facility will handle four to five times its storage capacity.

GENERAL GRAIN DEALER INFORMATION

CATEGORY	COMPARATIVE FIGURES	
	2015-2016	2016-2017
Number of Audits Performed	0	5
Number of Suspended License	0	1
Number of Revoked License	0	1
Violations Found and Corrected	0	4
Total Purchases	$346,034,384.97	$532,875,352
Number of Licenses Issued	18	22
Total Amount of Securities Posted	$ 2,800,000.00	$4,300,000
Total Demands on Securities	0	1
Total Amount Paid Out	0	$50,000
Number of Bond Cancellations	0	1
Increased Securities due to Net Worth Deficiencies	0	0

GENERAL CATFISH PROCESSOR INFORMATION

CATEGORY	COMPARATIVE FIGURES	
	2015-2016	2016-2017
Number of Processors Registered	3	2
Number of Audits Performed	4	0
Violations Found and Corrected	0	0
Number of Pounds Processed	904,869.00	0
Total Amount of Security Posted	$0.00	0
Number of Demands Made on Securities	0	0
Total Amount Paid Out	0	0



AREAS OF FIELD AUDITOR STAFF

Each area auditor will assist other auditors on the audits of the larger facilities.

PESTICIDE DIVISION

Susie Nichols - Director
Leigh Gibson, Dana McGinty, Brandi Reynolds, & Jason Robertson - Asst. Directors
Annelie Browder – Agri Specialist

(Calendar Year – 2016)

The responsibilities of this Division include the administration and enforcement of the Pesticide Control Act and Regulations, Pesticide Use and Application Act and Regulations, Regulations on Pesticide Classification, and special initiatives negotiated with EPA dealing with Worker Protection, Endangered Species, Ground Water Protection, and Container and Containment.

The major activities involve: registration approval after label review of various products covered; issuance of permits and licenses to manufacturers, dealers, and custom, commercial, non-commercial and private applicators after qualification; subjecting pesticides to continuous inspection and sampling in the field and chemical analysis in the laboratory to determine label compliance; inspecting pesticide producing establishments to insure compliance with the Federal Insecticide Fungicide & Rodenticide Act (FIFRA); investigating pesticide complaints; applying legal remedies such as civil penalty assessment to effect compliance when violations are found; collection of fees and record inspections to determine proper payment; compiling statistical data for the use by industry and educational agencies; providing compliance assistance and enforcement of Worker Protection standards; implementing State Ground Water Protection Plan; and developing a State Endangered Species plan.

New developments in inspection techniques require periodic evaluation by the division staff. During the year staff members attended and participated in several meetings and seminars aimed at: program development and evaluation; continuing education; applicator certification; and cooperation with the various agricultural associations.

Details of enforcement activities and related information in each major area follow.

PESTICIDES

Each product must be registered by the manufacturer or guarantor prior to sale or distribution. This involves label review to insure that the buyer or user is informed of the purpose of the product, the kinds and amounts of active ingredients, and that there are adequate directions for use and necessary warnings and precautions for the protection of the public. Most uses are those which have been approved federally for interstate shipment. Others are "special local needs" registrations which are granted for State use under Section 24(c) of the Amended FIFRA. Some pesticide uses pose unique hazards due to crop or use

pattern and are therefore prohibited or restricted. As an example: The use of 2,4-D is governed by detailed regulations.

All agencies of government that are involved with pesticide application as well as industry related groups have been involved in an educational effort designed to assure that pesticide users are knowledgeable regarding federal and state pesticide laws and regulations. The Cooperative Extension Service, in its role as pesticide educators, trained several hundred additional private applicators.

During 2016, 1,314 manufacturers registered 13,670 products as compared to 1,322 and 13,218 the previous year. Under the enforcement grant a total of 143 formulation samples were collected and 206 analyses were reported, with 0.01% being found deficient.

Additional activities included the issuance of 2 Emergency Exemptions from registration and 3 Special Local Needs registrations as allowed under Section 18 and Section 24(c), respectively, of the amended FIFRA. The Emergency Exemptions were Transform WG Insecticide (sulfoxaflor) for control of sugarcane aphid in sorghum, Transform WG (sulfoxaflor) for control of tarnished plant bug in cotton, and Sivanto Prime (flupyradifurone) for control of sugarcane aphid in sweet sorghum. Special Local Needs registrations were to gain additional uses or change use patterns for products currently registered by EPA. The Plant Board conducts routine use monitoring and tracks the amount of pesticides use under Emergency Exemptions.

2016 CHEMICAL LAB PESTICIDE REPORT

Formulation Pesticide Samples

Pesticide Class	Number of Samples	Number of Ingredients	Number of Deficiencies	Percent Deficient
Herbicides	46	55	0	0
Fungicides	3	5	0	0
Insecticides	26	36	2	0.08%
Rodenticides	11	12	0	0
TOTAL	**86**	**108**	**2**	**0.02**

Total Regular Pesticide Samples Received

Year	Samples Received	Analysis Reported	Ingredients Deficient *
2016	143	206	0.01%
2015	118	171	0.0%
2014	194	275	0.4%
2013	98	136	1.5%
2012	157	199	5.5%

***** Deficient to the extent a Stop-Sale was issued

Additional Pesticide Samples

	Samples	Analyses Reported
Use Dilution & Surfactants (Agricultural)	45	86
Pesticide Enforcement Residue Samples	36	77
Pest Control Samples (Dilutions & Formulations)	21	21
Pest Control (Soil, wipe, vegetation, fire ant smps)	44	88
Seed Treatment Samples	17	57
University of Arkansas Dicamba Study	0	0
TOTAL	**163**	**329**

2016 Groundwater Monitoring

Wells Tested	65
Wells Retested	8
Wells Where Pesticides Found	7
Wells Access Denied	0

PESTICIDE USE AND APPLICATION ACT

Commercial applicators must secure licenses and a decal for each unit of spraying equipment, such licenses and decals being issued upon submission of adequate proof of financial responsibility. Out-of-state operators must also designate a resident agent for service of process. The number of operators licensed in 2016 was less than 2015. Air strips were visited numerous times to examine equipment for leaks and proper spray system maintenance. Operators of ground equipment must be either a Licensed Certified Applicator or a Commercial Applicator Technician.

	2016	2015	2014
Commercial Licenses Issued	391	406	419
Decals Issued for			
Application Equipment: Aerial	337	367	360
Ground	849	921	887
	1,186	1,289	1,247
Pilot & Ground Operator Licenses	989	1,027	1,047
Category Authorizations	1,453	1,336	1,348
Commercial Applicator Technician	136	149	141

There were 20,305 private applicators and 550 non-commercial applicators licensed for the use and/or supervision of the use of restricted use pesticides. Approximately 3,299 private applicators were certified/re-certified. Also, the Regulations require the licensing of dealers who sell restricted use and Class E or F pesticides in containers of more than one quart. There were 454 such licenses issued.

2016

REQUEST FOR INVESTIGATION

Total Number Of Requests		**274**
Discontinued		77
No Violation Found		87
Violation Found		110
Incomplete Case Files	0	

Top 3 Pesticides Found By The Inspectors:

2,4-D

Paraquat

Dicamba

Previous 5 Years Total:	2015	237
	2014	181
	2013	176
	2012	180
	2011	195

REGULATIONS ON PESTICIDE CLASSIFICATION

All pesticides registered for sale in Arkansas are assigned to a Class. Each Class carries with it one or more restrictions that must be complied with by the user, applicator, or dealer. The classification system ranges from Class A which presumably all pesticides are registered as initially, until a problem develops. The only use-restrictions assigned to Class A products are those on the product label. If problems develop with a product, the Plant Board, after a public hearing, can move a product from the Class A designation to another designation (B, C, D, E or F) which has more restrictions. Each classification carries with it all the restriction(s) that are specified for that class plus all that came before it. That is, if a product is classified as Class D it will be bound to the restriction(s) specified for Class D and those specified for Classes A, B and C.

This allows the Plant Board to a have a systematic approach to placing use-restrictions on products when needed as opposed to creating a unique set of restrictions for each product as needed. This has also cut down on the confusion that existed as to what regulations apply to what products.

The distribution of Class E and F products requires a Restricted Use Pesticide Dealer's License. Dealer records of sales or distributions must be retained for two years. Custom Applicator permits are also required of custom-applicators, such being issued after qualification of the operator in charge (and pilots for aerial application) through testing and proving financial responsibility. All equipment used to apply Class E and F products must be inspected annually. Distance requirements are also required to susceptible crops.

	2016	2015	2014
Custom-Applicator Permits Issued			
Aerial	119	119	126
Ground	58	57	66
Operators-In-Charge Authorized	200	199	204
Pilots Authorized	232	227	233
Decals Issued	400	388	396
Equipment Inspections	126	114	128

ARKANSAS/EPA SPECIAL INITIATIVES
CALENDAR YEAR 2016

Ground Water - Ground water is one of Arkansas' major resources and agricultural chemical practices should not pollute ground water. Arkansas has developed and revised its Generic Pesticide Management Plan (PMP) to help prevent contamination of its ground waters.

The Arkansas State Plant Board and the Arkansas Department of Environmental Quality (ADEQ) will continue to work with registrants, EPA and other agencies on preventing contamination of ground water in Arkansas. The state and federal agencies will be looking for ways to determine the sources of contamination to ground water in the state of Arkansas. The Plant Board has developed a list of best management practices for agricultural pesticide use to help the regulated community better understand how to avoid polluting ground water. All well sample results are posted on the Plant Board web site and are available for public viewing at http://www.aad.arkansas.gov/ground-water-monitoring-program

The State Plant Board collected sixty-eight (68) ground water samples from sixty-five (65) wells in nineteen (19) counties in Arkansas. Access was denied to Plant Board inspectors on five (5) occasions in three (3) counties. Samples were collected in the following counties: eleven (11) in Desha County, two (2) in Greene County, one (1) in Hempstead County, six (6) Howard County, nine (9) in Jackson County, three (3) in Lafayette County, four (4) in Lawrence County, four (4) in Lincoln County, six (6) in Mississippi County, twelve (12) in St. Francis County and nine (9) in Woodruff County. Pesticides were detected in seven (7) wells sampled during 2016. On July10, 2016 Desha County well #79, an irrigation well, tested positive for 1.83µg/L Metolachlor in a running water sample. A resample of this well was conducted on August 17, 2016 and no pesticide was detected in the sample. On August 6, 2016 Jackson County well #11, an irrigation well, tested positive for 2.21µg/L Bentazon in the running water sample. A resample of this well was requested. On September 3, 2016 Lafayette County well #52, an irrigation well, tested positive for 0.86µg/L Bentazon in the pre purge water sample and 0.75µg/L Bentazon in the post purge water sample. A resample of this well was requested. On June 25, 2016 St. Francis County well #13 an irrigation well tested positive for 0.32µg/L Bentazon and 0.45µg/L Quinclorac in the running well sample. A resample of this well was conducted on August 13, 2016 and no pesticide detections were made. On June 25, 2016 St. Francis County well #06 an irrigation well tested positive for 0.32µg/L Bentazon. On June 25, 2016 St. Francis County well #07 an irrigation well tested positive for 1.06µg/L Bentazon in the running well sample.

Worker Protection Standard - The Worker Protection Standard (WPS) is intended to reduce the risk of pesticide poisoning and injuries to agricultural workers by reducing exposure to pesticides and pesticide residues and providing training for people working around, mixing, loading, applying or transporting pesticides. The WPS covers workers on farms, forests, nurseries and greenhouses. The Arkansas State Plant Board provided EPA

produced educational materials including water bottles and bandannas in Spanish language to help educate Limited English Proficient Hispanic workers about the dangers of pesticide residues on clothing and personal protective equipment, and reminding them that work clothes should be washed separately from the family clothing to avoid cross contamination. The information also reminded the workers to wash their hands before eating, smoking, or using the rest room and that they may transfer pesticides to their families if they are not cautious.

During the 2016 calendar year the Arkansas State Plant Board conducted sixty-four (64) total Worker Protection Inspections at agricultural establishments including commercial application firms, farms, nurseries and greenhouses. Of the sixty-four inspections conducted, sixty-one (61) were considered Tier I worker protection inspections and three (3) were considered Tier II inspections. Twenty-three (23) inspections were conducted at Commercial Applicator Firms, four (4) were conducted at Nursery/Greenhouse operations, and thirty-seven (37) were conducted at Farms. Three violations of the worker protection standard relating to training and use of personal protective equipment were found.

Endangered Species - The Endangered Species Act is intended to protect and promote the recovery of animals and plants that are in danger of becoming extinct due to the activities of people. Under the Act, EPA must ensure that the use of pesticides it registers will not result in harm to the species listed as endangered and threatened by the U.S. Fish and Wildlife Service, or the habitat critical to those species' survival. To implement the Endangered Species Protection Program, labels of certain pesticides will direct users to bulletins with information on the endangered species habitat. This program will protect endangered and threatened species from harm due to pesticide use.

The Arkansas State Plant Board provided outreach to applicators, growers, and other groups that had concerns about the endangered species program. The Arkansas State Plant Board maintained its web page which includes a link to the current EPA bulletins live Endangered Species page. Zero (O) bulletins were in effect for Arkansas in 2016. The Arkansas State Plant Board would prefer this program remain voluntary and not a regulatory program.

The Arkansas State Plant Board has reviewed all section 18's and 24C's issued and checked labels on Section 18's to insure that endangered species habitats are not harmed or destroyed by pesticide use.

DIVISION OF PLANT INDUSTRY

Scott Bray, Director

All work dealing with plants, plant materials, insects, and plant diseases is handled by the Plant Industry Division. The Division's work is divided into four sections:

1. Plant Inspection and Quarantine

2. Commercial Pest Control

3. Apiary/Pink Bollworm
   A. Pink Bollworm
   B. Boll Weevil Eradication
   C. Sweet Potato Weevil
   D. Bait and Ornamental Fish Certification

4. Federal-State Fresh Fruit and Vegetable Inspection Section

A report of the work done by each section follows:

Plant Inspection and Quarantine Section

Paul Shell, Head

Nursery

Summary of Nursery Inspections 2016-2017				
Kind of Business	**Number Licensed**	**No. of Inspections**	**Certificate Tags Issued**	**Stop-Sales Issued**
Landscape Contractor	233	178	80	0
Nurseryman	105	107	4,688	2
Nursery Dealer	644	640	591	9
Totals	**982**	**925**	**5,359**	**11**

Nurseryman. A nurseryman grows a major part of the stock he sells. Nurserymen in Arkansas grow primarily ornamental plants, trees, brambles and other fruit plants, and sod.

Nursery Dealer. A nursery dealer does not grow his stock but buys it from nurserymen for resale. Emphasis has been continued toward better correlating the size of heelyards to the proper fees required. A growing number of dealers maintain display areas and heelyards greater than 500 square feet.

Nursery Landscape Contractors. Those nursery dealers involved in the installation of ornamental or horticultural plants, or offering for sale, or selling nursery stock in Arkansas, through the planting of nursery stock for compensation, are considered to be nursery landscape contractors. If not already holding a valid Arkansas Nurseryman or Nursery Dealers License, Nursery Landscape Contractors are required to obtain a valid nursery landscape contractor license issued by the State Plant Board to perform such services.

Stop-Sales. These are issued when plants are dead, dying, showing disease or insect damage which cannot be corrected. In some cases, the business will destroy the plants without a stop-sale being issued. Stop-sales issued on trees and shrubs this year included dead plants, foliar diseases, root diseases, and crepe myrtle bark scale insects.

Vegetable Plants

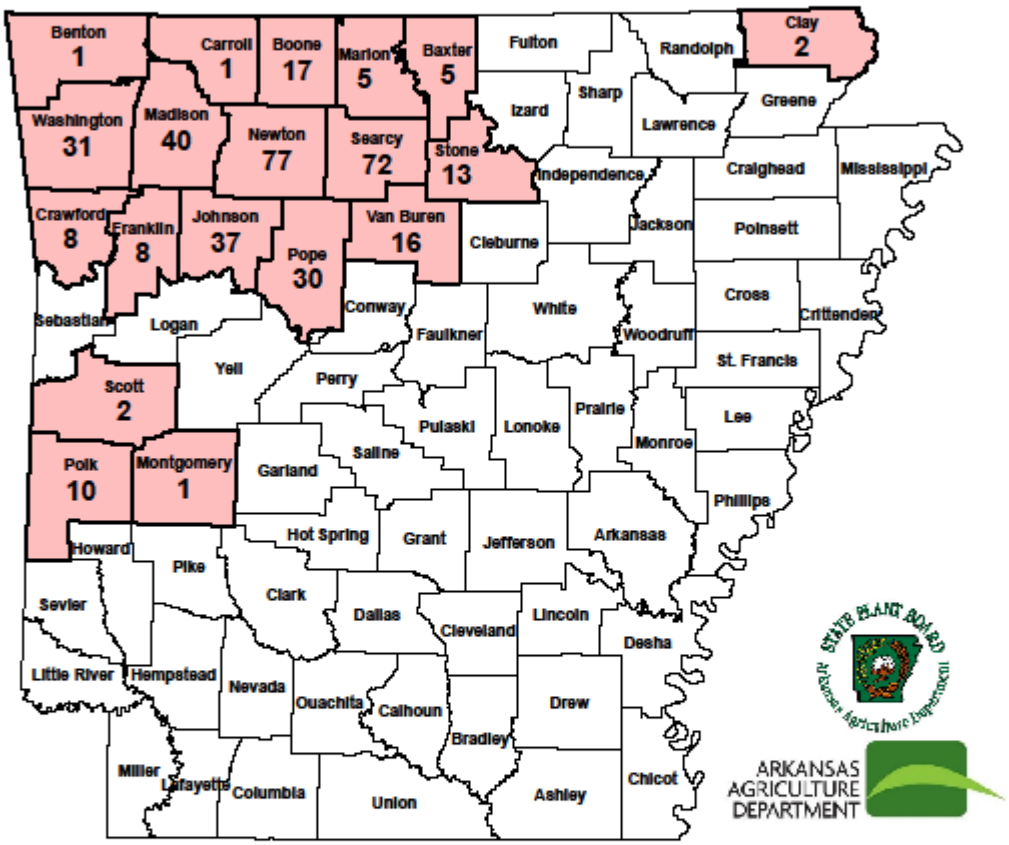
Cabbage, Tomato, Onion and Pepper Inspections. Arkansas Plant Permit Numbers were issued to 2 growers of assorted vegetable plants with 3 inspections performed.

Out-of-State Cabbage, Tomato, Pepper and Onion Plant Shippers. Arkansas Plant Permit Numbers were issued to 1 shipper.

Ginseng

Arkansas is one of 18 states that has and maintains an approved program for the harvest and export of wild ginseng set forth by the U.S. Scientific Authority and Management Authority in Washington, D.C. For the 2016 harvest season, certificates were issued on 46 shipments of wild ginseng totaling 387 pounds, which is less than the average annual harvest. The general distribution of ginseng in Arkansas is believed to be stable. In Arkansas, Ginseng is found only in moist shaded locations in the Ozark and Ouachita Mountains and on Crowley's Ridge. This plant is very sensitive to seasonal conditions such as rain and temperature. During dry years, it often goes dormant before the harvest season begins. Also, wild digging is often influenced by the market demand in China, Hong Kong, and South Korea, as well as the local economy. The harvest was much more intensive in Johnson, Madison, Newton, and Searcy Counties where ginseng is known to be most abundant. There is also one Ginseng Nursery that is licensed to sell ginseng plants and ginseng seeds. The following map shows the number of pounds of ginseng collected in each county.

Arkansas State Plant Board
Ginseng Report 2016



Total collected: 387 pounds

Quantities indicate the number of pounds (dry weight) of wild ginseng collected per county for 2016

Federal Phytosanitary Certificates

In 1976, the State Plant Board entered a cooperative agreement with APHIS-USDA whereby properly qualified and trained Plant Board personnel can issue Federal Phytosanitary Certificates on plant material being shipped to other countries. This document attests to the freedom from pests, weeds, and diseases of concern for the importing country. Scott Bray - Plant Industry Division Director, Mark Stoll -Apiary Manager, and Paul Shell - Plant Inspection and Quarantine Manager are qualified to issue these documents.

There were 1,199 certificates issued this year. The top three primary items certified are as follows: 492 phytos issued on 625,667.758 pounds milled rice, 314 phytos on 6,497,813 board feet and 31,878 railroad ties of red oak lumber, and 110 on 140,923 pounds soybean seeds. Remaining items certified include: rice flour, rice seed, rice related seeds, soybean grain, soybean seed, cotton seed, cottonseed grain, cotton fiber, peony roots, filbert trees, pine branches, muscadine grape plants, and honeyberry plants. Phytos were also issued for the following types of lumber and logs: ash, cedar, elm, hickory, locust, sweet gum, pine, bald cypress, sugar maple, persimmon, yellow poplar, sycamore white oak, and black walnut. These certificates covered shipments to the following 54 countries: Antigua and Barbuda, Argentina, Australia, Austria, Barbados, Belgium, Brazil, Canada, China, Colombia, Costa Rica, Denmark, Djibouti, Dominican Republic, Egypt, El Salvador, Germany, Greece, Guatemala, Guinea-Bissau, Haiti, Honduras, Hong Kong, India, Indonesia, Italy, Ivory Coast, Jamaica, Japan, Lebanon, Liberia, Malaysia, Mexico, Netherlands, Pakistan, Panama, Peru, Portugal, Saudi Arabia, Senegal, Singapore, South Africa, South Korea, Spain, Switzerland, Taiwan, Trinidad and Tobago, Turkey, Ukraine, United Arab Emirates, United Kingdom, Uruguay, Vietnam, and Yemen.

State Phytosanitary Certificates

This year, there were 86 State Phytosanitary certificates issued. The top 3 primary items shipped are as follows: 48 certificates on 5,269,368 pounds rice, 25 on 1,213 pounds soybean seed, and 6 on 2,101 pounds rice seed. Other commodities include the following: blackberry plants, grape plants, and cotton bolls. These certificates covered shipments to the following 7 states and territories: California, Florida, Idaho, Mississippi, Oregon, Puerto Rico, and Texas.

Imported Plants and Seeds

Certain plants imported into Arkansas from other countries are required to remain under post-entry quarantine for two years or longer. During the quarantine period the imported plants are kept separate from other plants of like kind and are inspected periodically for insects and diseases, which may not have been apparent at the time of importation. There were no post-entry inspections this year.

Homeowner Assistance

An average of 4 - 5 calls every working day, year round, were received from property owners with insect or plant disease problems and identification in their lawns, trees, and shrubs. Similar calls were also received from nurserymen and vegetable plant growers. Three-fourths of such calls could be diagnosed and control recommendations given by telephone. The remaining calls required a visit to the premises. In addition to this, an average of 5 insect and disease specimens per month were brought or mailed to the office for identification and recommendations. Those which could not be identified by the staff were forwarded to appropriate departments at the University of Arkansas at Fayetteville. Other than servicing nurserymen and plant growers, this is primarily a function of the Cooperative Extension Service. The Plant Board has provided this service so long and so well, however, that it has come to be expected by the citizens of the state and it is good public relations. It also provides a means of keeping up with any new insects or diseases, which may be introduced into the State.

Cooperative State-Federal Programs

The Plant Board cooperates in programs with Federal agencies such as the Animal and Plant Health Inspection Service of USDA, the US Forest Service, US Fish and Wildlife Service, US Food and Drug Administration, and the US Army Corps of Engineers. There is also cooperation with other State agencies and institutions such as the University of Arkansas, the Cooperative Extension Service, and the Arkansas Forestry Commission, in addition to projects performed by the State Plant Board.

Forest Pest Outreach

This project was initiated on May 1, 2016. Three publications in Arkansas Living magazine were created in May and published in July, and September, and November. The advertisements were focused on educating the public on invasive insects, the threat of moving firewood poses for invasive pests, encourage the "buy it where you burn it" campaign, as well as encouraging the public to report potential sightings of targeted invasives of concern. This magazine currently has a reach of 950,000 plus additional online readers. Full page publications were placed into the Arkansas Game and Fish Hunting Guidebook on June 1 and in the Arkansas Game and Fish Fishing Guidebook on November 1. Both of these magazines have a press run at over 500,000 and are one of the largest press runs of any publication in Arkansas. This was our fourth publication into the hunting guide and as a result of this; we have seen a 20 fold increase in the number of calls for suspect invasive insects. A full car wrap publication was designed and created in April. The car wrap acts as a moving bill board with images of invasive pests of concern in Arkansas with contact information for the public to report any suspect finds. The car wrap design template and photos are currently being used by PPQ Outreach Coordinator Camille Morris as an example for other states to publicize invasive pests.

Three outreach events were held at Har-ber High School January 23rd, Arkansas Green Industry Association/ Arkansas Turfgrass Association January 13th, and Cabela's Spring Great Outdoor Days and Turkey Classic event on March 11th.

Weed Programs

Itchgrass (Rottboellia exaltata). This weed has been problematic in the past, but is considered eradicated because no plants have been found since 2000.

Purple Loosestrife. Since all Lythrum species were designated noxious weeds in 1990, the Plant Board has continued eradication efforts on 4 areas known to have purple loosestrife. The site in Randolf County has had no plants for the past 10 summers. The 1/8 acre in Horseshoe Bend and the ½ acre patch in Southern Stone County are also currently being monitored, with no new plants found. The location at Mammoth Springs State Park has had no plants observed the past 9 years, and is being monitored and treated by the park staff as needed. The site at Beaverfork Lake near Conway has shown no new plants for 4 years. We will continue monitoring these sites into the future.

Water Hyacinth. This is a floating aquatic plant which has been popular with water gardeners. In April 2006 this plant was placed on the Prohibited Plant List by the Plant Board due to the highly invasive nature of the plant when it grows in wetlands. There are several populations of this plant along oxbow lakes and backwaters of the Lower Arkansas River. The plant is also known to grow in Lake Dardanelle, the lower portions of the Ouachita River, and has been spotted in the Little Maumelle River west of Little Rock. The Little Maumelle infestation has been reduced over the past 5 years due to previous cold winters, but some isolated patches remain.

Insect and Mollusk Programs

Brown Garden Snail: Each load of plant material arriving from quarantined areas of California and Washington must be accompanied by an official snail-free certificate or a quarantine treatment certificate. This year, 54 loads of nursery stock from California were inspected at various points in the state. No snails were found.

Christmas Tree Inspections: The Plant Board also inspected trees grown out of the state of Arkansas at Christmas tree dealers across the state. No pine shoot beetles were found or Gypsy Moth Egg masses were found (for more information on Gypsy Moth see the report on the following page).

Oak Commodity Survey

This survey was conducted for the early detection of five invasive insects of oak forests. The insects surveyed for included: oak splendor beetle (*Agilus biguttatus*), oak ambrosia beetle (*Platypus quercivorus*), rosey gypsy moth (*Lymantria Mathura*), green oak tortrix (*Tortrix viridana*), and oak processionary moth (*Thaumetopoea processionea*). In 2016, thirty sites in 11 counties were selected in the Northwest and central Arkansas for this survey. Areas surveyed included: a.) known solid wood packing material destinations; b.) AR and MS river barge terminals; c.) selected city industrial parks; d.) oak lumber mills and e.) parks/campgrounds and tourist attractions in the Ozark and Ouachita mountains. Trapping began in April and concluded in October. There were no positive finds of sampled pest insects.

In April 2017, thirty sites in 11 counties were selected in the Northwest and central Arkansas for this survey. The survey will conclude in October 2017. One part-time employee was used to conduct the survey and traps were screened monthly. All traps were inspected/screened by the SSC and suspect, if any, were sent to APHIS/PPQ for confirmation.

Emerald Ash Borer (EAB): This small exotic beetle from China has been destroying ash trees throughout the Upper Midwest and the Great Lakes Region. There is a quarantine against movement of ash trees and logs from several states, but new infestations are appearing in new areas. In 2008, several infested trees were found in Missouri near the Arkansas border, most likely from firewood brought into a campsite.

The Emerald Ash Borer Survey in 2014 detected the presence of EAB in the south central part of the state. As a result to the positive findings, a quarantine was enacted that encompassed 25 counties; 6 confirmed counties and 19 counties surrounding them. The Emerald Ash Borer Survey in 2015 detected EAB in four new counties; Bradley, Calhoun, Saline, and Union. Because these counties were included in the 25 counties in the original quarantine, no changes to the quarantine area have been enacted. The ASPB will not participate in a 2016 EAB survey. The 2016 and 2017 EAB surveys were conducted by a private trapping firm contracted by USDA. In 2016, a new EAB find was in Randolph County near the Missouri border. The quarantine was expanded to include Randolph, Clay, Green, Lawrence, and Sharp Counties.

Gypsy Moths are a highly invasive European import which has severely impacted hardwood forests and urban areas throughout the Northeast, Mid-Atlantic, and Great Lakes regions of the United States. They lay egg masses on tree trunks, but can also lay eggs on outdoor furniture, trailers, and recreational vehicles. The Plant Board, along with several cooperating agencies trap throughout the state and concentrate on areas which have the highest likelihood of receiving traffic from areas of the country in which the insect is common. Campgrounds, parking lots, tourist areas, and roadside rest areas are some examples of target trapping areas.

The Gypsy Moth Detection Survey Plan for Arkansas has been developed through the joint efforts of the Arkansas State Plant Board, the U.S. Forest Service and the USDA APHIS Plant Protection and Quarantine. The plan follows the guidelines of the National Survey Plan.

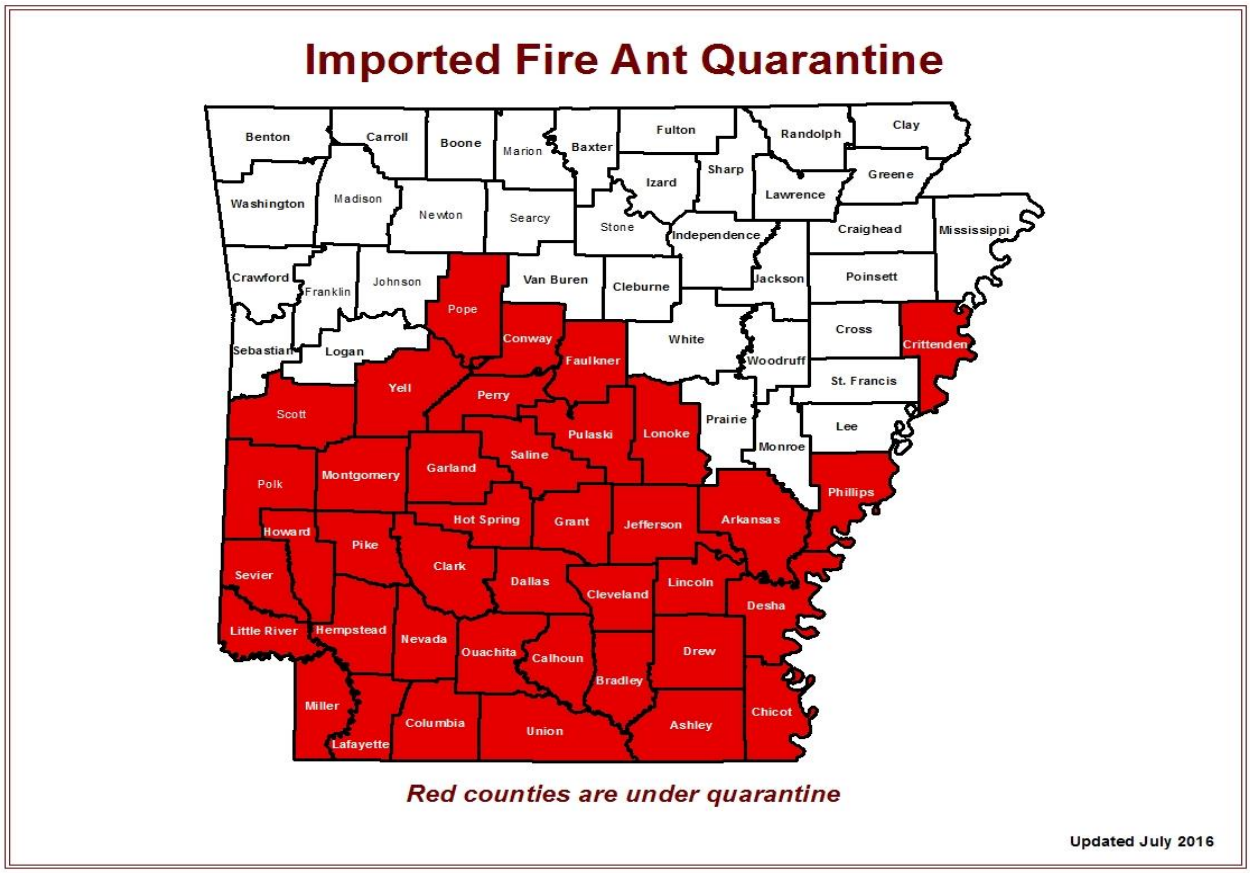
Arkansas' plan has three distinct parts.
(1) The 1st part is detection traps which are deployed all over Arkansas by our cooperating agencies, the Plant Board, and USDA APHIS PPQ. Every summer approximately 5,000 traps are placed throughout the state. Cooperating agencies include the Arkansas Game and Fish Commission, Arkansas Forestry Commission, Arkansas State Parks, Arkansas Highway Commission, University of Arkansas Cooperative Extension Service, Ouachita National Forest, Ozark National Forest, Buffalo National River, Natural Resources Conservation Service, United States Army Corps of Engineers, Camp Robinson National Guard and Fort Chaffee. USDA and Plant Board do concentrated trapping in rotating zones in forested areas of Arkansas.
(2) Delimiting trapping is conducted in high risk areas (those areas where there were catches the previous two years). If a gypsy moth is caught, the square mile around the catch is heavily trapped for the following two years. This shows whether the catch was from a breeding population or merely a hitchhiker. Delimiting trapping was concluded for after the second year

showed no more moths in the Nevada County location after a catch in 2014. In 2016, two traps showed a potential gypsy moth, although the specimen had deteriorated making positive identification impossible. We decided to treat these catches, one in Madison County, and one in Newton County as positive, and proceed with delimiting trapping in the summers of 2017 and 2018.
(3) The 3rd portion of the overall plan is the delimiting trapping in the eradication zone. This method will only be used if we find another breeding population.

During the Christmas season, our inspectors check on cut Christmas trees from areas of the country where a potential gypsy moth population could occur. The inspectors look at quarantine paperwork from the shipper, and also inspect tree bark for gypsy moth egg masses.

Imported Fire Ant

Originally from South America, fire ants are steadily moving northward. They can fly at certain times of the year, but can also spread artificially through potted plants, grass sod, hay, straw, mulch and used dirt moving equipment. Businesses which are located within the quarantine must sign up for a compliance agreement if they wish to move a regulated article outside of the quarantine. The compliance agreements outline the steps necessary to prevent fire ants from moving into new areas through these products. Companies which hold compliance agreements are inspected annually and their treatment records are checked. The Plant Board also tests soil from treating nurseries to ensure that those plants have the required insecticide.
We perform a border survey every year in the areas just beyond the quarantine to determine if new populations of IFA have become established. If a county or a portion of a county is considered infested, it is added to the quarantine. 747 nursery sites were inspected and treatment certificates were checked. Also inspected were 80 nurseries, nursery dealers, sod farms, hay producers, and used dirt moving equipment operators who are currently operating under IFA compliance agreements. We conduct border surveys every year in areas just outside of the quarantine line. These surveys show if the fire ant population has spread significantly so that additional areas could be considered infested. If a county, or a portion of a county, is deemed infested, then that area is added to the quarantine. In 2016, five new counties were added to the quarantine -– Conway, Crittenden, Phillips, Pope, and Scott. The map below shows the counties under quarantine.



Disease Programs

Karnal Bunt. Karnal Bunt, or partial bunt, is a fungal disease of wheat, durum wheat and triticale. The disease is caused by spores. Typically, only a portion of the kernel is affected; this is why the disease is sometimes called partial bunt. Damage is twofold; 1.) Infested plants produce less grain, 2.) The quality of the grain itself is lessened. Although the overall crop losses caused by Karnal Bunt might not be severe, the disease has quarantine significance and therefore could affect US grain exports. A National survey plan developed by APHIS is the guideline which each wheat growing state follows. Wheat producing counties are sampled every other year on a rotating basis, depending on the acreage grown in that county. In 2017 18 elevator and/or seed facilities were sampled at least once during the Arkansas wheat harvest. All grain and seed samples were negative for the fungal spores. The numbers were down due to a limited crop of wheat this year.

Sudden Oak Death. This is a fungus-like disease which has impacted coastal forests in Northern California and Southern Oregon. The disease is spread by other plants, many of which are sold as ornamentals. Nurseries in California, Oregon, and Washington which ship host plants out of state must be certified free of this disease in order to ship. They are also required to notify non-quarantined states when potential host plants are shipped to these states. We have conducted nursery surveys in the past looking for this disease. Whenever this disease is found in a shipping nursery, states on the receiving end are notified and those plants are analyzed for the presence of the disease. This is known as a Trace Forward. There were no notifications of potentially infected nursery stock in Arkansas this year.

Thousand Canker Disease of Black Walnut. This is a disease complex where the tiny walnut twig beetle, *Pityophthorus juglandis*, spreads the thousand cankers disease fungus, *Geosmithia morbida*, as it attacks walnut trees. Infected trees show dieback and eventual death. This disease has caused the death of walnut trees in Western United States, and has been found in Tennessee, Virginia, and Pennsylvania. In March 2011, the Arkansas State Plant Board enacted a walnut quarantine for any state in which the disease has been found. Articles regulated by the quarantine include walnut nursery stock, raw lumber, lumber with bark, walnut mulch and chipped walnut wood, and non-coniferous firewood. Unregulated articles include kiln dried walnut (if stripped of bark), finished walnut lumber and furniture, and walnut fruits (nuts).

In 2016, the survey work consisted of trapping and a visual survey performed for the purpose of early detection of Thousand Canker Disease and Walnut Twig Beetle in black walnut trees. One seasonal employee placed traps for this during the fall (August-October). A total of 30 traps were placed in seven counties throughout Northwest Arkansas. All traps have been screen and no positive suspects were found. Any suspect, if any, were sent to APHIS/PPQ for confirmation.

The survey in 2017 is still ongoing. A total of 60 traps were placed out in 13 counties. Thirty traps were placed out in the spring (May – July) and thirty in the Fall (August – October).

Solanaceous Survey

This survey was conducted for the early detection of three invasive insects of *Solanaceous* crops. The insects surveyed for included: Old world bollworm (*Helicoverpa armigera*), Tomato leaf

miner (*Tuta absoluta*), and Tomato fruit borer (*Neoleucinodes elegantalis*). A total of 60 traps were placed out in three counties of commercial tomato fields. Traps were placed out in May of 2017 and will conclude at the end of August. This survey was contracted out through the University of Arkansas Cooperative Extension. Any suspect find, if any, were sent to APHIS/PPQ for confirmation.

National Honeybee Survey

This national honey bee health survey is conducted to ascertain the incidence of exotic and established pests that may have a negative impact on honey bee populations in the United States. A composite sample of adult bees will be collected from 8 colonies in each of 24 apiaries state wide. These samples will be sent to the University of Maryland for analysis of Nosema, Tropilaelaps, *Apis cerana* and other exotic bees and pests. Wax samples will also be collected from 10 apiaries. These samples will be forwarded to UMD who will work with the USDA Agricultural Marketing Service (AMS) to analyze for the presence of pesticides. This survey started June of 2017 and will conclude December 2017.

Pine Commodity

This survey was conducted for the early detection of four exotic pine insects: Large Pine Weevil (*Hylobius abietis*), Pine Shoot Beetle (*Tomicus destruens*), Sirex Woodwasp (*Sirex noctilio*), and Masson Pine Moth (*Dendrolimus punctatus*). In 2016 A total of 126 traps were placed in 15 counties from March to August. Trap locations consisted of high risk areas such as pine plantations, pine mills, and industrial parks. The 2017 survey is still ongoing with a total of 63 traps were placed in 12 counties from March to October. The pine commodity survey is carried out by Dr. Mohammad Bataineh and his personnel at the University of Arkansas at Monticello. Any suspect find, if any, were sent to APHIS/PPQ for confirmation.

Orchard Commodity

This survey was conducted for the early detection of four exotic stone fruit insect pests: Plum fruit moth (*Grapholita funebrana*), false codling moth (*Thaumatotibia leucotreta*), European grape vine moth (*Lobesia botrana*), and light brown apple moth (*Epiphyas postvittana*). A total of 84 traps were placed in 9 counties from May to September. The Orchard commodity survey is carried out by Dr. Donn T. Johnson and his personnel at the University of Arkansas. Any suspect find, if any, were sent to APHIS/PPQ for confirmation. There were no positive finds of the surveyed exotic pests.

Grape Commodity

This survey was conducted for the early detection of five exotic grape insect pests: European grape berry moth (*Eupoecilia ambiguella*), black maize beetle (*Heteronychus arator*), European grape vine moth (*Lobesia botrana*), light brown apple moth (*Epiphyas postvittana*), and honeydew moth (*Cryptoblabes gnidiella*). A total of 72 traps were placed out in six counties from May to September. The Grape commodity survey is carried out by Dr. Donn T. Johnson and his personnel at the University of Arkansas. Any suspect find, if any, were sent to APHIS/PPQ for confirmation. There were no positive finds of the surveyed exotic pests.

Biotechnology
We continue to receive from USDA, APHIS, PPQ applications for movement and/or planting of material under regulation for comment. Our comments are considered by PPQ before permits are granted relative to these Genetically Modified plants.

Liberty Link. Discovery in Europe, in December of 2006, of rice containing a genetically engineered characteristic negatively impacted rice exports from Arkansas. Market prices dropped and several subsequent shipments were declined entry. Regulatory actions were undertaken. Regulations were enacted and protocols established requiring all seed to be used for planting be tested for the potential presence of the genetically modified trait. These requirements are still in place, and are being enforced.

Permitted Trial Inspection

Plant Board Inspectors have been trained and are being called on to inspect trials permitted through the USDA, APHIS, Biotech Regulatory Services permitting system. As assigned, inspectors gather relevant information, perform site visits, and confirm activities of the trial are consistent with the protocols stipulated in the permit approval. A written report is prepared and returned to BRS. This program has exited the pilot stage and is now being treated as an operational function of the BRS mission. ASPB inspectors performed four trial inspections this year. The number of inspections is expected to increase next year.

COMMERCIAL PEST CONTROL SECTION
JULY 1, 2016 / JUNE 30, 2017

Seth Dunlap, Agri Program Manager
James Clark (Transferred to Different Division), Plant Board Inspector Supervisor
Charlee Howard, Administrative Specialist II
Tiffany May, Administrative Specialist II
Julie Wilson, Administrative Specialist II

INSPECTORS

Johnny Bell, North East AR Inspector
Lyndall Hamilton, North West AR Inspector
Greg Hearnsberger (Transferred to Different Division), South AR Inspector
Josh Dement, North Central AR Inspector
Ryan Nichols, Central AR Inspector

The Pest Control Section is charged with carrying out the Arkansas Pest Control Law and Regulations, "Act 488 of 1975" and the Federal Insecticide Fungicide Rodenticide Act "FIFRA" concerning the non-agricultural use of pesticides. The section is staffed with one Agri Program Manager, one Pest Control Inspector Supervisor, five Pest Control Inspectors, and three Administrative Specialists.

Any person engaging in pest control service in Arkansas must obtain a license from the Plant Board Pest Control Section. A license can be obtained only after the individual has met financial and moral requirements and has completed written examinations in both category and basic EPA certification with passing scores. This section issues licenses or certificates in ten separate categories. Those persons licensed or certified are inspected routinely to insure proper performance under State and Federal Laws and Regulations. The heaviest work load is the inspection of work performed in structural pest control. This section investigates individuals performing commercial pest control services without a license. These offenders are subject to the Plant Board Pesticide Enforcement Response Policy or are prosecuted with the assistance of local law officials.

This year, one hundred and fifty (173) licensed Termite and Other Structural Pest Control operators reported thirty five thousand five hundred and fifty eight (35,558) Termite and Other Structural Pest jobs.

Plant Board inspectors performed 93 routine inspections, responded to 140 requests for inspections and performed 178 re-inspections.

Operator's license issued this year – 1,230

Agent cards issued this year – 1,078

Applicants certified this year - 128

EXAMINATIONS	TOTAL	PASSED	FAILED
Basic EPA Certification	143	130	13
Termite and Other Structural Pests (Class 1)	13	5	8
Household Pest (Class 2-H C)	32	22	10
Rodent Control (Class 2-R C)	40	24	16
General Fumigation (Class 3)	3	0	3
Ornamental Tree & Turf Pest Control (Class 4 and 9)	73	34	39
Weed Control (Class 5)	50	19	31
Golf Course Pest Control (Class 6 and 10)	18	13	5
Food Mfg., Processing & Storage Pest Control (Class 7)	5	2	3
Food Related Fumigation (Class 8)	33	15	18
TOTAL	410	264	146

Pest Control Section inspectors monitored pre-treatments for prevention of termites at 5 job sites.

Pest Control inspectors took 51 physical samples during the course of their work this year.

The Pest Control Section staff conducted 0 hearings this year.

Civil penalties issued thru the Pest Control Committee/Plant Board this year - 2

For a total amount of $1,100.00

Civil penalties paid this year - 2

For a total amount of $1,100.00

Termite and Other Structural pest control work takes up most of our time due to the amount of work performed and the importance of protecting the single most important investment consumers have, their home. Overall the staff performed 93 routine inspections, responded to 140 inspection requests, monitored 5 pre-treats, and issued 71 “first” pink slips to 40 companies, 18 “second” pink slips to 14 companies and 4 “third” pink slips to 4 companies this year.

This year, 273 licensed operators re-certified.

The Pest Control Section staff issued 8 Warning Letters this year.

34 Cease and Desist orders were issued by the Pest Control Section staff this year.

Property owners made 140 requests for inspections this year. Many of these requests came from disputes where the pest control operator and homeowner could not agree on the responsibility based upon Pest Control Law, Regulations and contractual agreements to settle these disputes. The staff feels that solving problems associated with property owner's requests is one of our most important duties.

The staff is continuing to work with the pest control industry, legislators and other interested groups and individuals to make changes to Arkansas Pest Control Law & Regulations, as necessary.

The Pest Control Section staff filled the following orders this year:

Forms – 7
Applications – 706
Mailing Lists – 0
Circular 6 – 706
Study Kit (1) – 66
Study Kit (2) – 134
Agent Exam Study Kit – 93
Study Kit (3) – 10
Study Kit (4) – 278
Study Kit (5) – 103
Study Kit (6) – 25
Study Kit (7) – 14
Study Kit (8) – 19

Mr. Seth Dunlap, Manager of the Commercial Pest Control Section, made 4 trips to attend conferences this year.

Apiary Section 2016-2017

Managed Programs: Apiary, Sweet Potato Weevil, Pink Bollworm, Boll Weevil, and Aquaculture (Bait & Ornamental, and Catfish).

Mark Stoll; Agri Program Manager (Section Head)
Daniel Plyler; Plant Board Inspector (Apiary Inspector)
Danny Brewer; Plant Board Inspector (Apiary Inspector)
Emily Rodriguez; Administrative Specialist II (Secretary II)

APIARY

Inspections

There were a total of 2,582 active registered apiarists in the state with 41,974 registered apiaries. A total of 7,434 colonies were visited this year. Out of these, 2,560 colonies were inspected.

Migratory Beekeepers

There were 3 moving permits issued this year to beekeepers moving from state to state. There were 10 commercial beekeepers that left the state on pollination contracts. They transported about 5,000 hives on these contracts.

Honeybee pests and disease

The breakdown, out of the 2,560 colonies inspected, is as follows:

American foulbrood:	0
European foulbrood:	26
Chalkbrood:	0
Sacbrood:	0
PMS:	0
Nosema:	0
Varroa Mite:	186 (Occurs in most hives.)
Tracheal Mites:	0 (Occurs in most hives.)
Small Hive Beetle:	913
CCD:	0

The majority of the beekeepers are aware of the need to treat for both the varroa and tracheal mites. The wild bee (feral colonies) population is slowly increasing. The Africanized Honey Bee has been found in the state but its' spread has been limited to the southwest part of the state.

The Small Hive Beetle was brought to the United States in 2000. Several states have now become infested with the beetle. The Apiary Section has deregulated the Small Hive Beetle due to the percentage of the state that now currently has the beetle.

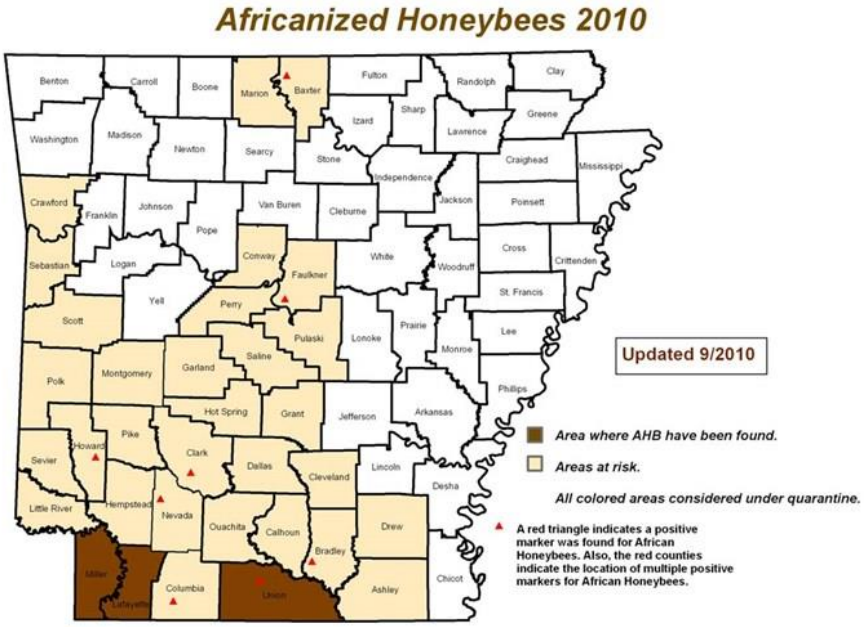
Survey

The Apiary Section of the Arkansas State Plant Board did not participate in the National Honey Bee Survey by USDA in 2016 due to staffing issues. However, we are participating for the sixth time in 2017. This survey will determine what honey bee pests and diseases we have in the United States. This information will help the U.S. in banning imports of bees from other nations that has a bee pest or disease not found in the U.S..

This survey will require twenty-four composite samples. These samples will be composite samples from eight hives in each apiary. The sample consists of three collection types: live bee box, alcohol sample, and alcohol filtered sample. Also, ten wax samples will be collected.

Africanized Honey Bee

The introduction of the Africanized bee into Arkansas has been closely monitored by the placement of traps along the Oklahoma, Texas and Louisiana borders. Forty-one (41) traps were placed around the state in 2006, in 2007 Fifty (50) traps were placed, in 2008 sixty (60) traps were placed, in 2009 sixty (60) traps were placed, in 2010 sixty (60) traps were placed, in 2011 sixty-one (61) traps were placed, in 2012 sixty-five (65), in 2013 fifty-six (56) traps were place, in 2014 fifty-six (56), in 2015 fifty-six (56), in 2016 forty four (44) traps, and in 2017 fifty-seven (57) traps are currently in the field. The 2017 swarm traps are placed in trap lines along the Oklahoma and Louisiana borders, along Africanized Honey Bee (AHB) counties in Arkansas, and in strategic locations. There have been about twenty positive locations verified in Arkansas since 2005. Counties with positive finds include: Miller, Lafayette, Clark, Columbia, Bradley, Nevada, Faulkner, Baxter, Howard and Union counties.



The Apiary Section continues its effort to monitor locations for AHB, and to provide information on new positive finds to the public.

Public Relations

The Apiary Section has held a large role in educating the public about bees by participating in a total of nine (9) demonstrations, sixteen (16) programs, seven (7) presentations, and sixty-eight (68) films/exhibits designed to increase public awareness of the honeybees' importance in agriculture, provide education, provide information concerning the Apiary Laws, and to provide a better understanding of the importance of honey bees. The section has helped teach in fourteen (14) beekeeping classes to those interested in learning more about how to keep bees and treat for pests and diseases. The Apiary Section has also helped in the training of veterinarians on two (2) occasions concerning the Veterinarian Feed Directive and how it will affect Honey bees and beekeepers.

The staff has also represented the State Plant Board in several beekeeping association meetings throughout the state, and in surrounding states.

SWEET POTATO WEEVIL

There were a total of 10 growers planting 3,423.4 acres of sweet potatoes in Sweet Potato Green Tag Certification Program this fiscal year. Five (5) growers were in Program A, and five (5) were in program B. There were no Sweet Potato Weevils trapped last year.

A $10 per acre trapping fee was implemented in 1998 to recover the costs of certifying sweet potato fields free of the Sweet Potato Weevil. A total of $34,230.00 was collected this year. A total of 1,882,000 green tags were mailed out to the growers.

PINK BOLLWORM

A total of 16 traps were placed by the State Plant Board at Gins in Northeast Arkansas. USDA trapped the remaining Gins in the state. No pink bollworm moths were recovered in the 2016 survey.

Guidelines or criteria of placing an area under Area A (infested area):

> *If a single moth is trapped prior to September 1, the area will be placed under regulation immediately. If a single moth is trapped after September 1, and no larvae recovered, regulations will not be applied unless an additional moth is trapped within a 1 ½ mile radius of the initial trap find.*

The quarantine was lifted by USDA in the spring of 2000. Arkansas is now considered to be Pink Bollworm free.

Most gin owners, managers and/or operators were most cooperative in all phases of the program. All gins were in compliance with the gin clean-up deadline.

Growers were most cooperative with the stalk destruction requirements. No violations will be carried over from 2016 leaving zero (0) on the 2017 prohibited ginners list.

All designated oil mills that received quarantined cottonseed were milled out and cleaned up by the June 1 deadline.

All survey, regulatory, and control work was in cooperation with USDA-APHIS. Other agencies such as Agricultural Extension Service, Soil Conservation Service, Agricultural Stabilization and Conservation Service, etc., assisted in publicity and other phases of the program.

BOLL WEEVIL

The Boll Weevil Eradication Program has successfully completed another year. The entire state is under the eradication program. The Northeast Delta Zone was the last zone to enter the Program in Arkansas. This zone entered under a forced program administered by the State Plant Board.

Cotton acreage is decreasing in Arkansas each year. In 2007 there were 852,159.1 acres of cotton statewide. The 2007 total was down 308,104.3 from the 2006 crop year. In 2008 there was a total of 605,686.8 acres of cotton statewide. That is down 246,472.3 acres state wide from 2007. In 2009 there was a total of 490,816.1 acres of cotton statewide. This is down 669,447.3 acres from the 2006 crop year. Since 2006 the cotton crop in Arkansas has decreased by over 50%. However, in 2010 there was a total of 522,221.3 acres of cotton statewide. This marked the first increase in cotton acreage since the start of the decline in 2007. In 2011 the total cotton acres increased again to 631,504.1 acres. But, in 2012 the cotton acreage declined to 587,128.60, in 2013 there was 304,000 acres, in 2014 there was 316,626.3 acres, in 2015 there were 201,380, in 2016 there were 365,858, and there should be around 420,000 acres in 2017.

The per acre assessment for 2017 has been set at $3 per acre statewide.

AQUACULTURE

The Aquaculture program was started in 2006. This program was started to certify bait and ornamental fish shipments, and to show that the shipments meet the Official Standards for Certification of Bait and Ornamental Fish. The Arkansas State Plant Board is working in conjunction with USDA accredited veterinarians that are completing two-year disease free inspections. These inspections follow APHIS-approved protocols and are followed by onsite inspections of biosecurity and aquatic nuisance species (ANS) status completed by Arkansas Agriculture Department field staff. Upon completing the two-year of disease free testing and the onsite inspection the Arkansas State Plant Board will issue the fish producers Certificates to verify that the shipment of bait and ornamental fish are certified to be ANS free and disease free.

In 2012 the Snakehead Fish and Quagga Mussel were added to the ANS list, and Best Management Practices for Gambusia were adopted.

The Arkansas State Plant Board had 20 producers signed up in 2016 for certification. The total acres for 2016 were 14,539.45. This program charges $1 per surface acre and collected $14,539.45 in annual fees from the participating producers.

Mark Stoll was the keynote speaker at the UAPB Aquaculture Field Day, presented a presentation on Arkansas's Bait & Ornamental Certification Program at the Mississippi River Basin Panel Meeting in La Crosse, WI, and provided a presentation at the Arkansas Catfish Association meeting in Hot Springs.

Arkansas Federal-State Inspection Program

Scott Bray, Director
Steve Bowlan, Manager
John Lansdale, Officer in Charge
Edgar Rippee or Harley Olinske, AMS/USDA Program Managers
July 1, 2016 - June 30, 2017

Under a cooperative agreement with the USDA, this section is responsible for providing inspections of fresh fruit and vegetables for the purpose of certifying their quality, condition and quantity as authorized by the Agricultural Marketing Act of 1946. Quality - referring to the inherent properties of a product which determines its relative degree of excellence. Condition - referring to the relative degree of soundness or preservation of a product and includes but is not necessarily limited to, its firmness or stages of ripeness, decay, freezing, shriveling, flabbiness or any other progressive factor which effects the products marketability. Quantity - meaning the number or weight.

In providing this service there are two types of inspections, shipping point and market inspections. Shipping point inspections are those performed on products produced within the state at the point of origin or production and are therefore, seasonal in nature. Market inspections are those made of products after they have been shipped from the point of origin or production and may include those produced within the state as well as other states or foreign countries.

The following table pertains to shipping point inspections performed during FY 2016- 2017.

APPLICANTS	PRODUCTS	NUMBER GROWERS	NUMBER CONTAINERS	NUMBER POUNDS
Proffer Wholesale Produce Warren, Arkansas	Tomatoes	4	87,126	1,956,700
"	Cucumbers	1	14,045	410,100
"	Squash	1	1941	38,800
"	Peppers	1	18,977	529,500
"	Okra	1	747	7,500
"	Eggplant	1	807	22,100

Requests for the shipping point inspection service continue below normal due to changes in marketing procedures (direct marketing, roadside markets, u-pick operations), and reduction in production of some products, etc.

All Market Inspections are performed by the officer in charge.

The following table pertains to Market Inspections performed during FY 2016-2017.

PRODUCT	NUMBER OF LOTS INSPECTED	NUMBER OF POUNDS
Tomatoes	0	0

The officer in charge assisted in some demonstrations with regard to grading, packing and marketing of fruits and vegetables.

This section is responsible for providing grading services of Farmers Stock Peanuts at two locations called buying points in the state. Five full time employees and nine extra help employees are licensed by AMS/USDA to grade the peanuts in FY 2016-2017, aided by eleven support staff members. There were 2,079 certificates issued.

FARMERS STOCK PEANUTS TONS GRADED	OIL STOCK/CLEANER RESIDUE TONS GRADED
50,897	947.68

This division cooperated with USDA's Foreign Agricultural Service, Trade Opportunity Referral System (TORS) of Export Trade Services Division with regard to marketing Arkansas agricultural products. It is also, cooperating with the Arkansas Industrial Development Commission in exchanging and forwarding inquiries on trade leads.

This section is also responsible for the Good Agricultural and Good Handling Practices Audit Verification Programs.

This program is an audit based service, in order to assess a company's efforts to minimize the possibility of contamination of fresh fruits, vegetables and nuts by microbial pathogens. It does not assure that the product is free from microbial contamination. Audits are intended to occur on a scheduled basis at a minimum of once a year. The responsibility for continuing product safety and the continued observance of practices leading to a minimized possibility of microbial contamination rests with the company.

These instructions are specifically developed by the Fresh Products Branch to assist officially licensed auditors in the application of auditing principles and practices, the use of an official checklist and define GAP & GHP terms in order to conduct audits for GAP & GHP program compliance. These instructions do not establish any rule or regulation.

The mission of the program and the intent of these instructions are to provide a uniformly applied national auditing program for the U.S. fresh produce industry for purposes of verification with GAP & GHP.

USDA GAP/GHP AUDITS PERFORMED	USDA GAP/GHP UNANNOUNCED FOLLOW –UP AUDITS	PRODUCE GAPS HARMONIZED AUDITS PERFORMED	PRODUCE GAPS HARMONIZED UNANNOUNCED FOLLOW –UP AUDITS
10	0	9	2

DIVISION OF SEEDS

Mary A. Smith, Director

The Seed Division's responsibilities are both service oriented and regulatory: (1) The enforcement of Seed Laws and Regulations, (2) The operation of an Official Seed Laboratory, and (3) The management of the Seed Certification program. All activities are coordinated through the Division Director. A summary of the work activities are as follows:

I. SEED LAW ENFORCEMENT

Mary A. Smith, Seed Control Official
Marchall Caster, Adm. Asst. II

The ultimate purpose of seed laws and regulations is to protect the consumer and seedsman from poor quality or mislabeled planting seed. This is primarily achieved through routine compliance monitoring - audits of seedsmen/farmers and field inspectors policing the areas where agricultural seed is sold. The inspectors make sure that all the seed, which is being offered for sale, has a label. The label provides information for the buyer - the germination potential, the kind and numbers of noxious weeds per pound, the % other crop, the % weeds, the % inert material present, etc.

The inspectors randomly take samples of the seed that is being offered for sale and send them, along with copies of the labels, to the seed laboratory. The seed analysts will test and analyze the seed and compare their findings with that on the label.

The seed is considered mislabeled if the seed analyst's findings are out of tolerance with the label. A Stop-Sale Notice is issued which prevents the seed from being sold until it has been released to show the correct information, sold for feed (must be untreated), or returned to the manufacturer.

Stop-Sale Notices are also issued by the field inspectors because of technical violations, such as: no analysis labels on the seed; insufficient information on the label; no Arkansas Seed Dealer's license; out-of-date-of test, etc.

All Stop-Sale Notices, whether issued by the Division Director or by the Field Inspector, must have a written release issued by the inspector after he/she is satisfied appropriate measures were taken to correct the violation.

	16/17	15/16
Number of Regulatory Samples collected from seed being offered for sale in the trade channels.	1,693	1,698

	16/17	15/16
Number of Stop-Sale Notices issued by the Division Director because the seed was found to be mislabeled.	22	25
Number of Stop-Sale Notices issued by Inspectors because of technical violations.	33	51

A breakdown of the top ten crops collected by the inspectors and tested by the seed laboratory **for regulatory purposes** is as follows:

Crop	Number Collected	Number Mislabeled	Number in Tolerance, but below Labeled Germ
Soybeans	**1,019**	**5 (0.49%)**	**55 (5.40%)**
Rice	**209**	**0**	**10 (4.78%)**
Corn	**153**	**0**	**1 (0.65%)**
Wheat	**93**	**2 (2.15%)**	**1 (1.08%)**
Ryegrass	**82**	**5 (6.10%)**	**4 (4.88%)**
Tall Fescue	**55**	**4 (7.27%)**	**1 (1.82%)**
Oats	**14**	**1 (7.14%)**	**0**
Rye	**12**	**1 (8.33%)**	**0**
Bermudagrass	**7**	**0**	**1 (14.29%)**
Clovers	**6**	**0**	**0**
All Others	**43**	**4 (9.30%)**	**1 (2.33%)**
Total	**1693**	**22 (1.30%)**	**74 (4.37%)**

Each year the Seed Committee reviews the Seed Enforcement Report and recommends the acceptance or rejection (to the full board) of any informal hearing agreements of seed companies with poor labeling records. For the 16-17 year, there is one company with three or more consecutive years of excessively high percentages of mislabeled seed (which requires an enforcement response of an informal hearing). Also, two companies with two consecutive years of over 10% mislabeled seed will be issued alert letters and three will receive caution letters for one year of over ten percent mislabeling records.

The Federal Seed Act regulates seed in interstate commerce, requiring proper labeling and prohibiting misrepresentation of seed transported from one state to another. By agreement between State and Federal authorities, randomly selected regulatory seed samples of interstate shipments are sent to the USDA Federal Seed Laboratory to be grown in varietal test plots. The Federal Seed Branch requests records on any seed found to be mislabeled as to variety. An investigation is made to determine who is responsible and appropriate action is taken - which can range from a warning letter to a penalty assessment.

This year (16/17) the USDA Federal Seed Branch requested garden bean, pumpkin, and sweet corn, but we had none of the kinds requested to submit. Last year they planted 24 samples of interstate shipments of soybeans & 18 ryegrass samples we submitted. Results of the grow-out tests show they have been correctly labeled.

Other activities included:
1) Soybean growing conditions were affected by the somewhat dryer than normal growing and harvesting seasons in the fall of 2016; conditions were not quite as good as those the previous year - resulting in mostly good quality soybeans for planting in 2017 but with lower vigor test results overall than the 2016 planting season. However, the number of stop-sales and advisory letters issued for soybean germination problems decreased over the previous year. This was possibly due to better planting weather in the spring /summer of 2017, with no hot spells to possibly affect seed storage before planting. Inspectors sampled over 1,000 regulatory soybean samples to check for possible problems with this seed in the marketplace. In 15/16, nine stop-sales were issued for soybean germination problems compared to three in 16/17. Also, the number of advisory letters was decreased – 55 issued this year compared to the 70 advisory letters in 15/16 (sent to seedsmen whose seed was in tolerance with the labeled germ, but 3% or more below the labeled germination percent). These advisories alert seedsmen to monitor their seed in the marketplace. The seed quality for rice was also a little lower than the previous year. However, no Arbitration complaints were filed last year on the crops planted in 2016 and so far (to date) this season, no calls for forms to apply for arbitration have been received on the crops planted in 2017.

2) Testing has continued each year since Liberty Link (LL) contamination was found in rice grain shipments in 2006. This finding led to activities in sampling, testing, and issuing validation reports for seed lots that were found to be negative for the LL trait. Plant Board Inspectors provided sampling for all rice seed intended for planting in Arkansas in the spring of 2017. During the testing phase, over 400 samples were submitted to labs for testing - all with negative results. In the spring and summer of 2017 the Seed Division issued approximately 974 Seed Sample Validation Reports to companies or farmers.

Another part of seed law enforcement is the issuance of various licenses:

	16/17	**15/16**
Number of Seed Dealer's Licenses Issued	220	219
Number of Subsidiary Locations Registered	170	167
Number of Seed Treater's Licenses Issued	123	126
Number of Seed Treater's Restricted-Use Pesticide Lic. Issued	24 (2017) (24 Loc. 35-treaters)	26 (2016) (26 Loc. 34-treaters)

All seed sold for planting purposes must have a tonnage fee paid on it to help support the regulatory work. This fee can be paid by purchasing permit tags, analysis labels, or by filing quarterly reports on the number of pounds of seed sold and paying a fee per each hundred pounds sold. The tonnage fee breakdown is as follows:

	16/17	**15/16**
Number of Permit & Analysis Labels Issued (non-certified)	19,128	24,049
Number of Pounds Reported	307,755,981	303,967,452

II. SEED LABORATORY

Aaron Palmer, Manager (CSA)*

Senior Seed Analyst	Seed Analyst
Gordon Baldridge (CSA)*	Dominique Bingham
Pamela Bingham	
Debbie Hill (CSA)*	
MD Rasheed	

*Certified Seed Analyst

The seed laboratory tests both regulatory samples as explained under "Seed Law Enforcement" and service samples. Service samples are seed samples submitted by seedsmen or farmers for the purpose of obtaining information as to the quality of the seed for planting purposes. If the seedsman is going to sell his seed for planting, he must have an official seed laboratory test to support the labeling information. The breakdown and comparison to last year is as follows:

	16/17	**15/16**
Number of Service Samples Tested	4,557	5,292
Number of Regulatory Samples Tested	1,693	1,698
Total	**6,250**	6,**990**

Many of the seed samples submitted to the seed laboratory required "special tests" in addition to the standard purity and germination tests. The comparison to last year is as follows:

	16/17	**15/16**
Number of Purity Tests	4,399	4,535
Number of Germination Tests	6,467	7,031
Number of Phenol Tests (varietal test for wheat)	3	46
Number of Coleoptile Tests (varietal test for wheat)	1	46
Number of Hypocotyl Tests (varietal test for soybeans)	36	64
Number of Peroxidase Tests (varietal test for soybeans)	0	0
Number of Fluorescence Tests (varietal test for oats)	41	24

Number of Moisture Tests (certification requirement)	853	1,153
Number of Tests for Red Rice (pounds hulled)	1,163 (3743)	1,216 (4,054)
Number of Cool Tests (vigor test for cotton)	7	30
Number of Accelerated Aging Tests (vigor test for soybeans & wheat)	1,127	1,343
Number of Tetrazolium Tests (rapid viability test for seed)	97	93
Soybean Herbicide Trait Tests	1,253	1,074
Rice Herbicide Trait Tests	279	299
TOTAL TESTS CONDUCTED	**15,726**	**16,954**

The seed laboratory tests over 60 different crops, which range from alfalfa to wheat. Below is a breakdown of the top ten crops in numbers submitted for service testing, compared to last year:

CROP	16/17	15/16
Soybeans	1,444	1,851
Rice	1,242	1,469
Wheat	603	794
Oats	156	155
Garden Beans	84	111
Corn	41	32
Annual Ryegrass	90	91
Cotton	26	31
Clover	109	109
Cowpeas	25	18
All Others	737	631
TOTAL SAMPLES	4,557	5,292

The Seed Lab participated in one referee and numerous webinars from the "Association of Official Seed Analysts" (AOSA) in 2016-2017. Also participated in a wheat germination referee with another seed lab where fusarium disease was causing test result differences.

III. SEED CERTIFICATION

James Chastain, Certification Manager

The Seed Certification Program provides constant supervision to the production of seed with the highest genetic and mechanical purity. Rigid standards of quality are set-up by the Plant Board for the three classes of certified seed. Detailed records are maintained for four generations of seed production. Each generation of Foundation, Registered and Certified seed production must be field-inspected and then laboratory tested. Only when all standards are met can certified tags/labels (or bulk certificates for wheat) be issued.

New standards were added to the Certification program for the certification of vegetatively propagated turfgrasses in 2006. Protocols and forms for this program have been developed and training for inspections has been conducted and is on-going. Three inspections are conducted annually on the fields in certification. Maps using GPS coordinates developed for all fields in continuous production continued to be helpful for this year's inspections.

In addition to the Certification Program, the Seed Division began offering services in 1994 other than the traditional seed certification program. The Identity Preserved/Quality Assurance Program allows inspection services to be developed to meet the specific needs of individual companies.

Regulation changes in 2017 allowed Foundation seed and changes in 2004 allowed Registered class rice, wheat and soybeans to be sold in bulk bags (superbags). This altered the way some of the crops are sold. There is a decrease in the amount of traditional bag labels printed and an increase in the superbag labels printed, especially for rice.

A breakdown of the acreage under each of these programs, and tags/labels issued is as follows:

	2016 Crop Year	2015 Crop Year	2014 Crop Year
Total Acres Certified	**31,659**	**39,840**	**37,706**
Total Acres Identity Preserved/Quality Assurance	**1,450**	**1,277**	**2,506**
Grand Total (Acres)	**33,109**	**41,117**	**40,212**
Number of Conditioners Inspected	**35**	**35**	**35**
Number of Permits Issued (includes Bulk Wheat Permits)	**45**	**45**	**48**
Bushels of Wheat Sold Bulk Certified	**0**	**202**	**3,083**
Bushels Wheat Sold in Super Bags	**145,785**	**315,733**	**329,695**
Bushels Soybeans Sold in Super Bags	**61,462**	**80,885**	**92,771**
Bushels Rice Sold in Super Bags	**1,589,876**	**1,885,442**	**2,214,035**
Number Labels Issued on Traditional Size Bags	**126,036**	**162,653**	**166,254**

CERTIFICATION DATA FOR THE 2016 CROP YEAR

CROP	No. of Applications	Acres Approved	NUMBER OF LABELS ISSUED ON TRADITIONAL SIZE BAGS				# Of Labels Issued if all Certified Seed was sold in 50 lb. traditional units
			FD	REG	BT	TOTALS	
Oats	1	122	0	0	0	0	0
Wheat	18	4,166	1,264	0	8,105	9,369	184,311
Rice	152	20,796	7,853	5,966	69,889	83,708	1,514,596
Soybeans	57	4,222	7,698	38	25,223	32,959	106,713
E. Gammagrass	0	0	0	0	0	0	0
Turfgrass	12	258	-	-	-	-	-
TOTALS	240	29,564	16,815	6,004	103,217	126,036	1,805,620

CERTIFICATION DATA FOR THE 2015 CROP YEAR

CROP	No. of Applications	Acres Approved	NUMBER OF LABELS ISSUED ON TRADITIONAL SIZE BAGS				# Of Labels Issued if all Certified Seed was sold in 50 lb. traditional units
			FD	REG	BT	TOTALS	
Oats	1	126	0	0	0	0	0
Wheat	37	9,635	6,861	0	8,736	15,597	394,679
Rice	124	25,521	7,146	3,203	99,283	109,632	1,806,530
Soybeans	45	4,297	9,864	330	27,230	37,424	144,086
E. Gammagrass	1	3	0	0	0	0	0
Turfgrass	12	258	-	-	-	-	-
TOTALS	220	39,840	23,871	3,533	136,971	162,653	2,345,295

THE BUREAU OF STANDARDS

The Bureau of Standards was created as the Weights and Measures Division under the State Plant Board with the passage of Weights and Measures Act 482 of 1963. In 1977, Act 768 transferred the Weights and Measures Division to the Department of Commerce. In 1983 with Act 691, the Weights and Measures Division became an independent agency and the name "Arkansas Bureau of Standards" was adopted. In 1993, Act 610 transferred the Arkansas Bureau of Standards to the Arkansas State Plant Board.

During the spring of 1996, the Bureau of Standards underwent reorganization from four divisions (Administrative, Petroleum Quality, Weights and Measures and Laboratory Standards Division) to three divisions. The Laboratory Standards division was placed under the Weights and Measures Division. The Administrative Division provides executive direction to the three divisions.

In compliance with Acts 586 & 587 of 2001, the existing divisions are now identified as the State Petroleum Products Division, the State Weights and Measures Division and the Office of Administration. The State Weights & Measures Division oversees the Area Investigation Section and the State Standards Laboratory.

The State Petroleum Products Division is responsible for testing of motor fuels (gasoline, kerosene, and diesel fuel), illuminating oils and heating oils used in Arkansas commerce. The Division provides protection for consumers, technical assistance to the petroleum industry, and assures consumers and the petroleum industry receives quality petroleum products in commercial transactions. Unannounced fuel samples are collected from retail fuel stations, terminal storage tanks, pipeline terminals, refineries and wholesale bulk plants regularly.

In addition, the division performs compliance testing on motor fuel and liquefied petroleum gas meters certified for use by Arkansas Registered Service Agents.

The State Weights and Measures Division is responsible for ensuring "equity may prevail" in the many commercial transactions involving weighing and measuring in the marketplace. Every transaction involving the exchange of goods, property, and service is affected in a very vital way by some form of weighing or measuring. This division enforces the provisions of Act 587 of 2001 and the regulations as prescribed by the National Institute of Standards and Technology Handbooks 44, 130, 133, and the Annual Book of ASTM Standards.

The Weights and Measure Division consists of thirteen field investigators, residing strategically throughout the state. They carry out inspections of the standard pack and random pack products at wholesale and retail outlets, test gasoline pumps, gasoline storage tanks, small capacity scales, pawn scales and airport baggage scales, also misleading advertising violations in the news media.

The State Standards Laboratory consists of the Metrology Laboratory and Grain Moisture Meter Laboratory. The State Standards Laboratory serves as the state's primary standards

and as scientific authority for measurement certification. The Metrology Laboratory maintains the official state standards of mass, length, and volume; calibrates and certifies standards and instruments used by state government, commerce, industry, educational and research institutions; and provide technical assistance in the measurement field. The Grain Moisture Meter Laboratory is responsible for ensuring the accuracy of moisture meters used in the buying and selling of grain. The laboratory develops grain standards and specifies basic testing techniques used in the standardization, calibration, and examination of public grain elevator moisture meters, as well as testing and verifying the accuracy of all commercial moisture meters in Arkansas.

ARKANSAS BUREAU OF STANDARDS
1963-2017

At the request of the Research Department of the Arkansas Legislative Council, the National Bureau of Standards conducted a study of the weighing and measuring practices taking place in the State of Arkansas. The resulting investigation revealed serious weight shortages among packaged food products and a high rejection rate for large and small scales and gasoline pump meters. These findings brought to light the need for an enforcement program to protect the weighing and measuring practices of both the buyers and sellers of consumer goods and commodities in the State of Arkansas.

As a result of these findings, the Division of Weights and Measures was created by the 64th General Assembly through the passage of Act 482 of 1963. The “Weights and Measures Act of 1963" made provisions for a director, a deputy director, state inspectors and technical and clerical personnel.

At its inception, the Weights and Measures Division had no personnel, facilities or programs in place, so the division was placed under the authority of the State Plant Board.

During the first year of operation, eight (8) new positions were created, and 14,000 tests and inspections were performed. Between 1964 and 1967, the workload increased making it necessary to employ ten (10) additional inspectors.

In 1963, the State Plant Board was located at 421½ West Capitol Avenue at the intersection of Broadway in downtown Little Rock. From 1963 to 1969, the Weights and Measures Division operated out of the State Plant Board office on Capitol Avenue.

In 1966, work began on a new Weights and Measures Metrology Laboratory at 4608 West 61st Street in the south central part of Little Rock. The official weights and measures standards and laboratory balances supplied by the National Bureau of Standards began arriving in 1968.

The official “State Standards” were placed in a special glass display case for protection where they could be viewed by visitors to the agency. On April 18, 1969, the Metrology Laboratory was officially dedicated.

From 1969 to 1971, new Weights and Measures programs and responsibilities brought the total number of employees to twenty-one with most of the work being coordinated from the new Weights and Measures Laboratory.

The Weights and Measures Division at this point became a functionally independent agency with responsibility for making all policy decisions and developing programs necessary to protect both the public and business sectors. During the 1971 and 1973 General Sessions, the Liquefied Petroleum Gas Testing Program was transferred to the Division of Weights and Measures, and the Grain Moisture Meter Testing Program was created.

Between 1973 and 1975, the Administrative Section and Grain Moisture Laboratory were completed, and plans for developing a Petroleum Quality Control Program were begun.

In 1977, due to major program differences and an increasing need for the Weights and Measures Division to make policy decisions, develop programs and coordinate activities from a central location, the Division of Weights and Measures was transferred from the State Plant Board and placed under the Department of Commerce.

In 1977, a Petroleum Quality Control Laboratory was completed. Chemists and technical personnel were employed to test octane ratings, fuel contamination and other components of gasoline and diesel fuel in order to protect motor vehicles.

In 1978, Arkansas was host to the 33rd annual Southern Weights and Measures Association. This meeting was held at the Camelot Inn in Little Rock with nineteen states represented.

In 1983, the Department of Commerce was abolished, and the Division of Weights and Measures became a totally independent, functioning agency with thirty-nine full-time employees. Due to the expanding role of the Weights and Measures Division, the agency name was changed to Arkansas Bureau of Standards in order to better reflect the increasing diversity of responsibilities. A subsequent internal reorganization created the Weights and Measures Division, the Laboratory Standards Division, Petroleum Quality and the Administrative Division. These changes proved beneficial at both the state and national level.

In 1983, the Director of the Bureau of Standards was elected Chairman of the National Conference on Weights and Measures.

In 1984, the National Conference approved Little Rock, Arkansas as the site for the 72nd Annual Meeting.

In 1987, the 72nd Annual Meeting of the National Conference on Weights and Measures was held at the Excelsior Hotel on July 19-24, with 383 registered delegates and guests. Forty-six states, Puerto Rico and the Virgin Islands were represented. Foreign countries represented included Canada, France and Taiwan. On March 1, 1993, the agency commemorated National Weights and Measures Week with a ceremony at the State Capitol. On June 30,

1993, the Bureau of Standards completed thirty (30) years of continuous service to the citizens of Arkansas.

On July 1, 1993, the Arkansas Bureau of Standards was placed under the State Plant Board, as part of an administrative reorganization act. During October, the Bureau hosted the Southwest Assurance Program (SWAP) annual meeting at Hot Springs, in conjunction with the National Institute of Standards and Technology, Office of Weights and Measures.

During the 80th Session of the Arkansas General Assembly of 1995, legislation was passed to construct a Laboratory Complex for precision measurement of volume and length standards. This project, completed in August 1997, included a new volume and length laboratory and training facility for weights and measures investigators.

In October 1995, Arkansas was selected to host the 52nd Annual Southern Weights and Measures Association's Conference for 1997. The conference, held at the Arlington Resort Hotel & Spa on October 26-30, 1997 was attended by all of the southern states, officers of the National Conference on Weights and Measures and representatives of the National Institute of Standards and Technology.

On March 7, 2001, Arkansas adopted the "Model State Weights & Measures Law" and the "Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Inspection Law" as proposed by the National Conference on Weights and Measures. These new laws are Act 586 and 587 of 2001 by the 83rd Session of the Arkansas General Assembly.

Effective July 1, 2003, the Special Testing Section of the Weights & Measures Division was abolished. All petroleum related duties were reassigned to the Petroleum Products Division and scale testing personnel now report directly to the Supervisor of the Weights & Measures Division.

February 13, 2003, marked the passage of Act 112 of 2003. This law transferred the responsibility of the annual certification and test of certain commercial devices such as meters, scales and LPG meters to the owners. The annual fee-based test and certification must be performed by an Arkansas Registered Service Agent employed by the owner of the device.

PAST AND PRESENT
DIRECTORS OF THE BUREAU OF STANDARDS

Tom R. Pugh	July 1, 2005, to Present
James C. Scott	November 1, 2000, to June 30, 2005
James M. Hile	July 1, 1993, to October 24, 2000
James M. Hile (Acting Director)	August 1, 1992, to June 30, 1993
Sam F. Hindsman	August 1, 1973, to July 31, 1992
Grady Brown	January 1, 1973, to July 31, 1973
James E. Holiman (Acting Director)	October 2, 1972, to December 31, 1972
James C. Blackwood	October 1, 1970, to October 1, 1972
James E. Holiman (Acting Director)	September 1, 1970, to September 30, 1970
George E. Miller	May 1, 1967, to August 31, 1970
A. L. Little	July 1, 1963, to April 30, 1967

BUREAU OF STANDARDS PERSONNEL
ADMINISTRATIVE DIVISION

Director	-	Tom R. Pugh
Deputy Director	-	Vacant
Special Testing Division Supervisor	-	Tim Chesser
Administrative Specialist III	-	Sheila Carter
Administrative Specialist II	-	Stormie Winsor
Administrative Specialist II	-	Tiffany Smith

STATE WEIGHTS & MEASURES DIVISION
STATE STANDARDS LABORATORY

Metrology Labatory Manager	-	Nikhil Soman
Metrologist	-	Jill Franke
Metrologist	-	Charles Hawkins
Grain Moisture	-	Randy Burns

WEIGHTS & MEASURES INVESTIGATION SECTION

Bureau of Standards Inspector Supervisor	-	Roger Frazier
Bureau of Standards Inspector - Area 1	-	Don Siefken
Bureau of Standards Inspector - Area 2	-	Stanley Cottrell
Bureau of Standards Inspector - Area 3	-	Tammy Beck
Bureau of Standards Inspector - Area 4	-	Michelle Cooper
Bureau of Standards Inspector - Area 5	-	Shelby Mross
Bureau of Standards Inspector - Area 6	-	Lowell French
Bureau of Standards Inspector - Area 7	-	Lynn Bellott
Bureau of Standards Inspector - Area 8	-	Larry Wornock
Bureau of Standards Inspector - Area 9	-	Richard Slater

Bureau of Standards Inspector - Area 10	-	Brian Terry
Bureau of Standards Inspector - Area 11	-	Tony Winsor
Bureau of Standards Inspector - Area 12	-	Gary King
Bureau of Standards Inspector - Area 14	-	Jack Newberry

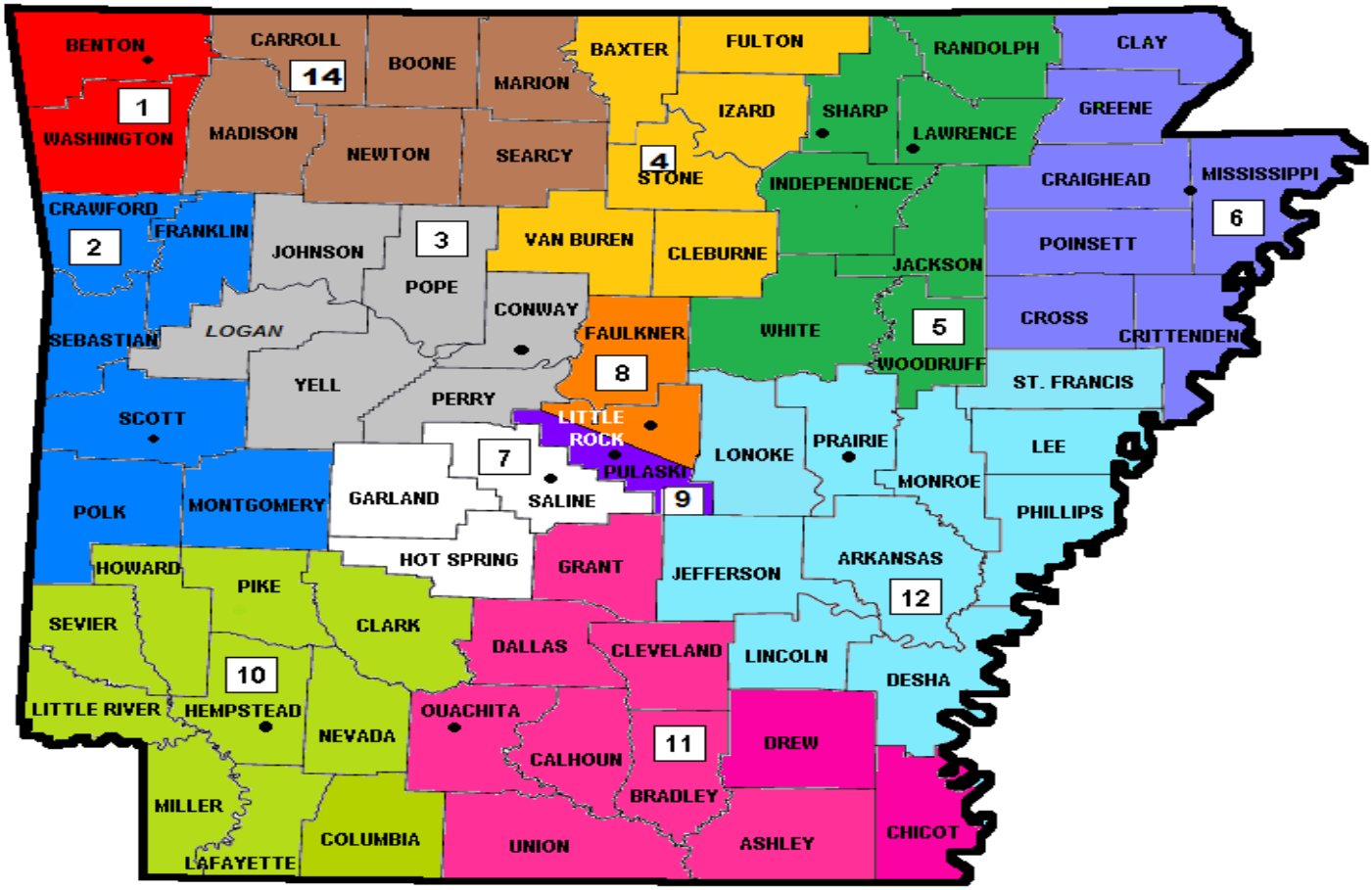
WEIGHTS AND MEASURES SPECIAL TESTING DIVISION

Supervisor LP, CNG, Heavy Scales	-	Tim Chesser
Scale Technician	-	Mike Jones
Scale Technician	-	Kody Kimbrell
LPG Technician	-	Gary Howard

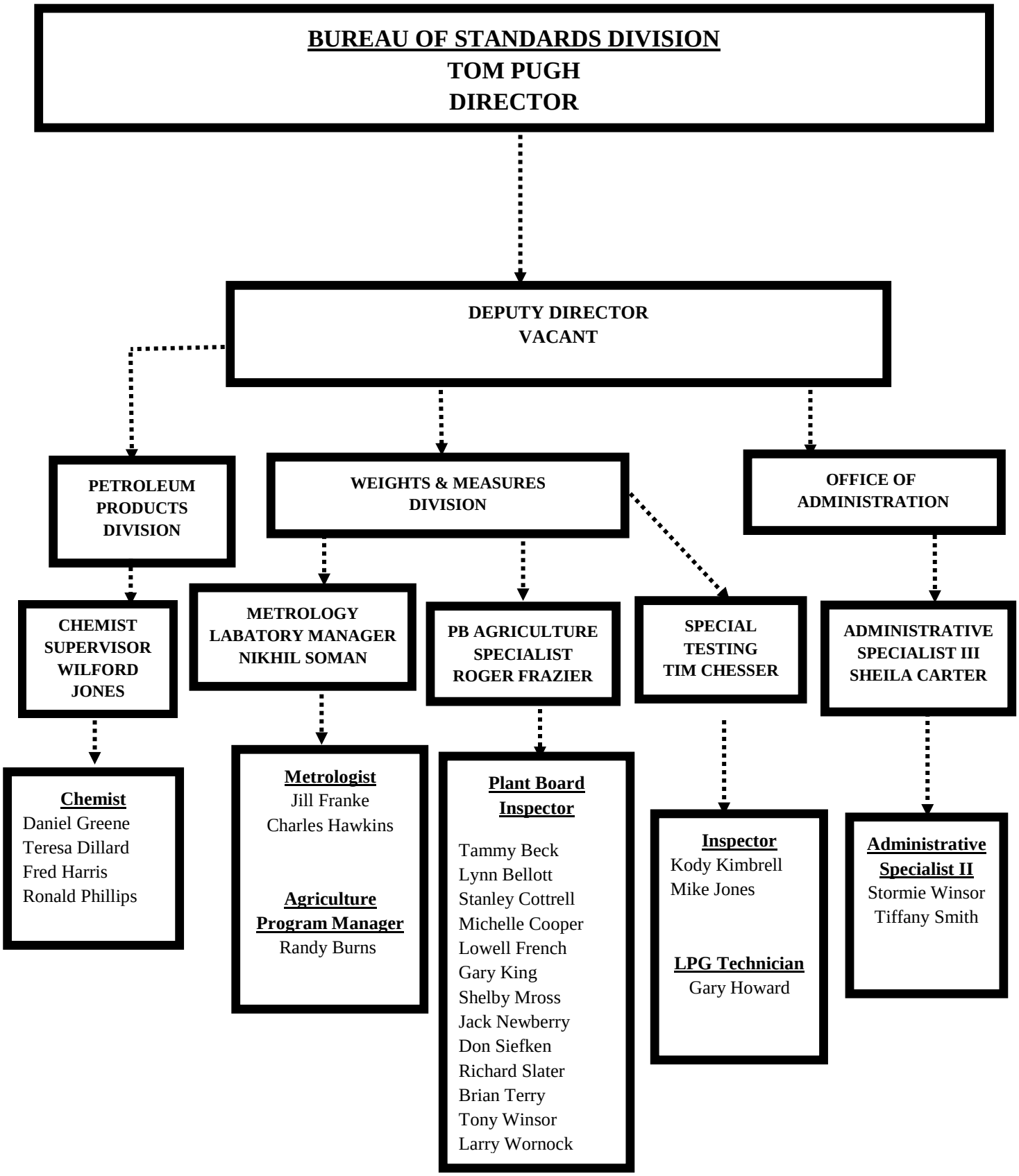
STATE PETROLEUM PRODUCTS DIVISION

Chemist Supervisor	-	Wilford Jones
Chemist	-	Daniel Greene
Chemist	-	Ronald Phillips
Chemist	-	Teresa Dillard
Chemist	-	Fred Harris

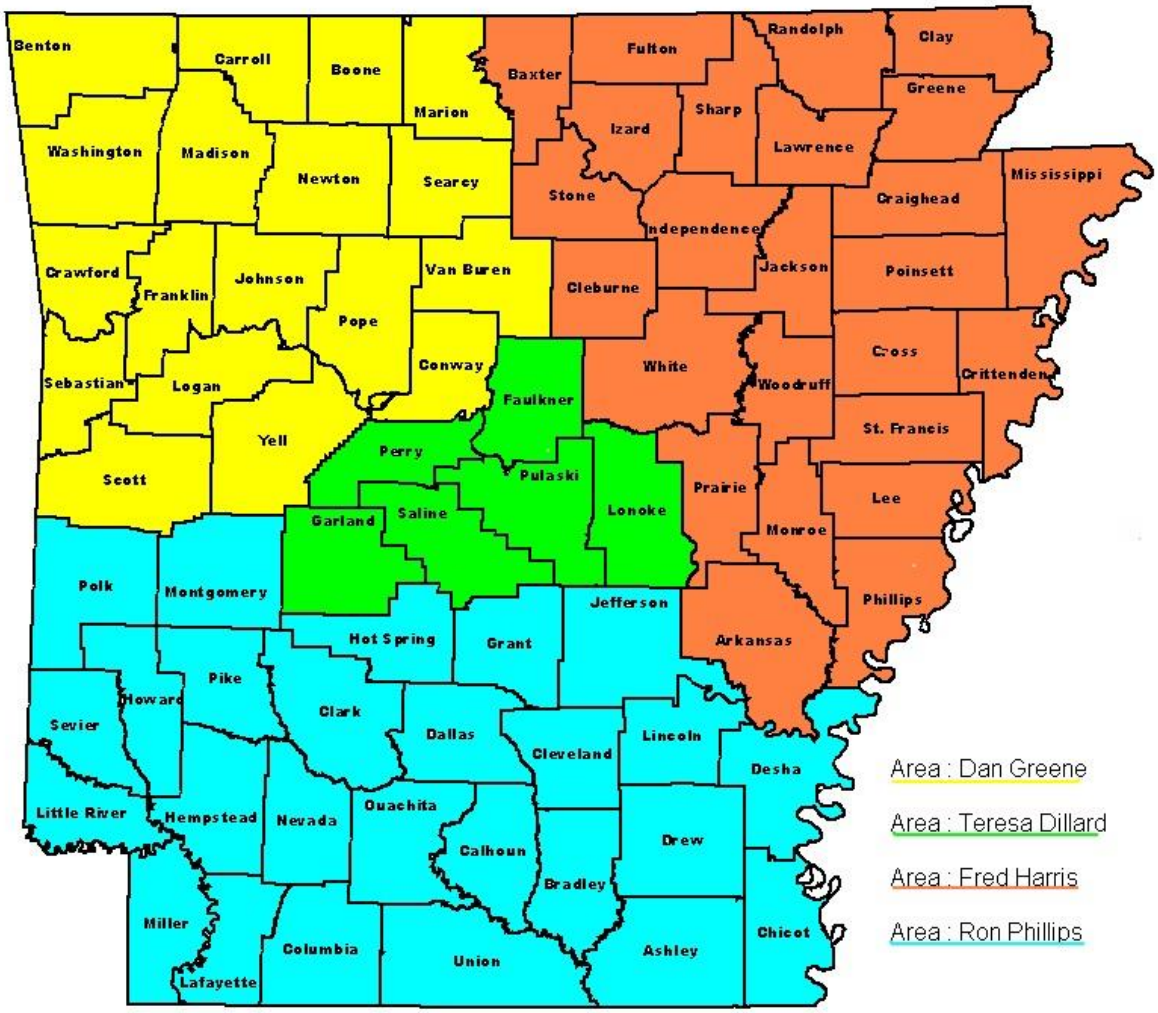
ARKANSAS BUREAU OF STANDARDS
INVESTIGATIVE AREAS BY COUNTY



Area	Investigator	Counties
1	Don Siefken	Benton, Washington
2	Stanley Cottrell	Crawford, Franklin, Montgomery, Polk, Scott, Sebastian,
3	Tammy Beck	Conway, Johnson, Logan, Perry, Pope, Yell
4	Michelle Cooper	Baxter, Cleburne, Fulton, Izard, Stone, Van Buren
5	Shelby Mross	Jackson, Lawrence, Randolph, Woodruff
6	Lowell French	Clay, Craighead, Crittenden, Cross, Greene, Mississippi, Poinsett
7	Lynn Bellott	Garland, Hot Springs, Saline
8	Larry Wornock	Faulkner, Pulaski North
9	Richard Slater	Pulaski South
10	Brian Terry	Clark, Columbia, Hempstead, Howard, Lafayette, Little River, Miller, Nevada, Pike Sevier
11	Tony Winsor	Ashley, Bradley, Calhoun, Chicot, Cleveland, Dallas, Drew, Grant, Ouachita, Union
12	Gary King	Arkansas, Desha, Jefferson, Lee, Lincoln, Lonoke, Monroe, Phillips, Prairie, St. Francis
14	Jack Newberry	Boone, Carroll, Madison, Marion, Newton, Searcy


BUREAU OF STANDARDS DIVISION
TOM PUGH
DIRECTOR
DEPUTY DIRECTOR
VACANT
PETROLEUM PRODUCTS DIVISION
WEIGHTS & MEASURES DIVISION
OFFICE OF ADMINISTRATION
CHEMIST SUPERVISOR WILFORD JONES
METROLOGY LABATORY MANAGER NIKHIL SOMAN
PB AGRICULTURE SPECIALIST ROGER FRAZIER
SPECIAL TESTING TIM CHESSER
ADMINISTRATIVE SPECIALIST III SHEILA CARTER
Chemist
Daniel Greene
Teresa Dillard
Fred Harris
Ronald Phillips
Metrologist
Jill Franke
Charles Hawkins
Agriculture Program Manager
Randy Burns
Plant Board Inspector
Tammy Beck
Lynn Bellott
Stanley Cottrell
Michelle Cooper
Lowell French
Gary King
Shelby Mross
Jack Newberry
Don Siefken
Richard Slater
Brian Terry
Tony Winsor
Larry Wornock
Inspector
Kody Kimbrell
Mike Jones
LPG Technician
Gary Howard
Administrative Specialist II
Stormie Winsor
Tiffany Smith

ARKANSAS BUREAU OF STANDARDS
PETROLEUM INVESTIGATIVE AREAS BY COUNTY



PROGRESS THROUGH THE YEARS

1963 Creation of the Arkansas Weights and Measures Division.

1968 Metrology Laboratory construction completed.

1969 Official dedication of facilities on April 18.

1973 Liquefied Petroleum Gas Testing Program transferred from the L.P. Gas Board to the Weights and Measures Division.

1973 Began development of programs for L.P. Gas, Grain Moisture and Petroleum Quality Control.

1975 Administrative Section and Grain Moisture Laboratory completed.

1975 Petroleum Quality Control transferred from the Revenue Department to the Weights and Measures Division.

1975 Organization of the Weights and Measures Division into four sections: Investigative, Laboratory, Petroleum and Special Testing.

1977 Division of Weights and Measures transferred from the State Plant Board to the Department of Commerce. Petroleum Laboratory completed in November.

1978 33rd annual SWMA Conference held at the Camelot October 22-26, 1978, in Little Rock, Arkansas.

1983 Sam F. Hindsman elected chairman of National Conference on Weights and Measures, 1983-1984. Agency name changed to Arkansas Bureau of Standards and reorganized to include three separate divisions: Laboratory, Petroleum, and Weights and Measures.

1984 The National Conference approved Little Rock, Arkansas as the site for the 72nd National Conference on Weights and Measures annual meeting in July 1987.

1987 72nd Annual Meeting of the National Conference on Weights and Measures held at the Excelsior Hotel July 19-24, with registered delegates and guests. Forty-six states, Puerto Rico and the Virgin Islands were represented. Foreign countries represented included Canada, France and Taiwan.

1993 The Bureau of Standards transferred to the State Plant Board. The Bureau of Standards hosts the annual Metrology meeting of the Southwest Assurance Program (SWAP), in conjunction with the National Institute of Standards and Technology, Office of Weights and Measures in Hot Springs on October 3-8.

1995 Metrology Laboratory Addition approved by 80th General Assembly.

1997 Metrology Laboratory Addition completed.

1997 52nd Annual SWMA Conference held at the Arlington Resort Hotel & Spa, October 26-30, 1997 in Hot Springs, Arkansas.

2001 Acts 586 & 587 of 2001 of the 83rd Session of the Arkansas General Assembly adopted, as law, the National Institute of Standards and Technology "Model State Weights & Measures Law" and the "Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Inspection Law."

The Bureau of Standards hosts the first annual training seminar for registered service agencies and service persons on regulations concerning commercial measuring devices and newly enacted laws and regulations.

The Special Testing Section of the Bureau of Standards initiates a new annual test schedule for mobile Liquefied Petroleum Gas meters by establishing nine locations around the state as test sites for the 860 vehicles presently in operation in the state. This resulted in 100% of the vendor's vehicles tested for the first time, ever.

The Area Investigation Section of the Bureau of Standards implements the first annual thirty day test cycle for the certification of volumetric test measures as a prerequisite to the issuance of annual certificates of registration for meter service companies and individuals.

The Area Investigation Section achieved their goal to test 100% of gasoline meters totaling 37,154 for the first time.

2002 The Bureau of Standards hosted the second Annual training seminar for registered service agencies and service persons on regulations concerning commercial measuring devices and newly enacted laws and regulations.

June 24, 2002, the Bureau hosted the first annual information meeting for scale service technicians.

2004 Effective January 1, the annual test and certification of meters, scales and LPG meters are transferred to the Arkansas Registered Service Agents to comply with the provisions of Act 112 of 2003.

2005 Effective January 1, all Arkansas Registered Service Agents are required to provide security seals approved by the Bureau to any individual employed as a registered technician authorized to perform inspections and tests.

2007 A bio-diesel testing program was designed to ensure bio-diesel quality guidelines based upon Arkansas regulations and ASTM standards. Additionally, the Bureau of Standards provides guidance, technical support, and assistance to Bio Fuels producers and distributors.

2008 Due to rising cost, fuel related complaints have risen significantly.

Effective February 1, 2008, the Bureau of Standards began a Cooperative Agreement with the Federal Agricultural Marketing Service (AMS) to conduct Country of Origin Labeling-Retail Surveillance reviews at covered retail facilities. These reviews are to ensure compliance with the country of origin labeling provisions of the 2002 Farm Bill. The first phase of the reviews consisted of fifteen stores randomly selected by (AMS). The covered commodities are included in Part 60 CFR includes; Farm-Raised and Wild Fish and Shellfish.

2009 Effective April 27, 2009, the Bureau of Standards continued its Cooperative Agreement with the Federal Agriculture Marketing Service (AMS) to conduct Country of Origin Labeling surveillance reviews at covered retail facilities. A total of 55 retail facilities were randomly selected by (AMS). The additionally covered commodities in Part 65 CFR includes muscle cuts of meat: beef, veal, lamb, pork, goat, and chicken. Ground meats include beef, veal, pork, goat and chicken. In addition, fresh frozen fruits and vegetables, peanuts, pecans, macadamia nuts and ginseng are included as part of surveillance reviews.

2010 Effective January 25, 2010, the Bureau of Standards was assigned 86 randomly selected stores to perform COOL reviews in a continuation of the cooperative agreement with (AMS) to conduct Country of origin Labeling-Retail Surveillance inspections.

Effective March 3, 2010, the Bureau of Standards began inspections of precious metal scales located at jewelry stores, pawnshops, and other locations buying gold or other precious metals. The increase in the price of gold prompted many companies to purchase scrap gold and other precious metals. Approximately ninety-eight percent (98%) of the scales were rejected for not being legal for trade.

2013 The Bureau of Standards hosted a training seminar for registered service agencies and service persons on regulations concerning commercial measuring devices. The training provided instruction on laws, regulations, policy, and requirements on inspection and testing of weighing measuring devices.

2014 The Bureau of Standards hosted a training seminar in August pertaining to "Checking the Net Contents of Packaged Goods." The class consisted of fourteen delegates from Arkansas and also included representatives from four additional states. Classes were taught by David Sefcik, technical advisor from the National Institute of Standards and Technology (NIST).

2015 The Bureau of Standards increased enforcement, training and oversite operations with registered service agencies and the businesses they service. This involved additional compliance inspections in the field and classroom training at the Bureau.

STATE PETROLEUM PRODUCTS DIVISION

The State Petroleum Products Division is responsible for assuring quality in gasoline, diesel, bio diesel, alcohol fuels, kerosene and petroleum products in commercial transactions. The Laboratory conducts visual, flash point, sulfur, octane, viscosity, specific gravity, water, sediment, glycerin content, distillation tests on gasoline, and diesel, bio-diesel, kerosene, and aviation fuel collected from retail and wholesale outlets. Technical assistance to the petroleum industry is provided.

The State Petroleum Products Division began operation in June of 1975, investigating complaints with one full-time employee. The Petroleum Quality Laboratory is currently staffed with five Petroleum Chemists.

Engine Fuel Trends

The Petroleum Division preforms unannounced quality test on all wholesalers and retailers annually. In FY 2017, the Bureau checked 3,198 retail and 198 wholesale locations, testing 6,375 petroleum samples; issued 40 violation notices, 84 stop sales, investigated 54 consumer complaints and 16 requested quality samples from industry; 54 locations were issued a penalty violation.

STATE WEIGHTS AND MEASURES DIVISION

An internal reorganization in July of 1983 resulted in the Weights and Measures Division being placed under the direction of the newly created Arkansas Bureau of Standards. During the spring of 1996, the Bureau of Standards underwent reorganization from four to three divisions. In March of 2001 the Bureau was reorganized into two divisions, the State Weights and Measures Division and the Petroleum Quality Division, to comply with the provisions of Acts 586 & 587 of the Arkansas General Assembly. The State Weights and Measures Division is composed of Area Investigation and State Standards laboratory.

Area Investigation

The Area Investigative Section consists of thirteen field inspectors, strategically located throughout the state. They carry out unannounced inspections of packages at retail and wholesale outlets. They also perform price verification inspections to determine the accuracy of advertised commodities, test motor-fuel dispensers, and small capacity commercial scales.

Totals, Fiscal Year 2017

Retail Businesses Inspected	7334
Catfish / Catfish-Like Labeling Inspections	580
Violations	37
Compliant Percentage	94%
Packages Ordered "Off Sale"	3044
Pricing Errors	2339
Motor-Fuel Dispensers Tested	1451
Rejected for Calibration	24
Calibration Rejection Percentage	1.65%
Computing Scales Tested	1765
Rejected for Calibration	1
Calibration Rejection Percentage	.05%
Complaints Received	67
Investigated / OK	54
Rejections / Action Taken	13

Package and Labeling

To assure package compliance, it is necessary adequate and correct information be prominently displayed on a package. The Federal Fair Packaging and Labeling Act of 1966 mandated accurate consumer package information to facilitate value comparisons.

Congress felt another way consumer value comparisons could be improved was through the Package Standards Program outlined in the Fair Packaging and Labeling Act. Packages and their labels should enable consumers to obtain accurate information as to the quantity of the

contents and should facilitate value comparisons. It is the Weights and Measures Inspector's responsibility to enforce these quantity and labeling requirements.

Protecting the Public's Pocketbook

Since the creation of the Bureau of Standards in 1963, a comprehensive field-testing program has been one of the primary goals. Thirteen Area Inspectors, perform unannounced inspections and testing of the following:

1. Random and standard pack packages
2. Retail motor-fuel dispensers
3. Check-Out Scanners
4. Commercial Scales
5. Misleading advertising violations

The Weights & Measure Inspectors occasionally assist the State Petroleum Products Division in collecting motor fuel samples. This cooperative effort between Divisions saves time, money and additional vehicle expense. Numerous complaints are received each year with most being related to motor fuel issues. All complaints are considered a priority and are investigated and documented in a timely manner. The complainants are informed of the results and provided a copy of the report when requested. An alert consumer continues to be one of the Field Inspectors best sources against weights and measures violations.

Commercial Device Testing

The Weights & Measures investigative section is responsible for compliance testing of retail motor-fuel dispensers as well as commercial scales.

Country of Origin Labeling Program (COOL)

The Weights & Measures Section works in cooperative agreement with USDA/AMS to perform routine retail surveillance reviews within the State of Arkansas for the administration of the Country of Origin Labeling (COOL) program.

Large Volume and Retail Motor Fuel Meter Testing

This section is responsible for testing and certification of large volume fuel meters used at airports, pipeline terminals, fuel wholesale loading docks and large truck stops. This certification is accomplished by using a 150-gallon prover.

Liquid Petroleum Gas Meter Testing

One of the duties performed by this section is the testing and inspection of propane meters mounted on delivery trucks and stationary meters located at fueling facilities and campgrounds across the state. These devices are certified annually by Arkansas Registered

Service Agents. Inspectors travel the state making unannounced visits to Propane vendors. The Bureau investigates consumer complaints on devices used to deliver propane (LPG) to the consuming public.

Compressed Natural Gas Meter and Liquefied Natural Gas Meter Testing

Twelve locations have compressed natural gas dispensers and two locations have liquefied natural gas dispensers. The Bureau of Standards has implemented a testing program for these devices. This section ensures every meter is calibrated and certified accurate on an annual basis.

Large Capacity Scale Testing

There are more than1600 heavy truck scales and hundreds of other large capacity scales in commercial use in the state. These devices are certified annually by Arkansas Registered Service Agents. This section performs compliance testing and investigates consumer complaints using specially equipped heavy truck scale test units carrying 32,000 pounds of certified test weights. There are many different types of large capacity scales in Arkansas with a wide range of weighing capacities. Some examples of the types of scales in Arkansas are given below:

Vehicle Scales (30,000 - 200,000 lbs.)
Located at grain elevators, junkyards, wood yards, sand and gravel plants, cotton gins, fertilizer plants, etc.

Livestock Scales (10,000 - 20,000 lbs.)
Located at auction barns, farms, packing houses, etc.

Hopper Scales (500 - 60,000 lbs.)
Located at feed and seed stores, fertilizer plants, etc.

Platform Scales (50 - 2,000 lbs.)
Located at grocery stores, scrap metal yards, feed mills, fertilizer stores, packing plants, chemical companies, etc.

Monorail Scales (up to 1,600 lbs.)
Located in most markets and packing plants

STATE STANDARDS LABORATORY

The State Standards Laboratory is a scientific laboratory devoted solely to the science of precision measurement, and the related calibration of measurement standards. Precision measurement science is probably the most widely used scientific engineering discipline.

The State Standards Laboratory serves as the state's primary standards laboratory and as scientific authority for quality measurement certification. Specifically, the Laboratory (1) maintains the official state standards of mass, length, and volume, (2) calibrates and certifies those standards and scientific instruments which are used by state government, commerce, industry, educational and research institutions, and (3) serves state government and citizens by providing technical assistance in the measurement field.

Most contracts awarded to industries, especially federal contracts, stipulate the standards used in quality control testing that must be calibrated and certified by an institution who maintains legal traceability to the National Institute of Standards and Technology.

The laboratory participates in round robin experiments, training seminars, laboratory workshops, and regional measurement management programs administrated by the National Institute of Standards and Technology.

The laboratory provides calibration and certification of standards for several military industrial companies in Arkansas that produce weapons for the Defense Department. Hospitals and pharmaceutical manufacturers also submit metric mass standards and equipment to our laboratory for calibrations and certification.

Other responsibilities of the State Standards Laboratory include measurements, engineering, manufacturing, and quality assurance. Users of our services range from pharmaceutical firms, hospitals, and U.S. Defense Department and weapons manufacturers to the local gasoline pump mechanic.

For the first time, the Metrology Laboratory successfully obtained National Institute of Standards and Technology Recognition (certification) for a 2 year period. The laboratory must satisfy all requirements of ISO 17025 standard in order to achieve this certification. Listed below is the breakdown of the laboratory workload in the calendar year 2016:

Number of Small Mass Calibrations = 2576
Number of Large Mass Calibrations = 1524
Number of Volume Calibrations = 124
Number of staff members = 3

All calibration work is performed by a trained competent staff using 5 high-resolution precision balances, 64 mass and volume standards, 4 environmental monitoring units and a digital thermometer. This equipment has to be calibrated and serviced regularly to achieve the accuracy and precision needed in legal metrology calibrations.

GRAIN MOISTURE METER LABORATORY

The Grain Moisture Meter Laboratory is a sub-section of the State Standards Laboratory. Moisture content is one of the most important factors affecting the quality of grain and the price the grower receives for that grain. The sole device utilized for determining the moisture content in grain at public grain elevators is the electronic grain moisture meter. The moisture meter has a staggering economic impact on the grain segment of our agricultural industry.

The Moisture Meter Inspection Program is a Bureau of Standards service designed to assure equity and fairness prevail between farmers and public grain elevators in commercial transactions. Specifically, the Grain Moisture Meter Laboratory (1) develops grain standards and specifies basic testing techniques used in the standardization, calibration, and examination of public grain elevator moisture meters, and (2) tests and verifies the accuracy of all commercial moisture meters in Arkansas, thereby assuring grain buyers get what they pay for and farmers don't give away their profits through faulty or inaccurate equipment. Failure to maintain reasonable accuracy may result in injustices in grain marketing transactions and in spoilage of grain during shipment and storage. The Grain Moisture Meter Laboratory is tasked with enforcing state laws by seeing that the moisture meters are accurate. This is accomplished through a comprehensive field inspection and laboratory analysis program.

Participation in the National Type Evaluation Program (NTEP) technical committee provides a steady source of information on many aspects of the grain trade.
As a result, the laboratory participated in surveys to ascertain the precision and accuracy of the current NTEP meters within the state. It should be noted we are able to perform these surveys in addition to our annual testing. In addition to the testing and collection of meters and samples respectively we are assisting the Grain Inspection Section of the U.S. Packers and Stockyards Administration (GIPSPA) in their annual National Sample Collection Program. Laboratory technicians, in addition to GIPSA'S field offices, are collecting representative samples of the state's crops to be used in the NTEP ongoing calibration and testing program. This participation ensures the laboratory has samples in the calibration data pool to promote the state's uniformity within the grain trade.

A total of 285 commercial and noncommercial moisture meters were approved in the calendar year 2016 by one staff member. The standards used for checking these meters are prepared in the laboratory using an oven method.

Looking Ahead

On any given day, every Arkansan makes dozens of purchase decisions at grocery stores, gas pumps, hardware stores or coin metered devices, for a yard of fabric or a gallon of home heating fuel. Consumer trust is built into every transaction by an effective statewide weights and measures enforcement program. Not only is the Bureau of Standards here to protect the interest of the buyer, wage earner, and homemaker, but also to protect the interest of the seller, manufacturer, packer, processor, wholesaler and retail merchant.