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ANNUAL REPORT
FY1995 - 1996

Department of Agriculture
STATE OF ARIZONA

FIFE SYMINGTON
Governor

KEITH KELLY
Director

Arizona Department of Agriculture

1688 West Adams, Phoenix, Arizona 85007
(602) 542-0998 FAX (602) 542-5420

OFFICE OF DIRECTOR

The Honorable Fife Symington
Governor of Arizona

This Annual Report, covering the period from July 1, 1995 through June 30, 1996, represents the fifth full fiscal year of activity for the Arizona Department of Agriculture. The Department was established as a director-led, cabinet level, state agency on January 1, 1991. Many challenges confronted our state agency during FY96.

I announced the appointment in September, 1995 of Brett E. Cameron as the new assistant director for the Department's agricultural Consultation and Training Program. The program is an innovative industry supported, non-regulatory compliance assistance program to aid Arizona's agricultural interests in complying with complex state and federal laws that affect agriculture today. The program is not affiliated with on-going enforcement activity within the Department, and is one of only two innovative compliance programs in the United States.

The entire Department rallied to meet the challenge made by the discovery on March 8, 1996 of the wheat fungus, Karnal bunt. Karnal bunt can reduce crop quality and quantity, but it does not cause illness to humans. In your emergency declaration of March 14, you authorized the expenditure of $200,000 from the general fund for the containment of Karnal bunt. The USDA declared an "extraordinary emergency" on March 20 and quarantined the entire state of Arizona on March 25, 1996. Arizona's wheat crop at that time was valued at over $80 million. While conducting business as usual, the Department opened an auxiliary laboratory and hired approximately 285 new temporary employees to deal with rigorous sampling and testing procedures required by the Federal Quarantine for the 1995 to 1996 wheat crop. The Department has worked continuously with the Arizona wheat industry, the USDA and other states' officials to relieve the onerous and costly quarantine imposed on the state's wheat industry.

The Department's Plant Services Division ports of entry at Yuma, Ehrenberg, Sanders and San Simon, in addition to inspecting commercial vehicles for pests and quarantine violations, assisted the Animal Services Division in intercepting livestock shipments which did not meet Arizona entry requirements. The ports inspectors also were actively involved in the Karnal Bunt program by ensuring that all harvest equipment was processed to prevent the spread of the fungus.

Department officials in late May signed an historical cooperative agreement with the U.S. Department of Agriculture (USDA). The agreement transferred the federal-state inspection program for produce from the Agricultural Marketing Service, USDA, to the Arizona Department of Agriculture on July 1, 1996. The Department took charge of the Nogales port of entry, the second largest port in the United States. The agreement also gives the Department management of USDA's shipping point inspection program in Arizona which certifies produce to a USDA grade for export. These new responsibilities will be handled through Plant Services Division's Citrus, Fruit and Vegetable Standardization program.

The following report describes in greater detail the daily work of the many programs within the Department -- programs associated with our basic mission of assuring a wholesome food and fiber through inspection, regulation, enforcement and promotion.

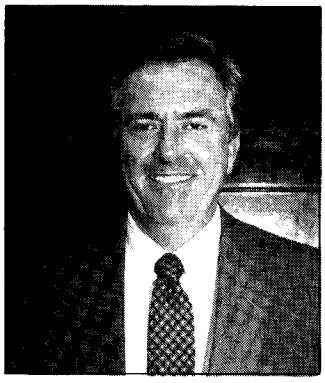
Sincerely,

Keith Kelly
Director

Agriculture Advisory Council

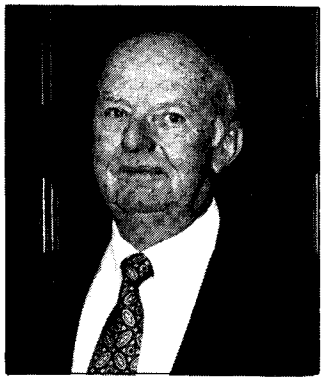
The Arizona Agriculture Advisory Council is a five member group of citizens, appointed by the Governor for five-year terms. Two of the members are actively engaged in animal production as their major source of income; two members are actively engaged in plant production as their major source of income; and one member is actively engaged in agribusiness as his major source of income. A member may continue to serve until his successor is appointed and assumes office. A member may not be appointed to more than one full term plus appointment to fill a vacancy for the remainder of the unexpired term.

The Council reviews agricultural policy in Arizona as established by law and as administered in all functional areas of the Department. The Council assists the Director in formulating administrative rules and the proposed budget allocations among the administrative units of the Department. The Council also reviews, advises and makes recommendations to the director on proposed rules prior to their being adopted.



Ed Boschma
Animal Production

Jolene Vukasovich
Plant Production
Chairperson



Bill Scott
Plant Production

Les Heiden
Animal Production

David Rousseau
Agribusiness

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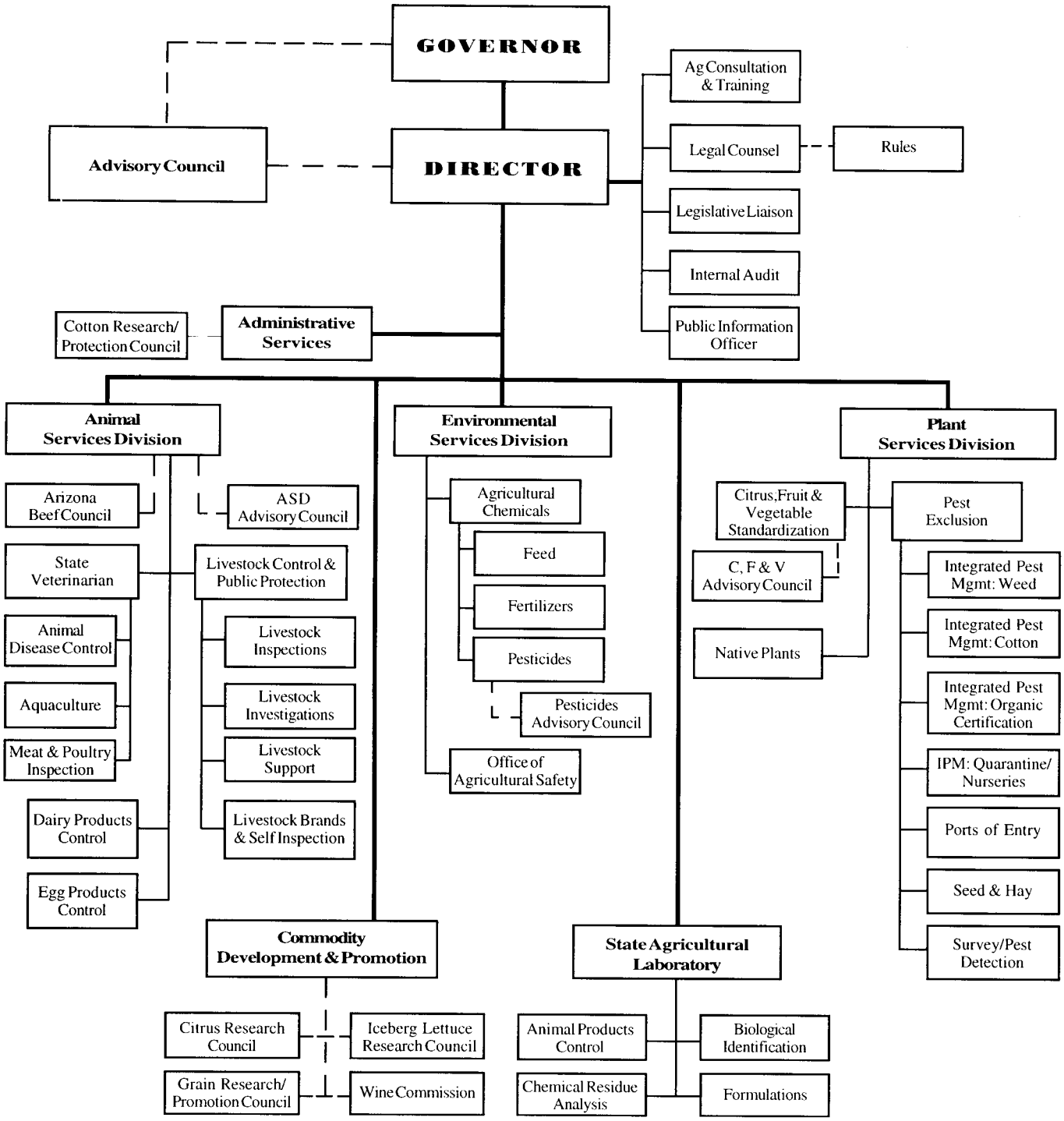
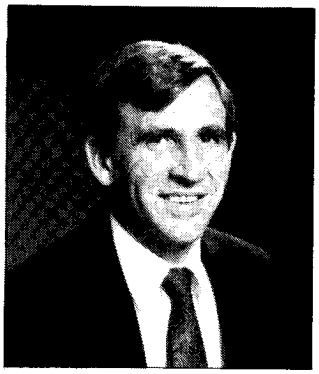
Fiscal Matters

ASD	Animal Services Division
ACT	Agricultural Consultation and Training
AS	Administrative Services
CD&P	Commodity Development and Promotion
ESD	Environmental Services Division
FY96	Fiscal Year 1996 beginning July 1, 1995 and ending June 30, 1996
OOD	Office of the Director
PSD	Plant Services Division
SAL	State Agricultural Laboratory
USDA	U. S. Department of Agriculture

Arizona Department of Agriculture
FY 1995-1996



OFFICE OF THE DIRECTOR



Keith Kelly
Director

DEPARTMENT MANAGEMENT

John Hagen
Deputy Director

Kathi Tees
Legislative Liaison

Andy Thomas
General Counsel

Keith Meyer
Education Outreach Specialist

Ed Sanchez
Chief of Stategic Planning & Budgeting

OFFICE OF THE DIRECTOR MISSION

To direct the Department in a responsible, efficient and effective manner, using general guidelines, which allows each division an independence to develop new methods of operation and means of serving the agricultural community at the least possible cost.

Department accepts U.S.'s second largest produce port

Department officials in late May signed an historical cooperative agreement with the U.S. Department of Agriculture (USDA). The agreement transferred the federal-state inspection program from the Agricultural Marketing Service, USDA, to the Arizona Department of Agriculture on July 1, 1996.

The Department took charge of the Nogales port of entry, the second largest produce port in the United States, and assumed the administrative management of the Nogales grade inspection for all fresh produce entering the U.S. with restrictions. USDA will continue to provide technical assistance in training and licensing inspectors and in maintaining quality assurance.

The agreement also gives the Department management of USDA's shipping point inspection program in Arizona which certifies produce to a USDA grade for export. The signing, held at the Department's home office, was witnessed by officials from Governor Fife Symington's office, the USDA, Arizona State legislators and agriculture industry leaders.

The Department's newest responsibilities will be handled through the Citrus, Fruit and Vegetable Standardization program.

Cameron to head Consultation program

Brett Cameron was appointed as the Assistant Director of the Agricultural Consultation and Training program. Cameron is an 18 year Department veteran whose experience in administering a wide variety of regulatory programs is complemented by an excellent reputation for implementing new programs. The effective date for the promotion was September 2.

The Department's Consultation and Training (ACT) program assists farmers and agribusinesses in complying with complex state and fed-

eral laws that affect agriculture today. Cameron fills the position left vacant by ACT's first Assistant Director Dan Danielson.

Cameron started his career as an agricultural inspector in August, 1977. His most recent position was the *Arizona Grown* program and project specialist in the Department's Commodity Development and Promotion program.

Cameron's previous position allowed him to develop and coordinate the March 1995 Retail Grocery Promotion. He also chaired the Agriculture Day 1995 Committee. He has served agriculture as a native plant law investigator and managed an environmental impact review program, cotton PLOWER/abatement and imported fire ant programs.

General Counsel

Local resort pays first civil penalty for native plant violations

The Department and the Attorney General's Office announced on October 26, 1995 that The Boulders resort in Carefree agreed to pay $20,000 to the state to settle the lawsuit which the Department and the Attorney General's Office filed against it for the unlawful removal and destruction of protected native plants.

The lawsuit, filed on behalf of the Arizona Department of Agriculture by the Attorney General's Office, alleged that The Boulders violated state native plant laws in the removal and destruction of native plants in its construction of a pipeline across its own and surrounding private property.

Although The Boulders and its sub-contractors failed to obtain the proper releases from landowners, The Boulders is to be commended for developing a major resort with a sensitivity towards the fragile Sonoran desert. Since most of the plants affected by the pipeline construction were merely transplanted rather than destroyed, the money represents a significant penalty for failure to obtain the consent of the landowners.

The Department stated that it was a fair settlement that protects both private property rights and Arizona's natural beauty.

The suit, filed on July 7, 1994, is the first civil action filed for violation of the state's native plant statutes. The Department's suit alleged that a pipeline of slightly over one mile in length was built through the area. The Arizona Department of Agriculture will continue to enforce the native plant laws consistent with this dual mission of upholding property rights and preserving protected native plants.

More than 4,000 people attended Ag Day 1996 in March which was held in downtown Phoenix at Patriots' Park. Ag Day is an annual event showcasing Arizona's agricultural industry in an effort to educate the public on the importance of agriculture. Director Keith Kelly, Honorary Chairman, officiated at the noontime ceremonies. Pictured below is OOD's Keith Meyer, Education Outreach Specialist. Meyer chaired the Department's in-house Ag Day committee.

Department assesses large fine for serious category violation

In late November the Department issued a citation for a first ever serious category violation of the state's pesticide laws. The Department also assessed a substantial civil penalty against the pesticide applicator.

The case involved a very clear incident of farm workers' health being put in jeopardy. The Department's action signals a

staunch commitment both to protecting the health and safety of agricultural workers and to ensuring pesticides are used properly.

On November 13 Arizona custom applicator Mor-Crop agreed to pay a civil penalty of $5,400 to settle the Arizona Department of Agriculture's enforcement action against them for a serious category violation.

The citation was issued after an employee of Mor-Crop allegedly sprayed five agricultural workers in a field southwest of Gila Bend. The spraying incident occurred on July 7, 1995 and involved the usage of the pesticides Karate and Vydate.

On November 17 a civil enforcement hearing was held in absentia for Mor-Corp's employee. He did not appear at this hearing. The Department then requested a civil penalty of $7,500 be assessed against him. The hearing was held to determine whether he had committed a serious category violation.

The Department enforces Arizona's pesticide laws under Arizona Revised Statutes 3-361 and Arizona Administrative Code R3-3-301. The maximum penalty allowed for a serious category violation is $10,000.

4,000 attend Ag Day 1996

More than 4,000 people attended Arizona Agriculture Day 1996 held at downtown Patriots' Park in late March. Ag Day is an annual event showcasing Arizona's agricultural industry in an effort to educate the public on the importance of agriculture.

Ag Day 1996 was the state's sixteenth annual salute to its farmers, ranchers and allied industries. Approximately 3,000 people bought an all-Arizona Grown lunch for $1 which was served by members of the Arizona State Cowbelles, FFA and 4-H volunteers. The audience included urban workers, tourists and school children. Thirty-two private and state agencies organized and had educational booths at Ag Day 1996.

Director Kelly served as honorary chairman for the Arizona 1996 Ag Day Committee. The state committee is an all volunteer organization made up of many agricultural commodity groups, including the Department, Maricopa County Cooperative Extension, Arizona Vegetable Growers, Arizona Nursery Association and the Maricopa County Farm Bureau.

The Department also had an Internal Ag Day Committee which worked very hard to portray a positive image of each division to the public at Ag Day. Assistant Director Brett Cameron, ACT, was Department Liaison to the Ag Day 1996 Committee.

Noon ceremonies featured Honorary Chairman Keith Kelly's presentation of the Friend of Ag award to Arnott and Kathleen Duncan, who are active members of the agricultural community. Their farm features a children's farm animals zoo and a farm fresh produce market for the public. The Duncans also have been involved with the state-wide gleaning program.

The Cow Milking Contest, which included four cows, spotlighted local media personalities who coached teams made up of students from area schools. The milking contest winners were Channel 3 weatherman Royal Norman, Arizona Maid of Cotton Sara Shoe and State FFA President Candi Biship.

Director elected officer of NASDA

Director Keith Kelly was elected Secretary/Treasurer of the National Association of State Departments of Agriculture (NASDA) at NASDA's annual meeting in Portland, Oregon in late September. In conjunction with the NASDA meeting, Director Kelly participated in regional and trade association meetings. Director Kelly also served this past year as president of the Western Association of State Departments of Agriculture. Scheduled panel sessions at the NASDA conference focused on the changes facing agriculture policy and agriculture trade in the twenty-first century. Members of NASDA are Commissioners, Secretaries and Directors of the state Departments of Agriculture. NASDA's purpose is to better American agriculture through the development and promotion of sound public policy at the state, territorial and federal levels relating to food and agriculture and agriculture-related or associated businesses or programs. The organization also communicates the vital importance of agriculture to the economy and general welfare of the people of the United States.

Director Kelly appointed to national ag advisory group

The Department's Director was appointed to the Agricultural Policy Advisory Committee for Trade (APAC) [by Secretary of Agriculture Dan Glickman, USDA]. The APAC is a major advisory body that provides information and advice relating to U.S. agricultural trade policy. The APAC is jointly chartered by

USDA and the Office of the U.S. Trade Representative pursuant to the Trade Act of 1974, as amended.

The committee provides information and advice on U.S. negotiating objectives and bargaining positions before the U.S. enters into trade agreements.

In addition, the committee makes recommendations on the operation of any trade agreement once entered into, and on other matters arising in connection with the development, implementation, and administration of U.S. agricultural trade policy.

APAC will play an even more critical and integral role in the trade policy process with the passage of the North American Free Trade Agreement and the negotiation of the Uruguay Round agreement under the auspices of the General Agreement on Tariffs and Trade. [*NASDA News*, September 15, 1995, Volume III, Number 37]

State Legislature passes agriculture bills impacting Department

The general effective date for bills passed during the 1996 legislative session is Saturday, July 20, unless otherwise specified by statute. The 1996 Arizona State Legislature adjourned on Saturday, April 20 after a 104-day session. Among the bills passed and signed by Governor Fife Symington are several that affect Arizona agriculture and the Department in particular:

House Bill 2060 -- Allows the Department of Agriculture to hire livestock inspectors on a full-time basis and gives them additional inspection authority (Chapter 8).

House Bill 2141 -- Gives the Director of the Department of Agriculture additional penalty options for violations of the seed law, including authority to suspend, restrict, deny or not renew a license, along with authority to impose civil penalties (Chapter 3).

House Bill 2143 – Gives the Director of the Department of Agriculture additional penalty options for violations of the hay law, including suspension, restriction, denial or nonrenewal of a license, along with authority to impose civil penalties. Exempts retail dealers from the provisions of the article under certain conditions and exempts hay brokers or dealers whose gross annual revenue from selling hay does not exceed $10,000 (Chapter 229).

House Bill 2235 -- Requires the Department of Agriculture to conduct hearings on appeals of cotton plow-up refunds; specifies that the Department and the Cotton Research and Protection Council shall agree on the criteria to be used; requires the Council to reimburse the Department for costs incurred in the abatement of cotton fields required under the statute, if funds are available, along with other changes (Chapter 266).

House Bill 2283 -- Exempts thoroughbreds and quarter horses that will be used solely for horse racing and horse race breeding purposes and that are registered with the Jockey Club of Lexington, Kentucky or the American Quarter Horse Association of Amarillo, Texas respectively, from statute and rules requiring the horse to have an ownership and hauling certificate; effec-

Director Keith Kelly spoke to Arizona's FFA state office team members when they visited him in late February. From left to right, front row -- Holiday Martel, Black Canyon Vice President; Candi Biship, President. Middle row -- Josh Williams, South Central Vice President; Marcos Moore, Yuma Vice President; Kim Kerr, Estrella Vice President; Director Keith Kelly; Denise Davies, Gila Southern Vice President. Back row -- Jamin Smith, Treasurer; Sam Henry, Reporter; Lance White, Superstition Vice President; Tobe Haught, Northern Vice President; Cheryl Eddy, Secretary.

tive immediately (Chapter 280).

House Bill 2406 -- Adds the requirement that owners of bees specify the location of the hives within a quarter section when notifying persons involved in commercial agriculture of the presence of bees on property, creates a study committee on the notification of pesticide applications (Chapter 340).

House Bill 2372 -- Outlines programs to be included in the Program Authorization Review (PAR) process in 1997 and 1998. The Department of Agriculture's Central Administrative Services, Office of the Director and Agricultural Consultation and Training Program are included for review in 1998 (Chapter 339).

Senate Bill 1234 -- Gives the Department of Agriculture the authority to run a citrus budwood certification program and charge a fee to cover the cost of the program (Chapter 55).

DIRECTOR'S AWARDS -- Director's Award recipients smile for the camera: From left, back row -- Mary Ann Gullion, ASD; Sylvia Shepard, PSD; Ed Foster, CF&V; Peg Eiben, PSD; Doug Marsh, SAL; Kathi Tees, OOD; Director Keith Kelly; RoseMary Martinez; ESD. Front row -- Afam Ugbor, ESD; Stewart Jacobson, ASD; Jo Ellen Woodall, Admin; Lewis Black, CF&V; Paul Knapp, SAL (behind Black); Mark Hernandez, Admin.

Strategic Planning & Budgeting

Sanchez appointed to key agriculture position

Edward J. (Ed) Sanchez has been appointed Chief of Strategic Planning and Development for the Department, Director Keith Kelly announced in early December. His assignment began December 23, 1995.

Sanchez brings a wealth of experience in government to the Department said Director Kelly. Not only does he have a close working relationship with the Office of Excellence in Government, he has worked directly with many of the state organizations involved in farming, ranching and property rights. Sanchez will be a tremendous asset as staff continues its commitment to making the Department more responsive to both the agricultural industry and the taxpayers.

Sanchez comes from the Arizona State Land Department where he served as land policy coordinator. He previously was Deputy Director of the Governor's Office of Community Programs and Public Outreach. From 1989 through 1994, Sanchez was staff assistant to United States Senator John McCain. A native of Phoenix, Sanchez is a graduate of Northern Arizona University.

Director Kelly said that Sanchez's job responsibilities are the result of consolidating two existing positions within the Department.

Employees come together for Department Day 1996

The Arizona Department of Agriculture held its fifth annual Department Day June 11 and 12 at the Bureau of Land Management Training Center in Phoenix. This year's program provided participants with a wide range of topics and speakers which included presentations from guest speakers, an Ag Industry panel, Divisional overviews, the new PRIDE Program and Department awards. Director Keith Kelly kicked off the day with a welcoming address on the Department's accomplishments of the prior year. Director Kelly said that despite the ongoing Karnal bunt situation he was pleased that the Department was able to continue the Department's

commitment to provide a quality event that both educates and recognizes the achievements of the Department and its employees.

Presentations by speakers Chris Williams of Food, Land and People and Peggy O'Sullivan-Kachel of the Governor's Office were well received by participants at the Department Day. The Agriculture Industry Panel also received high marks from Director Kelly and other employees for their thought provoking comments on the future of agriculture.

Department Day also was an opportunity for Roger Smallwood of Administrative Services to initiate the new employee recognition program. A total of 130 employees were recognized for their service to the state. Director Kelly also took a moment to recognize the retirement of ASD's Roy Collier by presenting to him a proclamation from the Governor for his years of service to the Department and state.

1996 Director's Awards

Thirteen Department employees received Director's Awards this year at Department Day 1996. Nominations came from Department employees, and a selection committee determined who would receive awards. The criteria for individuals to serve on this committee was that they be regular Department employees or first line supervisors. Management individuals did not serve on the committee. The committee received a total of 32 nominations, approximately 10 percent of the Department's work force. The quality of the nominees made deciding who was to receive awards very difficult. After discussions, the committee decided to present ten Director's Awards this year. When the scores were added up, there was a four way tie for the tenth Director's Award. Due to the four way tie for the tenth, 13 ADA employees received Director's Awards for 1996. See picture on page nine for award recipients. Congratulations to each and every one of these outstanding Department employees.

Department's first introductory video available

Director Keith Kelly announced in mid-June that the Department's first video on its various programs and Arizona agriculture now is available to the public. The seventeen minute action video briefly covers the activities of each Division, the Department's major regulatory concerns, consumer interests and Arizona agriculture. The video, *A Growing Climate for Today and Tomorrow*, can be used as a lead-in for talks about Arizona agriculture and can be shown at functions such as Ag Day and local and state fairs. Other possible audiences include public television stations, educational facilities and employee orientation. The video was produced by Department staff over the past two years as a result of the strategic planning goal to develop a format for bringing together diverse agricultural groups.

The video's goal is to explain the diversity and complexity of Arizona agriculture to the citizens of Arizona. It also outlines the Department's role as a regulatory and service agency. The following Department staff spearheaded this vital project: Brett Cameron, Jane Gregory and Jim Patterson.

Department and Director's Office meet Karnal bunt challenge

Karnal Bunt Overview/Summary

The period from March 4 to June 30, 1996 has been a challenge the Arizona Department of Agriculture and the Office of the Director have met by using teamwork and principles of good government. The first identification of Karnal bunt in an Arizona wheat field was made in March by the Department's State Agricultural Laboratory during routine seed inspections.

Karnal bunt is a wheat plant fungus which can reduce crop quality and quantity, but it does not cause illness to humans. In response to the discovery of Karnal bunt, the U.S. Department of Agriculture (USDA) declared a Declaration of Extraordinary Emergency on March 20 and quarantined the entire state of Arizona on March 25, 1996. Arizona produced over 335,000 tons of wheat in 1995 at a value of $46,290,000. The value of the 1996 Arizona crop was approximately $80 million.

Director Keith Kelly appointed in mid-March an Industry Karnal Bunt Task Force which is composed of Arizona wheat industry members and Department staff. Its task is to assist the Director and other managers and

program professionals at the Arizona Department of Agriculture in ongoing discussions with USDA. The Task Force, Department and the wheat industry worked with the U.S. Department of Agriculture to produce as workable as possible a 1996 sampling process which outlined pre-harvest testing, harvesting, quarantine and eradication procedures.

The Department also focused on strategies which could help the U. S. Grain Industry develop realistic solutions based on scientific findings. Director Kelly on May 29 delivered the Department's White Paper on Karnal bunt to USDA's Secretary Dan Glickman in Washington, D.C. and to State Commissioners, Secretaries and Directors of Agriculture in Washington, D.C. The position paper advocates science, education, research and perspective as solutions to the problem.

Director Keith Kelly and his staff are planning for the 1997 wheat harvest by preparing new rules that will meet the USDA's scientific objectives and reduce the affects of their imposed quarantine. The Department's plan facilitates the management of Karnal bunt and will be less onerous and less costly to regulate than the USDA's quarantine rules. The following sections outline major events and the impact Karnal bunt has had on the Department and the state's wheat industry.

Karnal bunt detected by State Ag Laboratory

Karnal bunt, *Tilletia (Neovossia) indica*, was identified on March 4 by Ron Ykema, plant pathologist for the Department's State Agricultural Laboratory. Identity of this wheat plant pathogen was initially confirmed in the Department's sample by U.S. Department of Agriculture (USDA) officials on March 5, with final confirmation on March 8. The wheat sample containing the infection was originally submitted to the Department's State Agricultural Laboratory (SAL) for standard seed testing. Detection was made possible due to the diverse technical expertise available and continuing cross training practices utilized within the SAL's biology section.

Detection of this fungal organism has extremely serious economic impact as wheat is the number one export commodity of the United States ($6 to $7 billion annually). A technical panel of scientists from USDA, state officials from Arizona, New Mexico and Texas, along with the SAL's Ron Ykema met at the SAL to formulate recommendations and to set up a testing program. Director Keith Kelly, the Plant Services Division and the State Agricultural Laboratory were part of a Karnal Bunt Task Force that evaluated the situation with the USDA. The lab tested more than 1,000 samples in March to help determine the source and extent of the Karnal bunt problem.

USDA Under Secretary Moos, Director Kelly face Karnal bunt detection in state

U.S. Department of Agriculture (USDA) Under Secretary Eugene Moos arrived in Arizona on Wednesday, March 13, along with various other USDA officials and experts to work with Arizona Department of Agriculture Director Keith Kelly and Department staff on the Karnal bunt detection in Arizona.

The discovery marks the first time this crop-damaging wheat fungus has been detected in the United

CHRONOLOGY OF KARNAL BUNT EVENTS
MARCH 4 - JUNE 30, 1996

March 4 Karnal bunt, *Tilletia (Neovossia) indica*, was identified on March 4, 1996 by the Department's State Agricultural Laboratory.

March 5 The Department's Arizona Grain Research and Promotion Council, at their quarterly meeting on March 5, 1996, were informed by the Arizona Department of Agriculture that Karnal bunt had been discovered through routine sampling of REVA Durum Wheat.

March 8 APHIS confirmed the presence of Karnal bunt in Arizona produced REVA Durum Wheat seed.

March 10 Secretary of Agriculture Dan Glickman held a news conference in which he stated that Karnal bunt was discovered in Arizona; however, the infestation was confined to a small area around Gila Bend, Arizona.

March 12 Secretary Glickman sent Under Secretary Gene Moos and APHIS (Animal Plant Health Inspection Service) Associate Director Terry Medley to Arizona to meet with the wheat industry and develop strategies to deal with the problem.

March 14 Director Keith Kelly, Secretary Moos and Terry Medley met with wheat industry representatives to outline plans to eradicate Karnal bunt. APHIS announced that an eradication program was being considered on all acreage that had been planted with REVA varieties

KARNAL BUNT CHRON see Page 12

States. The fungus was detected in a specific variety of seed at a seed dealership in Phoenix. Known infected fields have been quarantined. Currently, the fungus also is present in Mexico, India and two other countries. A technical advisory group, consisting of representatives from the USDA, the Department, the U.S. Wheat Commission and the agriculture industry, was formed to come up with a plan of action for eradicating the fungus and ensuring its containment. One issue is the possible destruction of infected wheat from quarantined growers. Karnal bunt could have substantial economic implications, as much of the United States' wheat ready for export was detained.

Governor's Involvement

Governor declares state of emergency

Arizona Governor Fife Symington declared a State of Emergency on Thursday, March 14, in the areas of southwestern and central Arizona due to the Karnal bunt detection in wheat crops. "Karnal bunt has the potential to put the entire U.S. international wheat export industry in jeopardy," Symington stated. "We must insure the integrity of the Arizona wheat export industry." The Governor authorized the expenditure of $200,000 from the general fund to be made available to the Director of the Division of Emergency Management for the eradication and containment of Karnal bunt.

Governor meets with USDA over Karnal bunt

Governor Fife Symington and Department Director Keith Kelly met on June 10 with U.S. Department of Agriculture Deputy Secretary Richard Rominger and other key federal agriculture officials to discuss Arizona's concerns that the USDA regulations pertaining to Karnal bunt may be overreaching and pose a threat to the State's economy. "Arizona's entire $6.3 billion agriculture industry is at risk due to USDA regulators," Symington said.

In the meeting he again raised his three primary areas of concern: the creation of an immediate compensation program; a reduction in the size of the quarantined area in light of the fact that over 95 percent of the fields in Arizona have tested negative for the disease; and setting reasonable safe tolerance levels. Symington and Kelly were assured by the federal officials that they would "move forward as expeditiously as possible in the area of compensation."

Funding work plan goes to Legislature

A work plan in which the Department requested a non-lapsing supplemental appropriation of $5.7 million for fiscal year 1996 was sent to the State Legislature on April 12. The regular session ended a few days later; consequently, the Department's request remained unanswered. Available funding for new Karnal bunt employees came from Governor Fife Symington's state of emergency declaration which authorized the expenditure of $200,000. The USDA advanced the state $1.5 million on April 1.

State Ag Laboratory Impact

State Ag Lab tests for Karnal bunt

The State Agricultural Laboratory's (SAL) testing for Karnal bunt spores began in early March and, to date, continues. The SAL's testing not only has included samples from Arizona fields, but also has

KARNAL BUNT CHRON from Page 11

from the two lots that tested positive for Karnal bunt.

March 14 Arizona Governor Fife Symington declared a State of Emergency on Thursday, March 14, in the areas of southwestern and central Arizona due to the Karnal bunt detection in wheat crops.

March 20 The Secretary of Agriculture signed a *Declaration of Extraordinary Emergency*, authorizing him to take emergency action regarding Karnal bunt within the three state areas of Arizona, New Mexico and Texas.

March 22 A meeting was held in the State Capitol to inform the wheat industry of plans by APHIS to eradicate Karnal bunt in Arizona. Speakers were Director Keith Kelly, Russ Schlittenhart, Industry Task Force, and Terry Medley, APHIS. Medley announced that APHIS was considering a quarantine being imposed on a risk based assessment.

March 25 Secretary of Agriculture Glickman placed a quarantine on the State of Arizona. Four counties in New Mexico and two counties in West Texas also were quarantined. The Secretary announced that he was restricting movement of regulated articles from the quarantine areas due to the presence of Karnal bunt.

April 2 Director Kelly formally established the Department's Karnal Bunt Task Force in accordance with Arizona Revised Statutes, Section 3-106(C). Members come from Arizona's wheat

KARNAL BUNT CHRON see Page 13

KARNAL BUNT CHRON from Page 12

industry (growers, shippers, millers, custom harvesters).

April 3 Arizona's Congressional Delegation or staff is briefed about the Karnal bunt situation and its impacts on the state.

April 4 Director Keith Kelly travels to Washington, D.C. to meet with U.S. Secretary of Agriculture, Dan Glickman, regarding funding for Karnal bunt containment in Arizona.

April 4 USDA estimates the total cost of implementing a work plan to address the Karnal bunt situation in Arizona at $19.5 million for a six-month period, and is requesting that the state pay $5.7 million of this amount. This money would be used to cover costs associated with obtaining pre-harvest samples from every wheat field in the state; testing these samples at the State Agricultural Laboratory to determine whether a particular field is infested with the fungus; developing a comprehensive map, pinpointing the areas in Arizona that are positive for Karnal bunt and those that appear to be free from the disease, which may lead to the lifting of federally imposed quarantines.

April 11 Department and USDA hold grower meetings in Litchfield Park, Casa Grande, Yuma and Coolidge to detail pre-harvest, harvest, quarantine and eradication procedures.

April 15 Department and USDA hold grower meetings in the Parker area to explain harvest procedures.

April 15 PSD Associate Director included the testing of samples from grain storage, elevators, handlers facilities and rail cars. Many of these samples came from out of state. The out-of-state samples included numerous samples from the USDA's national Karnal bunt survey, a volunteer survey of the nation's wheat industry.

KARNAL BUNT CHRON see Page 14

As of June 29, 1996 the SAL had tested 10,519 samples from Arizona and around the nation. 1,258 of these samples tested positive for Karnal bunt spores. Projections are for more than 14,000 samples to be processed by SAL in calendar year 1996. The most relevant numbers to Arizona came from the pre-harvest sample results. These sample results indicated the total number of Arizona wheat fields tested prior to harvest and the resulting positive finds.

The harvest began in early May and is expected to be completed by mid to late July. June 27, 1996 results showed that of 4,690 fields, 4,509 fields tested negative for Karnal bunt spores with 182 testing positive for Karnal bunt spores. The 182 fields represent only 3.8 percent of the total fields planted into wheat in 1995/1996. This low percentage of total fields affected by Karnal bunt had a minimal impact on crop yields and the quality of the wheat harvested in Arizona (see table below).

State Ag Lab opens second facility

The University of Arizona's Maricopa Agricultural Center, "Big Mac," facility served as the auxiliary outlet for the state's unprecedented sampling and testing procedure to detect Karnal bunt. The laboratory was located near Maricopa in Pinal County. Assistant Director Dwight Harder, State Agricultural Laboratory (SAL), said that management of the laboratories was part of a team-directed process. The auxiliary lab was staffed to process the overflow of wheat samples from the Department's State Agricultural Laboratory. The narrow window of time in which the harvest had to be completed put extra pressure on the Department's facilities.

State Ag Lab hires new lab techs

The State Agricultural Laboratory hired 104 laboratory technicians and two administrative assistants for Karnal bunt work at the main facility and for the auxiliary lab. Projected new lab employment for both facili-

STATE AGRICULTURAL LABORATORY
Karnal Bunt Spore Sample Results
March 4 -- June 29, 1996

	Total	Positive for Karnal Bunt Spores	Percentage Testing Positive
Samples Tested from Arizona & Nation	10,519 samples	1,258 samples	12% of samples
Fields Tested in Arizona	4,690 fields	182 fields	3.8 % of fields

ties, when fully staffed, was expected to be 144 full- and part-time employees. The SAL's 22 permanent employees saw a complete restructuring of their lab's normal schedule. When both labs were operating, the SAL had overlapping shifts of workers on duty 24 hours a day while Big MAC worked from 4 p.m. to midnight.

National/ International Implications

South African wheat delegation tours Arizona to make purchase decision

Representatives of the South African wheat industry, milling industry and government plant health services in late May toured Arizona wheat elevator facilities, USDA Cooperative Karnal Bunt headquarters, and field pre-harvest locations and rail facilities. An in-depth look was provided the delegation in order to assure them that Arizona wheat can be purchased free from Karnal bunt. The Arizona Grain Research and Protection Council along with the Department facilitated the State focus for the tour. Department members involved were Director Keith Kelly, OOD's Education Outreach Specialist Keith Meyer, PSD's Hay/Seed Program Manager Kathleen Willey and ESD's Brenda Ball.

Affects on Department

Director creates Karnal bunt task force, 4/96

Director Kelly formally established in early April the Department's Karnal Bunt Task Force in accordance with Arizona Revised Statutes, Section 3-106(C). Members came from Arizona's wheat industry (growers, shippers, millers, custom harvesters). Its task is to assist the Director and other managers and program professionals at the Arizona Department of Agriculture in ongoing discussions with USDA to: (1) develop a plan of action for timely, orderly implementation in Arizona; (2) develop a regulatory structure to market Arizona wheat determined to be free of Karnal bunt; (3) assure Arizona growers are treated equitable with other states; and (4) assist on other pertinent issues as deemed necessary.

Department staff works with USDA, 4/96

USDA Karnal bunt team members and the Department instituted a state-wide quarantine on the infected properties, seed, farm equipment, planted wheat and soil. The USDA oversaw the direction and operation of the effort with exceptional assistance from the Department. USDA employee numbers increased from 16 on March 11 to 50 plus as of April 1. Approximately 100 more state-wide USDA employees, as well as more Department staff of similar numbers, were required for the wheat harvest. Districts sites of operation were based on the boll weevil work unit sites for gathering field samples for lab tests. These tests were required to certify Arizona wheat free of the disease before it could be shipped out of quarantined Arizona.

USDA temporarily housed at 1688, 4/96

USDA had to build a force of employees in short order similar to the Department's operation to cope with USDA's objective of eradicating Karnal bunt. This involved having operations staff housed in the Arizona Department of Agriculture's home base at 1688 West Adams,

KARNAL BUNT CHRON from Page 13

tor Ken Boyd attends Western Plant Board meeting in the Seattle, Washington the week of April 15 to 19. Boyd conducted a session on Karnal bunt which led to conditional acceptance from several other western wheat producing states to accept Arizona's Karnal bunt-free wheat for shipment.

April 18 Director Kelly attends National Association of State Departments of Agriculture (NASDA) meeting with Secretary Glickman in Minneapolis, Minnesota.

April 18 Arizona Congressional Delegation writes to U.S. Agriculture Secretary Glickman. In a letter to U.S. Secretary of Agriculture Dan Glickman, signed by the eight members of Arizona's Congressional delegation, they asked that the present Karnal bunt eradication plan to be made more reasonable, workable and fair. Recommendations included adjusting the current state-wide quarantine of Arizona based on results from the pre-harvest surveys, establishing systems for moving wheat and other agricultural products free from Karnal bunt, and fairly compensating Arizona growers.

April 18 Mexico bans wheat from border states. According to Mexico's Secretariat of Agriculture, the ban "respects the domestic quarantine imposed by the U.S. Department of Agriculture." The effect is expected to be negligible as very little of the state's wheat is shipped to Mexico.

KARNAL BUNT CHRON see Page 15

KARNAL BUNT CHRON from Page 14

April 19 A grower meeting is scheduled at 1 p.m. in Willcox.

April 24 Director Keith Kelly met April 24 to 25 with representatives of the nation's wheat growers at the National Association of Wheat Growers meeting in Washington D.C. The rest of the nation's message was that the USDA should take an aggressive, tough stance to stop the spread of the disease. In part, the other states believe the USDA action is required in order to demonstrate to major wheat purchasing nations such as China that the U.S. is on top of the disease and that it will be eradicated.

April 27 As of April 27 the State Agriculture Laboratory has tested 2,671 samples with 517 testing positive for Karnal bunt. These tests are from 1995 or previous wheat seed crop, which includes a few out of state samples, and do not include any 1996 pre-harvest samples.

April 29 In a letter sent to over 2,300 growers, the Arizona Department of Agriculture and U.S. Department of Agriculture asked Arizona wheat growers to participate in a pre-harvest Karnal bunt sampling and testing program. The program's goal is to collect and test pre-harvest samples from every wheat field in the state.

April 29 APHIS Associate Administrator Terry Medley comes to Phoenix. Medley met with representatives of the state's wheat industry on Monday, April 29. He and others including Di-

KARNAL BUNT CHRON see Page 17

Phoenix. USDA staff moved into offices at 1688 to perform computer, public affairs, administration, mapping, personnel, procurement, sampling and regulatory functions. The following rooms housed USDA staff: 125, Ag Mediation (first floor), 306, 307, 309, 317, 321, 403, 404, 425. USDA also used any available conference room for meeting purposes.

Karnal bunt impacts Department hiring, 4/96

The Department hired more employees because of the unprecedented Karnal bunt pre-harvest sampling and testing procedure. The Department's Human Resources program initiated a major statewide recruitment campaign to fill over 230 non-covered (exempt) positions. Of that amount, over 90 percent were field personnel and laboratory technicians. When all positions were established, the total came to 236. This number included the following 101 positions: lab technicians, lab managers, plant pathologists, administrative assistants and EDP data base specialists ranging from grade 14 to 20. Plant Services Division projected to hire 133: Ag inspector IIs, Ag inspector IIIs, administrative assistants, administrative services officer IVS, administrative services officer IIs and EDP data base specialists ranging from grade 13 to 23. Also included in the total of 236 was one administrative assistant grade 17 and one fiscal services specialist grade 15 for Administrative Services.

USDA Karnal Bunt Staff move out of 1688, 5/96

The USDA Task Force on Friday, May 10, left the Arizona Department of Agriculture home offices at 1688 West Adams and moved to new headquarters. The new USDA address is: Cooperative Karnal Bunt Project, 3658 E. Chipman Road, Phoenix, Arizona 85040, at (602) 414 - 4740.

Director responds to hiring urgency, 5/96

Director Keith Kelly said that bureaucracy was not a roadblock to the Department's hiring efforts for the Karnal bunt program. The Department received outstanding support and cooperation from the Arizona Department of Administration's Human Resources in creating new positions. The Department hired as fast as personnel could interview and determine that the candidates had the necessary qualifications. The challenge was to identify enough candidates to provide an adequate hiring pool. The State Agricultural Laboratory and PSD's new hires totaled 285.

New hires, 6/96

As of June 4 the Department's 285 new employees were in the thick of an unprecedented pre-harvest sampling procedure to detect Karnal bunt in the 1996 wheat crop. The new hires were being paid from Governor Fife Symington's March 13, $200,000 emergency fund authorization and by a $1.5 million United States Department of Agriculture cost share advance to Arizona.

Industry task force meets to review wheat harvest, 6/96

The Arizona Department of Agriculture Industry Karnal Bunt Task Force and the Arizona Grain Council met in late June to review the 1996 Arizona wheat harvest and new Karnal bunt developments. Since the wheat harvest was over 95 percent complete at that time, Director Keith Kelly wanted to review compensation issues, the need of a tolerance level for Karnal bunt and the need to reduce the quarantine based on known

pre-harvest test results. Agenda items included the following: (1) harvest progress and update; (2) national survey; (3) compensation; soil and produce compliance restrictions; (4) tolerance level for Karnal bunt; and (5) quarantine guidelines and revision proposals. Director Kelly also appointed an industry sub-committee on managing Karnal bunt which will meet in early July.

Getting the Word Out

Director meets with National Wheat Growers Association

Director Keith Kelly was in Washington, D.C. in late April to meet with representatives of the nation's wheat growers. Their message, in regard to the current Karnal bunt situation in Arizona, was that the U.S. Department of Agriculture (USDA) should take an aggressive, tough stance to stop the spread of the disease. In part, the other states believe the USDA action is required in order to demonstrate to major wheat grain purchasing nations such as China that the U.S. is on top of the disease and that it will be eradicated.

Boyd leads Karnal bunt session at Western Plant Board annual meeting

Associate Director Ken Boyd, Plant Services Division, represented Arizona as a board member and participated at the Western Plant Board's seventy-seventh annual conference in Seattle, Washington in mid April. Boyd conducted a session on Karnal bunt which led to conditional acceptance from several other western wheat producing states to accept Arizona's Karnal bunt-free wheat for shipment. Other western states and western Canada conference reports included an update on Karnal bunt

Director Kelly meets with U.S. Secretary of Agriculture

Director Keith Kelly in late May met with U.S. Secretary of Agriculture Dan Glickman to present the Department's White Paper on Karnal bunt. The White Paper explores three scenarios which focuses the discussion on strategies which can help the U.S. Grain Industry develop realistic solutions to the Karnal bunt problem. Kelly met in Washington, D.C. at the same time with state commissioners, secretaries and directors of agriculture to discuss Arizona's position on Karnal bunt.

Kelly also took with him recommendations from the Department's Karnal bunt task force. The USDA had asked for input from those most directly affected by the fungus at the local level. The Task Force response addressed issues such as allowing full marketability of Arizona wheat certified free of Karnal bunt. A second issue for the Task Force was compensation of growers who may not be able to take their crops to market, due to detection of Karnal bunt at a zero tolerance level.

Director Kelly discussed with Secretary Glickman the level of funding required to battle the Karnal bunt disease in Arizona. Kelly asked what cost sharing funds could be made available to Arizona from USDA. USDA estimates it will take $19.5 million to fight Karnal bunt in Arizona, including the $8 million in

USDA's Under Secretary Eugene Moos, International Affairs and Commodity Programs, spoke to Arizona media representatives on March 14 from the Department's conference room at 1688 West Adams. Moos updated state media and industry representatives on the Karnal bunt situation.

KARNAL BUNT CHRON from Page 15

rector Keith Kelly answered questions about Karnal bunt.

May 1,3 Wheat growers sign-up for pre-harvest testing. As of May 1 a total of 434 growers signed-up for the pre-harvest sampling and testing procedure. As of May 3 a total of 176,680 wheat acres will be included in the pre-harvest sampling. Not all work units have reported at this time.

May 9 Michael Dunn, USDA Assistant Secretary comes to the State Ag Department. At the May 9 meeting of Arizona wheat industry and grower representatives, Assistant Secretary Dunn announced that flour millers will be eligible for $35 per short ton to heat-treat millfeed processed from wheat obtained from quarantined areas. This compensation action is expected to open shipments to markets out of state.

May 9 Producers and handlers will be eligible for compensation based on the actual difference between contract or market price and the price they can get for wheat infected with Karnal bunt.

May 18 Arizona Department of Agriculture undergoes massive hiring campaign. Over 200 well-paying positions, requiring a high level of qualifications have been hired, taking the total number of State Ag employees to over 500 in less than 60 days. More than 97 percent are field inspectors and laboratory technicians, as opposed to management or administrative personnel.

KARNAL BUNT CHRON see Page 18

compensation to growers through harvest and clean-up. In negotiations already begun toward a cooperative agreement, USDA has asked Arizona to contribute $5.7 million toward that six-month's budget. The entire Arizona Department of Agriculture general fund budget for the fiscal year beginning July 1, 1996 is only $10.4 million.

Karnal bunt featured at bi-national meeting

Both Arizona and Mexico's state of Sonora agreed in early May to support the wheat producers of Arizona in their effort to export wheat through the Port of Guaymas. The two states met at the 1996 Arizona-Mexico Commission's Plenary Session in Ciudad Obregon, Sonora, Mexico. The bi-national meeting drew more than 300 business and community leaders, border-issue scholars, state, local and federal officials.

In attendance from the Arizona Department of Agriculture were Director Keith Kelly, PSD's Associate Director Ken Boyd, CD&P's Assistant Director John Wake, Supervisor of Citrus, Fruit and Vegetable Al Davis, CD&P's International Market Development Specialist Gina Broyles and Fred Meyer, USDA/ Karnal Bunt Task Force. Also in attendance were several representatives from Arizona's wheat industry including Russel E. Schlittenhart, Dick Cooley, Michael E. Kelley, Dr. Al Simons, John C. Skelley and Stephen Sossaman.

Department responds to USDA quarantine

Included in the USDA March 25 quarantine was a provision for comment by anyone with a Karnal bunt concern. In his formal response to the USDA imposed quarantine, Director Keith Kelly on May 23 stated that:

(1) The emphasis of the quarantine should be on the risk of spreading Karnal bunt and not on the control of the spore.

(2) Grain moving to mills and/or export destinations is always to expedite the end use of the grain. The transport of wheat by-products and grain with low spore numbers should not be an issue.

(3) To protect the United States from Karnal bunt, non-bunted wheat could be certified "free from" if the wheat has been sampled at the appropriated protocol and no bunted kernels or only low levels of spores are present.

(4) The Arizona Department of Agriculture supports testing and eradication to the extent that the disease is not manifested in wheat crops and to the point where spore counts can be managed at levels that constitute a low risk in the shipment of grain.

(5) The Department believes that planting seed should be properly treated and must be free of spores and bunted kernels.

(6) The Department believes that reasonable common sense equipment sanitation should be maintained in established quarantine areas.

(7) Immediately following the 1996 crop year harvest, a reasonable quarantine process needs to be implemented, designed to create "free from" areas where no evidence exists that fields are likely to manifest the disease.

Karnal bunt symposium on the World Wide Web

The American Phytopathologi-

cal Society (APS) hosted a free, interactive, on-line symposium on Karnal bunt from June 24 to August 2 on the Internet's World Wide Web. It featured papers from noted Karnal bunt experts, as well as from other wheat scientists.

The Department's White Paper on Karnal bunt published in May was part of this group. Participants asked questions of the experts and other attendees via electronic mail. The site, http://www.scisoc.org, featured other Internet links and a folder of press clippings about the ongoing status of the disease and its management.

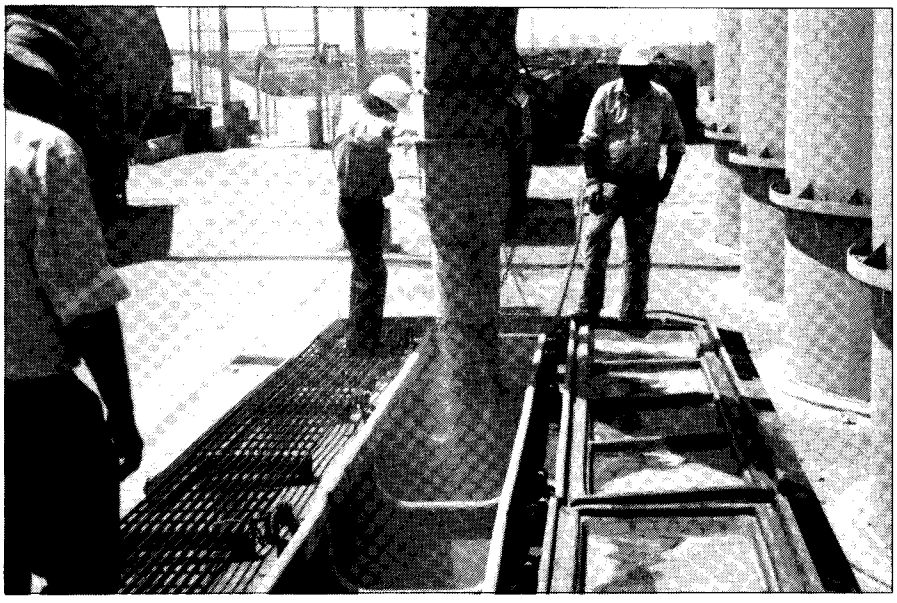
Pre-Harvest Surveys and Testing

The pre-harvest survey and the traceback activity went well. There was a fairly good correlation between the traceback activity showing where contaminated seed came from and was planted and the fields that tested positive for Karnal bunt. There were still some unknowns. For example, occasionally an isolated field tested positive in the pre-harvest test and, yet, there was no apparent connection with infected seed or equipment nor was the field near other positive fields.

More information was needed to resolve these unknowns. The Department continues to work towards the goal of reducing the size of the quarantine area.

As information from the pre-harvest and harvest surveys came in, the Department was able, by incorporating the information onto the traceback information, to identify wheat growing areas free from any possible contamination of Karnal bunt. Eventually, these areas should be eligible for "free from" status.

A railcar is loaded with wheat as a train is readied for shipment from Arizona. After the car is filled with approximately 200,000 pounds of wheat, sampling procedures are followed. Sample results are returned in 24 hours, and the wheat is shipped if tests are negative for Karnal bunt.



KARNAL BUNT CHRON from Page 17

May 22 Director Keith Kelly takes action to move Arizona wheat to market. Bay State Milling of Tolleson, Arizona, is relieved of federal requirement by Arizona Department of Agriculture agreement for their local wheat milling facility. The action by the Department allows for milling by-products to be sold for animal feed before it is "heat treated."

May 28 Director Keith Kelly authors White Paper focusing on long range solutions to the Karnal bunt problem. The paper was delivered by Director Kelly to U.S. Secretary of Agriculture, Dan Glickman and heads of state departments of agriculture in Washington, D.C. on Wednesday, May 28.

June 11 Governor Fife Symington appeals to U.S. Secretary of Agriculture, Dan Glickman, to ease the statewide quarantine in Arizona. However, the Secretary's answer was not welcome news as he told Governor Symington that the quarantine was justified and that testing standards would not be relaxed.

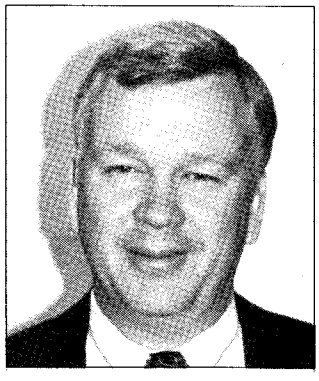
June 14 USDA issues compensation plan for farmers and handlers impacted by the Karnal bunt quarantine.

June 30 Pre-harvest sampling lab results are in for the 1996 crop. 4,509 fields tested negative for Karnal bunt spores. 182 positive samples for Karnal bunt have been detected from a total of 4,690 fields. Only 3.8 percent of the fields tested positive which indicates the minimal impact of the disease on Arizona wheat.

DEPARTMENT MISSION

In an open and public process, the Arizona Department of Agriculture will promote and enhance the economic vitality of the Arizona agricultural community in an environmentally sound manner while ensuring wholesome food and fiber for the consuming public. This will be accomplished by providing more effective services in the most cost efficient manner.

AGRICULTURAL CONSULTATION & TRAINING



Brett Cameron
Assistant Director

PROGRAM STAFF

Rick Stillion
Field Consultant

Margaret Helfrich
Administrative Assistant

MISSION

To provide expert on-site guidance to the agricultural community in a non-enforcement posture on regulatory matters administered by the Arizona Department of Agriculture.

Background

During the 1994 legislative session Senate Bill 1373 was passed requiring the Department to develop and implement an Agricultural Consultation and Training program (ACT). This legislation was supported by diverse segments of Arizona's agricultural industries and has been characterized by industry representatives as a new era of partnership with state government.

Cameron Appointed to Head Agricultural Consultation and Training Program

FY96 marked a complete transition in the leadership and staffing of the Agricultural Consultation and Training program. ACT's first assistant director, Dan E. Danielson, left state service in the summer of 1995 to pursue other endeavors. In September 1995 Director Keith Kelly appointed Brett E. Cameron as the new assistant director for ACT.

Cameron is an 18 year Department veteran whose experience in administering a wide variety of regulatory programs is complemented by an excellent reputation for implementing new programs. Director Kelly said that Cameron brings a long history of agricultural experience to his new position. Cameron's appointment signals the strong, continuing commitment the Department is making to help Arizona's agricultural community comply with the ever-increasing and complex state and federal laws that affect agriculture today said Kelly.

Upon the announcement of his appointment Cameron said, "as the new ACT assistant director, I want to thank Director Kelly for the opportunity to continue the development and implementation of the Department's newest program that will prove to be a valuable service for Arizona's agricultural community. I have new plans and ideas and a definite direction of where I would like to see this program go."

Shortly after his appointment, Cameron was faced with filling the program's consultant position left vacant when David Villa chose to enter the private sector. Rick Stillion, Field Supervisor from the Plant Services Division's, Citrus, Fruit and Vegetable Standardization program, was chosen as Villa's replacement. Stillion has been with the Department since joining CF&V in 1987 as an inspector. His horticulture background and excellent rapport with the produce industry should prove to be a valuable asset to ACT.

In March 1996, MargaretHelfrich

CUMLATIVE TRENDS OF REGULATORY TOPICS JUNE 30, 1996

Worker Protection Standard	59%
Pesticide Record Keeping/Reporting	26%
Other Pesticide Related Questions	8%
Other Issues	7%
TOTAL	**100%**

was chosen to fill the program's Administrative Assistant I support staff position. Helfrich started her career with the Department in January 1994 and has worked in Administrative Services and the Office of Commodity Development and Promotion. Her tenacious ability in tracking down information and her attention to detail will serve ACT well.

Overview

ACT is an innovative compliance assistance program unique to an agricultural regulatory agency. The program is not affiliated with ongoing enforcement activity within the Department. Detected violations are not made available to regulatory personnel except in cases of imminent danger where human health and welfare are concerned.

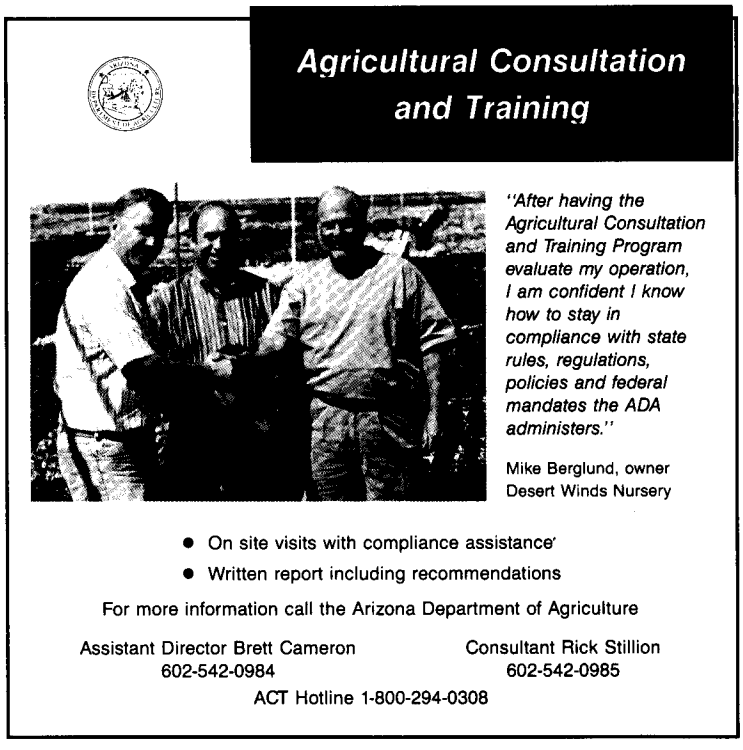
The ACT program functions through subject-specific requests from the agricultural community for on-site visits to provide compliance assistance recommendations in a non-regulatory mode. The final product of the visits is a detailed evaluation report tailored specifically to the requested subject. The report details information discussed during the visit as well as any corrective recommendations if applicable.

Goals and Focus

The initial focus of the program was twofold: industry outreach and internal program development. This process began by establishing an office separate from any existing enforcement programs. ACT also physically located its new offices away from the enforcement programs. The second step involved hiring field and support staff and educating as many industry representatives as possible about the program.

ACT program goals include: providing timely and accurate assistance to the agricultural community by interpreting and implementing state and federal regulations and increasing compliance through voluntary actions based upon the program's consultative services.

Outreach efforts to meet these goals included the following: (1) speaking engagements to Arizona agriculture groups; (2) submission of articles to industry trade publications; (3) placement of ads in industry trade publications; (4) staffing of



ACT has received help from the agricultural industry in getting the word out about its program. This ad and others like it were published in ag industry newsletters and magazines whenever there was extra space. Brett Cameron, left, and Rick Stillion, center, shake hands with Mike Berglund, nurseryman, right.

informational booths at industry trade shows and annual meetings; (5) a cooperative project with the Arizona Farm Bureau in the creation of an ACT Regulatory Checklist; (6) a brochure of the program's services; (7) creation of handouts for the regulated community to use as guidelines in complying with specific regulations; and (8) the program's "1-800" number (1-800-294-0308) to provide toll free, statewide access to the Department's consultative services.

Current Activities

On-site visit requests increased at a steady rate except during the initial onslaught of Karnal bunt in March. ACT personnel answered these requests by responding to a wide variety of compliance-assistance questions by telephone, in writing and through on-site visits, in addition to providing appropriate referrals to other agencies or organizations.

The program initially targeted pesticide programs, and as anticipated, the federal Worker Protection Standard (which became effective January 1, 1995) was the topic which received the most questions.

Pesticide record keeping and reporting questions continued to be the second highest category of requests. The chart on this page shows the trends of regulatory topics related to these efforts.

Examples of other types of questions related to pesticide issues addressed by ACT have included pesticide storage protocols, needed licenses, early entry requirements, etc. Issues over which ACT has no authority were referred to other agencies, but, whenever possible, out-

SUMMARY OF COMPLIANCE ISSUES
07/01/95 - 06/30/96

Issues Addressed by ACT	Number of Issues	Approximate Percentage
WPS: Training Record Keeping	26	11
WPS: Central Posting	25	11
WPS: Worker Training	22	10
WPS: Handler Training	16	7
WPS: Personal Protective Equipment	13	6
WPS: Pesticide Application Record Keeping Requirements	13	6
WPS: Decontamination Site	12	5
WPS: Worker\Handler Cards	11	5
Pesticide Storage Requirements	11	5
WPS: Early Entry Restrictions	11	5
WPS: Posting Requirements for Greenhouses/Nurseries	7	3
WPS: Contract Labor Training Requirements	7	3
Pesticide Container Disposal	6	3
WPS: Working Safely with Pesticide Application Equipment	6	3
U.S. DOL: Registration -- Farm Labor Contractor	5	2
WPS: Heat Stress Management	5	2
WPS: Contract Grower Requirements	4	2
Ground Water/Restricted Use Pesticide Reporting Requirements	4	2
U.S. DOL: Transportation Requirements	2	1
WPS: Custom Applicator Applicability	1	.5
WPS: Employees with California Training Cards	1	.5
Pesticide Applications: Ground History Record Keeping	1	.5
ESD: Pesticide Sales Record Keeping Requirements	1	.5
ESD: Form 1080 Filing Requirements	1	.5
ESD: WPS Compliance Procedures	1	.5
ESD: License Requirements: Pesticide Applicators	1	.5
PSD: License Requirements: CF&V	1	.5
ESD: Requirements for Pesticide Applicator Name Change	1	.5
PSD: Arizona Nursery Association Information	1	.5
PSD: Ozonium Free Nursery Certification	1	.5
PSD: Citrus Nursery Stock Importation	1	.5
PSD: Scale Insect Pest Rule	1	.5
PSD: White Fly Rule	1	.5
PSD: Transportation/Inspection of Plant Material	1	.5
PSD: Propagation/Export of Nursery Stock	1	.5
Total	**222**	**100**

The above chart is a detailed summary of compliance issues addressed by the Agricultural Consultation and Training program during FY96.

NUMBER OF PRINTED ARTICLES FY96

Publication	Times Appeared	Circulation in-state	Circulation out of state	Total
Arizona Farm Bureau News	3	4,250	50	12,900
Southwest Horticulture	2	1,420	451	3,742
ADA Employee News	7	500	N/A	3,500
ADA Ag Activities	7	270	N/A	1,890

reach material was provided to questioners. A total of forty-two referrals were made to other state and federal agencies. The appropriate referral information was given to the questioner so as not to compromise the confidentiality of the program. Program personnel are developing consultative services relative to other Department programs in concert with program managers and industry needs. A second edition of the *Agricultural Consultation and Training Newsletter* was distributed to over 2,500 agribusiness people regulated by the Department.

Twenty-seven regulatory checklists/attachments were created to be used as handouts to the regulated community. Appropriate attachments were included with on-site visit reports and distributed at trade shows, annual industry meetings and through direct mailings. A total of 3,001 attachments were distributed by mail, as handouts and with on-site visit reports.

Informational articles were published for industry specific publications explaining how the program functions and outlining specific issues the program had addressed to-date. The above chart outlines the number of printed articles which appeared during FY96.

Outreach Activities

- Program staff appeared on a Yuma, Arizona television show which covers southwestern Arizona and southeastern California.
- Ads, featuring an industry representative being quoted on the benefits of using the program, were developed for industry publications and appeared twice in Arizona Nursery Association's *Southwest Horticulture* magazine. Costs associated with the development and production of the ads were provided by the Arizona Nursery Association.
- Program personnel staffed informational booths at the annual Southwest Horticultural Trade Show and the annual meeting of the Arizona Farm Bureau Federation.
- A cooperative project with the Arizona Farm Bureau in the printing of the ACT Regulatory Checklist in the *Farm Bureau News* was begun.

National Attention

The Department's Agricultural Consultation and Training program has received national attention. The U.S. Environmental Protection Agency (EPA) has requested ACT program staff to give presentations on Arizona's program at EPA sponsored meetings. Other states also have requested in-depth program information on the Department's newest addition.

ANIMAL SERVICES DIVISION

Sheldon R. Jones
Associate Director

PROGRAM MANAGERS

Dr. Rick Willer
State Veterinarian/ Meat and Poultry Director

Roy Collier
Dairy Supervisor

Dart Easterday
Egg Supervisor

Kevin "Zeke" Austin
Investigations Supervisor

Ellis Kane
Meat and Poultry Supervisor

Ralph Valenzuela
Chief Livestock Officer

MISSION

To serve the citizens of Arizona by protecting livestock from theft; livestock, poultry and commercially-raised fish from contagious and infectious disease; and the public from unwholesome meat and meat products, milk and milk products and eggs and egg products. The Division is enjoined to enforce and uphold state laws concerning the movement, sale, importation and slaughtering of livestock; together with statutes regarding all its other regulatory responsibilities; in a commitment tempered with reasonableness, sensitivity and practicality and to the needs of the various commodity groups and the general public. Employees of the Division — all inspectors, sanitarians, veterinarians, livestock officers, investigators and staff members alike — are committed to maximum productivity and efficiency, while at the same time conducting Division business with thoroughness, timeliness, accuracy and diplomacy. Division management is committed to enhancing multidirectional communications, making the best use of resources on hand, and testing and using innovative techniques and creative employee ideas as appropriate. The word "integrity" will remain as the cornerstone of the Animal Services Division's relations with its employees, the industry, and the public.

The Animal Services Division (ASD) came into being in 1991 as a result of the formation of the Arizona Department of Agriculture. This Division deals with -- as its name implies -- the regulation of and law enforcement for all aspects of the animal segment of Arizona agriculture.

Its tasks range from insuring that the public has wholesome and safe animal-derived food products to protecting the livestock industry from theft and disease. Within this range of responsibilities, ASD has a number of important and interesting duties.

Palo Verde Drill

The Department is a major contributor to the State's response ability should a nuclear incident occur at the Palo Verde Nuclear Generating Station located west of Buckeye. In preparation for a practice "drill" scheduled for October, 1996, the Department response team participated in a dress rehearsal in June.

The dress rehearsal involved addressing agriculture-related problems pursuant to a nuclear release. The June meeting helped to polish previ-

ously demonstrated skills for the October drill.

Ratite Control Program

During FY96 the Associate Director, the State Veterinarian and other Department personnel worked closely with industry representatives to write rules that would govern the slaughter and processing inspection of ratites, such as ostriches, emus, and rheas, for consumption by the public. After the rule package was completed in spring of 1996, the Department proceeded with the required hearings before the public. Providing the rules are endorsed by the Governor's Regulatory Review Council in early fiscal year 1997 (FY97), the State Veterinarian will begin overseeing the inspection of the slaughter and processing of these alternative protein sources.

Office of the State Veterinarian

One of the largest ASD groups is the Office of the State Veterinarian which has four main responsibilities. The first is to administer the state's Meat and Poultry Inspection program.

Using standards that are equivalent to those used by the federal government, our inspectors ensure that Arizonans have a safe supply of wholesome meat and poultry products that are properly labeled.

This public health requirement is fulfilled by enforcing appropriate laws, licensing slaughter and processing plants, providing in-plant inspection services and insuring that diseased specimens are properly analyzed. Another State Veterinarian responsibility is to prevent the importation of diseased animals, focusing primarily on livestock.

This mandate is carried out by enforcing importation laws, investigating and controlling disease outbreaks, enforcing swine feeding and cattle feedlot laws and working with other state and federal governmental agencies in the enforcement of laws to control tuberculosis, brucellosis, pseudorabies and rabies.

The third program under the State Veterinarian's watchful eye is Arizona's growing aquaculture industry. With a warm climate and well-located supplies of geothermal water, more and more aquaculture producers are going into business. They raise many varieties of fish for consumption, ranging from trout to tilapia.

Finally, in the 1994 legislative session, regulatory authority over the ratite (ostrich, emu and rhea) industry was given to ASD. The State Veterinarian was the logical choice for the administration of this new program. During the past year, the State Veterinarian has been working with industry to design a voluntary slaughter inspection program which will assist in the marketing of their animals.

Meat and Poultry Inspection

For FY96 the Meat and Poultry Inspection (MPI) program issued 190 total licenses in the following categories: 71 official (including 13 slaughters), 54 exempt processing and/or slaughter (meat for home use only); and 65 distributor/broker licenses. Livestock slaughtered under state inspection amounted to 4,912 cattle, 8,576 swine, 1,247 sheep and goats and 161,344 chickens and turkeys.

Of the 1,100 contacts made by compliance, 150 were reviews of distributor/broker operations, 10 were investigations of consumer complaints and five were truck investigations of wrecks involving meat and/or poultry products. MPI inspectors collected 70 meat samples at processing plants for analysis, performed 412 in-plant residue monitoring tests for sulfas and antibiotics, and submitted 15 samples to USDA laboratories for drug analysis.

MPI was able to send five employees to USDA training school at College Station, Texas for either slaughter or processing classes. Training on the use of a new computerized system of inspection task tracking, PBIS (Performance Based Inspection System), based on risk was provided. Use of the system will be fully in place during FY97. Hazard Analysis Critical Control Point (HACCP) regulations, mentioned in the last annual report, were released by the USDA the end of FY96. MPI will phase in the use of this inspection system from FY97 to FY99.

MPI and the State Veterinarian worked closely with the ratite industry to write Department rules for the inspection of ratites at slaughter. It is anticipated to have the rules in place the beginning of FY97. MPI inspectors will assist the State Veterinarian in providing inspection coverage during the initial phase of the implementation of this program.

PBIS

As mandated by the U.S. Department of Agriculture, the Meat and Poultry Inspection Program implemented the use of PBIS, the

Performance Based Inspection System. PBIS is a computer program that generates inspection activities for MPI's meat inspectors. These inspection activities, or tasks, are based on the public health risk and are specific to each individual packing plant's processes. The computer also keeps track of inspection results over time.

Not only is this information useful in tracking plant performance, but also it is documentation that could be used in legal actions by the Department. After purchase of the necessary hardware and software, key personnel in Meat and Poultry Inspection were trained on the use of the program. Training of inspection staff followed, and the use of PBIS will begin in early FY97.

Animal Disease Control

Animal Disease Control (ADC) tested 38,523 cattle and swine for brucellosis. A total of 2,906 separate shipments of cattle into Arizona were monitored for compliance. Imported livestock numbers were 295,448 beef cattle (including 93,183 steers and spayed heifers from Mexico), 37,868 dairy cattle, 14,590 horses and 17,825 swine. A total of 217,370 cattle crossed into the United States through ports along the Arizona-Mexico border.

The program conducted 3,469 pseudorabies tests in swine, including samples collected from imports as well as animals consigned to slaughter. In order to maintain Arizona's accredited free status for tuberculosis, ADC monitored 17,993 tests conducted at dairies. In addition to issuing three permits to garbage swine feeders and 21 licenses to beef cattle feedlots, ADC made 45 field visits to concentrated feeding operations to ensure compliance with animal health requirements.

Aquaculture

Aquaculture statistics indicate that this year 74 licenses were issued to aquaculture facilities and transporters, including eight special licenses for educational/research purposes. Nearly every licensed facility was visited and inspected at least once during the year.

Dairy and Egg Programs

Arizona has economically significant dairy and egg industries -- most of which are located in the warm central area of the state. ASD is charged with their regulation.

The Dairy and Dairy Products Control (DDPC) program protects the public from harmful milk and dairy products and insures their marketability through quality control. These responsibilities are carried out through six programs: licensing and permitting; residue surveillance; sampling of raw and pasteurized milk and milk products for compliance; labeling and complaint resolution; grading; and emergency preparedness (Palo Verde Nuclear Generating Plant).

The Dairy office works very closely with the U.S. Department of Agriculture (USDA) and the U.S. Food and Drug Administration (FDA). Arizona's dairy industry has 139 dairy farms that produce more than two billion pounds of milk each year. The average herd numbers around 1,000 cows. Most of the milk is processed in 20 plants.

Dairy Products Control accomplished the following in FY96: issued 247 licenses; conducted 988 inspections of dairies and processing plants; graded one million pounds of butter and powdered milk; and collected 5,072 samples which were used for 14,082 tests. During FY96 approximately one million pounds of milk were removed from sale.

Egg and Egg Products Control issues dealer licenses and provides inspection and grading services for shell eggs and all classes of egg products. This program administers state and federal regulations relating to the sale, packing and movement of eggs and egg products, including poultry and egg products procured for the USDA School Lunch Program. In Arizona there are 109 licensed egg dealers throughout the state that sold a reported 70 million dozen eggs and nearly nine million pounds of frozen and dried egg products. The operators range in size and complexity from small flocks with a few thousand birds to ranches with 300,000 layers.

A large part of the industry is comprised of wholesalers who distribute eggs (and other food products) packed with eggs produced locally as well as from other states. Even though 88 percent of the shell eggs and all of the egg products consumed within Arizona are imported from other states, our inspectors must still insure their wholesomeness.

With a staff of six, Egg Products Control inspected nearly 893,809 individual shell eggs during the fiscal year; issued 461 hold tags, totaling 548,189 retained dozens; issued 98 notices of violation for noncompliance with state regulations; and for the USDA school lunch program,

inspected nearly 1.5 million pounds of turkey, chicken, poultry and egg products.

Livestock Inspection

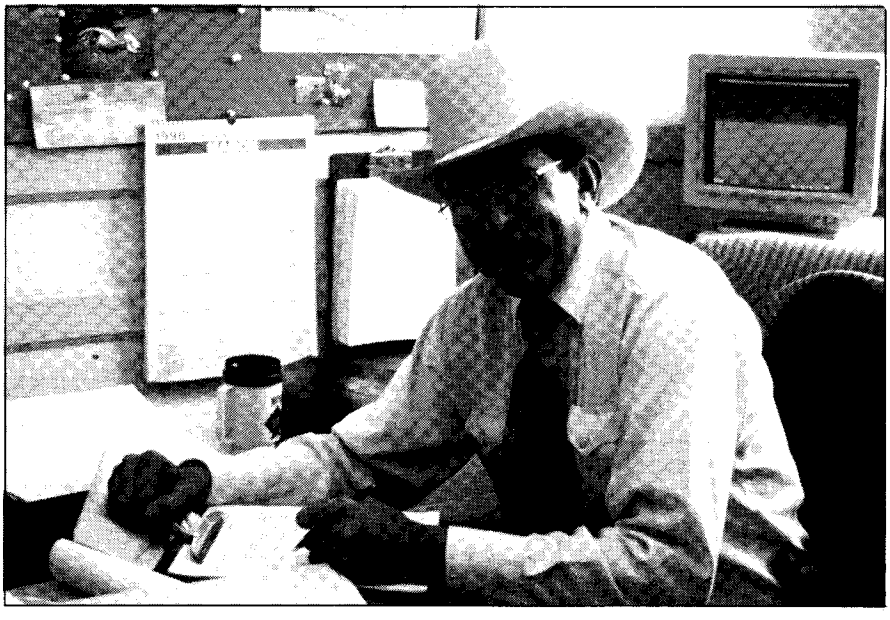
The largest entity in ASD in terms of personnel is Livestock Inspection. Some 38 livestock officers were stationed throughout the state in FY96. Their responsibilities are to curtail the theft of livestock and help the State Veterinarian in detecting, and stopping the spread of, contagious and infectious livestock diseases. Sometimes referred to as "brand inspectors," livestock officers are certified peace officers. Livestock officers are assisted in their criminal investigation endeavors by an Investigation Supervisor. Their responsibility is to enforce the laws and regulations pertaining to branding, transportation and sale of cattle, horses, sheep and other livestock. Prioritization of a myriad of other livestock inspection activities were also necessary to insure that the main statutory mandates were fulfilled. Operationally, livestock officers inspected approximately 1.5 million head of livestock, including 21,909 horses, and drove more than 877,689 miles to accomplish this.

Livestock investigations during FY96 issued 29 citations and 170 warnings. This is a 50 percent (approximately) increase over last year. 1,363 Departmental Reports (D.R.) were issued. These reports detail certain incidents that require livestock officers, supervisors, and other ASD personnel to prepare a written statement of specific events. These events include: theft, killing of livestock, animal disease and health violations, strays, seizures of livestock, highway and railroad "kills," starving and cruelty complaints and other miscellaneous information which need documentation.

There were 58 starving and/or cruelty complaints documented by officers in the field. Seven seizures of livestock were taken to court. Livestock officers responded to and documented 196 head of livestock killed on the highway and 114 head of livestock killed by railroads. There were 348 head of livestock impounded as strays. Approximately 10 percent of these were returned to the owners. On another note, 474 head of livestock reported as strays were returned to their owners without being impounded. Conservatively, this is approximately $290,000 worth of livestock returned to owners during FY96.

Livestock officers documented 24 cases of dogs killing or chasing livestock. A number of which resulted in criminal prosecution. Criminal and civil penalties also were assessed against the defendants.

The investigations section of the Animal Services Division investigated 80 cases of theft, killing of livestock, taking of livestock, branding livestock of another and missing livestock. Half of the cases were killing livestock of another. Several of the killing cases were determined to be animal mutilations. A number of the cases under investigation resulted in the discovery that the animals were killed with arrows. The majority of the killings were done indiscriminately by person(s) with firearms.



Livestock Officer Kevin "Zeke" Austin, Interim Central Area Supervisor, assists in criminal investigations which include the theft and killing of livestock, animal disease and health violations and strays.

Brand Registration & Equine Ownership/Hauling

Closely associated with livestock inspections are the state's Brand

Registration and Equine Ownership/ Hauling Permit programs.

These programs help protect livestock owners from the theft of their animals. Brand Registration deals with livestock operators who run cattle or certain other animals on the open range. Owners must have the cattle marked with a registered brand to establish ownership. There are currently 16,851 registered brands on file. As for the Equine Ownership/Hauling Program, it serves the same function as automobile registration does for vehicles. This section processed 14,096 new registrations and an estimated 15,138 transfer requests during FY96.

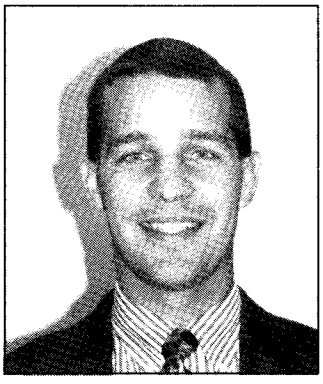
Dairy's Roy Collier Retires

The year 1996 was the year that Roy Collier, the State Dairy Supervisor, retired. A state employee for more than 22 years, Collier moved to Arizona from the upper Midwest, where he was directly involved in the dairy industry. Collier was the former Dairy Commissioner of the Office of the State Dairy Commissioner and was originally appointed by Governor Bruce Babbitt in 1979. He was reappointed two more times by state governors. He managed the Dairy Commissioner's office in Tempe from the early 1980s until the Dairy Commission merged with the Department in 1991.

Roy and his wife currently reside in Tempe. They plan to move to Missouri's Lake of the Ozarks sometime in early 1997. On the day of his retirement, Roy was thanked for his many years of service to Arizona by Director Keith Kelly and by dairy industry representatives who had worked with him for many years.

Director Keith Kelly (left) presents to Roy Collier, Dairy Supervisor, a plaque from the Governor commemorating Collier's many years of state service and his early summer retirement.

ENVIRONMENTAL SERVICES DIVISION



Jack D. Peterson
ESD Associate Director
Assistant Director
Office of Agricultural Safety

PROGRAM MANAGERS

Janet Bessey
Assistant Director
Registration and Licensing

Ken Davis
Compliance Manager

Paul Nicodem
Acting Certification and Training Specialist

MISSION

To protect the health and safety of the general public by regulating the safe use of pesticides, worker safety and the quality of feeds, fertilizers and pesticides.

Division Purpose & Responsibilities

The purpose of the Environmental Services Division (ESD) is to ensure: (1) the safe use of pesticides by the agriculture industry; (2) the quality of feed, fertilizer and pesticide formulations; and (3) the safety of farm workers and pesticide handlers. This multi-faceted purpose also includes the goal of cooperating with other agencies in protecting Arizona's environment from contamination or depletion. The Division has broad responsibilities involving programs with inter-agency agreements and memorandums of understanding at both state and federal levels.

The Arizona Department of Agriculture is designated as the State Lead Agency for pesticide enforcement by the U. S. Environmental Protection Agency (EPA) and the Governor of Arizona. ESD's functions include the following:

- Implementation of worker protection standards and ensuring proper handling, storage, use and disposal of agricultural chemicals.
- Development and implementation of outreach materials and programs relating to the protection of threatened and endangered species and the waters of Arizona from agricultural chemicals.
- Feed, fertilizer and pesticide product registration, company licensing and sampling to assure product quality and appropriate labeling for consumer protection.
- Certification, licensing, and permitting of individuals and companies to help ensure proper sale and application of agricultural chemicals.
- Provision for pesticide label exemptions through the EPA under Section 18 and 24© of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) for emergency or unique local pest conditions.
- Follow up on requests by federal agencies to monitor the sale and use of pesticides including the use of experimental use pesticides.

As of June 30, 1996, there were twenty-eight full-time employee positions in the Division. Twelve (with one vacancy) of these positions are field investigators who have a basic responsibility for assuring compliance with pesticide, feed, fertilizer and worker protection statutes and rules.

To meet statutory mandates, this report provides information regarding the licensing of manufacturers and distributors of feeds and fertilizers and the registration of pesticides and specialty fertilizers as well as compliance requirements for the use of agricultural chemicals.

FY96 Highlights

Aflatoxin

Continuing the trend from the previous year, aflatoxin levels were high in livestock feed. (Aflatoxins are a group of chemically related toxins produced as natural by products during the growth of certain common molds.) With the levels of aflatoxin so high, numerous complaints were filed requiring the Division to sample in all cases. The sampling is done to determine if the feed is adulterated with aflatoxin. If it was determined to be adulterated, the Division then discovered where the feed came from and who the seller(s) was. ESD also reviewed background information as to contributing factors in causing the adulteration. This information would be needed were the cases to go to hearing. However, upon final analysis by the Department's State Agricultural Laboratory and after disclosure of the case information to the involved parties, all the cases were settled.

Certification

The Division held four continuing education courses with the cooperation of the Arizona Crop Protection Association. Under this cooperative relationship, the Department put on a portion of the program and the Association put on a portion of the program. These courses were held across the state to help crop advisors and applicators meet their requirements to remain educated on proper pesticide application, pesticide safety issues and other pesticide related topics.

This year the Division changed its schedule for these continuing education courses. For the past three years the Department had put on courses in both the spring and in the fall, with varying attendance rates. When one of the spring programs was delayed this year, we discovered that early summer was a time when more people, from all sectors of agriculture, could attend. Therefore, as a successful experiment, this year only one set of courses was held during May. With this schedule and the cooperative program format, the attendance was good at all four course locations. The programs were held at Casa Grande, Thatcher, Yuma and Phoenix. These courses were all awarded six continuing education units (CEUs). These six CEUs were divided to allow those that only needed three CEUs to attend either the morning or afternoon sessions which also was a change from last year.

The last of the certification examinations were redone. These examinations test the competence of pesticide users and crop advisors. All tests now have been revised within the last two years. These tests judge peoples' knowledge on pesticide usage based on current pesticide information and issues.

Paul Nicodem, acting Certification and Training Coordinator, and Associate Director Jack Peterson attended the National Pesticide Applicator Training meeting in San Diego. This seminar allowed interaction between the states. It showcased effective training methods and

The Environmental Services Division displayed its areas of responsibilities at a booth at Ag Day 1996. From left to right, Pesticides Control Inspector Alex Leivas, ESD's Associate Director Jack Peterson and Pesticides Control Inspector Brenda Ball greet visitors and hand out information on ESD's programs.

mechanisms, new techniques, and current available information. Arizona was able to come back with new information and resources.

Section 18s

The Department was able to, with the help of industry in preparing the packages, submit and obtain a number of emergency exemptions through the EPA, referred to as section 18s. Emergency exemptions are exemptions that allow pesticides to be used on crops that are not federally registered. This exemption is allowed only under extreme emergency pest situations and when the risks are far exceeded by the benefits. These exemptions allow growers in Arizona to produce crops that may not otherwise be grown. Without these, many of the unique vegetables and fruits grown in Arizona would otherwise not be available.

The most significant of the Section 18s was the one obtained for the use of two insect growth regulators. These two products have the potential of significantly lowering the overall pesticide usage needed for cotton production.

Personnel

There were two significant changes within ESD relating to personnel. First, the legislature set aside money to help alleviate some job classification inequities. As a result of much work, all the inspection staff in ESD received a one-grade increase and the associated salary increase. The second significant item for the Division was the hiring of a new compliance unit supervisor. Ken Davis came to the Department with a wealth of knowledge in dealing with pesticide enforcement and grant negotiations from his previous work at the Arizona Structural Pest Control Commission. Davis is responsible for overseeing the compliance issues which stem from inspections dealing with feed, fertilizer and pesticides.

Dr. Ed Minch was chosen to represent the EPA Region IX states as its State FIFRA Issues Research and Evaluation Group (SFIREG) for the next two years. SFIREG is made up of state representatives to help the EPA address issues as practically as possible. It also allows the states to learn of EPA happenings and give feedback to the EPA on said happenings.

Janet Bessey-Paulson was chosen as a Director for the Association of American Plant Food Control Officials. This association is made up of state regulatory officials who deal with fertilizer issues on a national basis. This helps industry deal with consistent regulations across the country. Industry also is very active with this association.

The ESD inspection staff continues to become more qualified and proficient. During the year investigators were able to participate in various training seminars aimed at improving their skills. The courses dealt with investigation skills which ensure that things are done in accordance with EPA protocol and that investigations are defensible should it come to a regulatory action.

Current Issues

The Division continued its extensive outreach efforts to the general public and regulated community. This included attending and making presentations at numerous county fairs, job fairs, health fairs and other public

FERTILIZER

Documentary (nonlicensed or nonregistered)	127
Enforcement Actions	57
Penalties Assessed	$ 507
Laboratory Samples	391
Samples Deficient	74
Licenses Issued (Calendar 1995)	322
Specialty Products Registered (Calendar 1995)	1,789
Total Tonnage Reported	434,470 Tons

FEEDS

Documentary (Nonlicensed)	87
Enforcement Actions	29
Laboratory Samples	222
Samples Deficient	22
Licenses Issued (Calendar 1995)	695
Total Tonnage Reported	824,505 Tons

RESIDUES

Pesticide Misuse Residue Samples	171
Mycotoxin Samples	112

PESTICIDES

Documentary (Nonregistered)	303
Enforcement Actions	129
Laboratory Samples	220
Samples Deficient	33
Total Pesticides Registered (Calendar 1995)	8,252
Agricultural	1,250
Non-agricultural	7,002

meetings. The public received the information well. They seemed to realize and appreciate that the feed, fertilizer or pesticide they may be using at home or on the farm are monitored for quality.

The Division did not introduce any legislation. However, House Bill 2406, which deals with pesticide applications and bees, was introduced and passed. The new statute also set up a legislative committee to look for a solution to the conflict that can arise between pesticide applicators and the apiarists near the application site.

The Department also is participating on a State Labeling Issues Panel that is trying to address the issue of poor label language on insecticides dealing with applications and bees. It is intended to allow the states to come up with a solution that can be addressed at the state or local level versus the one-size-fits-all that is currently on the federally approved labels.

The Division is advancing technologically. Much of its current software is being modified to make it more useful or more user friendly. This process allows the Division to better track cases, funds and problems with products. It is hoped that all outlying personnel will soon be able to link into the numerous data bases being used within the Division.

Feed, Fertilizer & Pesticide Registration & Licensing Program

Samples of feeds, fertilizers and pesticides are taken by investigators of this agency from products distributed in Arizona to determine compliance with labeling and quality requirements. These samples are analyzed by the State Agricultural Laboratory, and their findings are reported back to this office. When the analysis is found to vary from the label guarantees, and/or the labels are not in compliance with the appropriate law, enforcement action is initiated. This may include the issuance of a warning letter, a cease and desist order, a withdrawal from sale order, an assessment of a penalty, condemnation of the material, cancellation of the registration and/or license, or finally, a request for injunction of criminal proceedings.

Expenses for enforcement of the above statutes are paid entirely by licensing, tonnage inspection or registration fees ap-

CREDENTIAL HOLDERS
June 30, 1996

Regulated Grower Permits (PGP)	1,554
Regulated Seller Permits (PSP)	153
Agricultural Pilot Licenses (AAP)	117
Custom Applicator Licenses (CAA, CAG & CAB)	79
Equipment Licenses	236
Pesticide Control Advisor Licenses (PCA & PCE)	314
Certified Applicators	
Pesticide Use Private (PUP)	667
Pesticide Use Commercial (PUC)	231
Pesticide Use Government (PUG)	111

SUMMARY OF COMPLAINTS AND CONCERNS RECEIVED AND INVESTIGATED BY ESD -- FY96
Total Complaints 125
CLASSIFICATION OF COMPLAINTS

07/01/95 — 06/30/96	NUMBER OF CASES	PERCENTAGE
Bee Kill	3	.02
Buffer Zone	1	.01
Drift/Overspray	29	.23
Illegal Application	7	.06
Expired License	4	.03
Illegal Sales	53	.42
Label Violation	7	.06
Aflatoxin	3	.02
Late 1080s	5	.04
Odor	1	.01
Crop Damage	3	.02
Property Damage	2	.02
Record Keeping	5	.04
Miscellaneous	2	.02
TOTAL CASES	125	100.00

Complaints are issued a case number and are assigned to an investigator who documents the facts of each incident. Disposition of each case is made following statutory requirements.

ESD FY96 ENFORCEMENT ACTIVITIES*

VIOLATIONS		ASSESSED	PAID
NON-SERIOUS VIOLATIONS			
Agricultural Aircraft Pilots -- AAP	12	$1,674.00	$1,807.00
Custom Applicators -- CAA	2	$ 00.00	$ 144.00
Pest Control Advisors -- PCA	3	$ 72.00	$ 107.00
Regulated Growers -- PGP	6	$ 107.50	$ 211.50
Pesticide Sellers -- PSP	4	$ 211.50	$ 69.00
Commercial Applicators -- PUC	1	$ 97.00	$ 54.00
Private Applicators -- PUP	1	$ 54.00	$ 101.00
Private Sector (Unlicensed)	3	$ 101.00	$ 70.00
TOTAL (includes FY95 cases enforced in FY96)	**32**	**$2,345.00**	**$2,564.00**
DE MINIMIS VIOLATIONS			
Regulated Growers -- PGP	3		
Custom Applicators -- CAA	3		
Pest Control Advisors -- PCA	1		
TOTAL	**7**		
SERIOUS VIOLATIONS			
Private Applicators -- PUP	1		
Custom Applicators -- CAA	1	$ 400.00	$ 400.00
Commercial Applicators -- PUC	1	$ 100.00	$ 100.00
TOTAL	**3**	**$ 500.00**	**$ 500.00**
TOTAL ENFORCEMENT ACTIONS	**74**		
TOTAL FINES		**$2,845.00**	**$3,064.00**

* *In some instances more than one enforcement action was taken in the same case. EXAMPLE: A certified applicator may receive a fine and a custom applicator receive a De Minimis Violation in a drift case.*

OTHER ENFORCEMENT ACTIVITIES

WARNING LETTERS			
Private Applicators -- PUP	10		
Agricultural Aircraft Pilots -- AAP	3		
Pest Control Advisors -- PCA	3		
Regulated Growers -- PGP	4		
Pesticide Sellers -- PSP	4		
Custom Applicators -- CAA	1		
TOTAL	**25**		
MISDEMEANOR COMPLAINTS			
Private Applicators -- PUP	22		
Pesticide Sellers -- PSP	2		
TOTAL	**24**		
CASES DISMISSED			
Agricultural Aircraft Pilots -- AAP	2		
Commercial Applicators -- PUC	2		
PrivateApplicators -- PUP	1		
TOTAL	**5**		

plied to the commodity or product involved. Revenues for enforcement of the Commercial Feed Law are derived from a $10 license fee and a 25 cent per ton inspection fee. Revenues for the enforcement of the Fertilizer Materials Act are derived from a $125 license fee, a $50 per brand and grade specialty fertilizer registration fee and a 25 cent per ton inspection fee. Revenues for the enforcement of the Pesticide Registration Law are derived from a $100 per brand registration fee. An excess of $500,000 per year is generated from $100 of the fertilizer license fee and $75 of the pesticide registration fee which is passed to the Arizona Department of Environmental Quality and deposited into the Water Quality Assurance Revolving Fund for the purpose of groundwater protection.

A total of 619 licenses were issued to feed companies to distribute commercial feeds in Arizona. Three hundred and twenty-two licenses were issued to fertilizer companies to distribute fertilizer materials, and 1,644 specialty fertilizer products were registered by 175 of those

CASE ACTIVITY FY96

Cases Closed as of 06/30/96 63

Cases still open or waiting for case recommendations 62

TOTAL CASES 125

Total FY95 cases closed in FY96 9

Total FY96 cases closed in FY96 63

Total number of cases worked in FY96 (FY95=9; FY96=125) 134

companies. There were 8,252 pesticide products registered by 812 companies.

During FY96, 491 analyses were performed on 222 feed or feed commodity samples; 320 analyses on 112 feed products for various mycotoxins including aflatoxin, vomitoxin and fumonisin; 927 analyses on 391 fertilizer samples; 160 analyses on 220 pesticide formulation samples (with 37 samples taken but not yet analyzed); and 256 analyses on 171 misuse residue samples (49 samples are still to be analyzed). Samples are frequently analyzed for more than one ingredient or have multiple analyses performed due to laboratory quality assurance requirements.

In FY96, investigations indicated 87 feeds, 127 fertilizers and 303 pesticide products were in violation of registration, licensing or labeling requirements. Additional enforcement actions taken during FY96 include 29 withdrawal from sale orders on feed or feed commodities, 57 cease and desist orders on fertilizers, and 129 stop sale, use or removal orders on pesticides. Twenty-four penalties were assessed on fertilizers.

Pesticide Use Compliance Program

The Division continues to monitor or inspect the use of pesticides in Arizona in the agricultural setting. These activities include observation of actual pesticide applications, mixing and loading activities, pesticide storage and the disposal of pesticide rinsates and containers. These monitors come in many different ways. The first is the routine monitor which is initiated as an observation of an actual pesticide application or as an inspection following an application. This type of inspection is usually selected using a neutral or routine inspection scheme. The second is the requested monitor. There are two types of requested monitors. The first type is a request from a custom applicator or other interested party to monitor an application which will be made in either of two areas designated as pesticide management areas (PMA). The second type is a request to monitor applications which are intended to be made in sensitive areas. A PMA is a legally defined area, designated by the Director, when it meets specific criteria. Sensitive areas are designated by the Department and reviewed annually to reflect areas which generate a larger share of complaints.

Another type of monitor which may be either routine or requested is the application of experimental use pesticides (EUP). Whether routine or requested, an EUP monitor is conducted to monitor applications of pesticides which are being applied under an experimental use permit. An EUP permit is granted for the application of pesticides that are being used to gather research data for eventual federal registration. EUP monitors help ensure that pesticides are being applied properly according to label directions, appropriate laws and regulations. The total number of monitored pesticide use applications in FY96 was 133. Of that number, 32 were routine, 88 were requested, and 13 were EUP.

The Division continues to conduct pesticide producer establishment inspections, marketplace inspections, pesticide dealer inspections and certified applicator records inspections. Producer establishment inspections are conducted at facilities where pesticides or devices are produced or packaged and held for distribution or sale. ESD inspects the facility's products and obtains samples. Marketplace inspections are conducted at the retail, distribution, wholesale, or user level to determine product registration status, proper storage and display. To help protect the consumer, ESD collects random samples

PESTICIDE EXAMS ADMINISTERED* FY96

TYPE OF EXAM	Total Exams	Number Passed	Number Failed	Passing Rate
Commercial Applicator	261	220	41	84.3%
Custom Applicator	20	16	4	80.0%
Pest Control Advisor	123	76	47	61.8%
Private Applicator	128	105	23	82.0%
TOTALS	**532**	**417**	**115**	**78.4%**

***It should be noted from the table's passing rates that the Department's goal is to ensure that all applicators are competent to safely handle and apply pesticides.**

to be analyzed for product decomposition. Samples of feeds, fertilizers and pesticides collected during marketplace inspections are turned over to the Department's State Agricultural Laboratory for analyses to determine if the products meet advertised label claims. If they do not, the products are removed from the channels of trade. Pesticide dealer inspections are conducted on-site at dealers who sell restricted-use pesticides. These inspections determine if the dealer is properly licensed and maintaining the required records. Pesticide dealer inspections also ensure that restricted-use pesticides are being sold only to certified applicators or their authorized representatives.

Certified applicator records inspections are normally conducted at a pesticide applicator's place of business. These inspections determine if the applicator is properly certified and if required records are being maintained. Certified applicator inspections also check to see that the applicator is applying restricted-use pesticides only in the category in which they are certified. They also ensure that all applications of restricted-use pesticides have been made in compliance with all applicable laws and regulations. In FY96 the Division performed 18 producer establishment inspections, 486 marketplace inspections, 37 pesticide dealer inspections, and 25 certified applicator records inspections.

The Division conducts follow-up investigations that are initiated in response to complaints, referrals and tips. Follow-up investigations also are done based on the Division's own observations of violations during inspections or monitors.

Each complaint is issued a case number and assigned to an investigator who documents the facts of each incident. Disposition of each case is made following specific statutory requirements which include review and approval by a representative of the Office of the Attorney General. During FY96 the Division investigated 125 complaints of various types. The investigation of illegal sales increased 87 percent from FY95 figures. This increase is due to stepped up enforcement against retail manufacturers and distributors who habitually fail to license or register feeds, fertilizers and pesticides with the Department, or whose products were found deficient from claims made on their labels.

Certification & Training Program

ESD's continuing education program strives to keep credential holders aware of current laws, rules and the latest integrated pest management techniques which help them better protect the environment through more efficient utilization of pesticides. Individuals holding commercial or governmental certification and pest control advisor licenses are required by rule to earn six continuing education credit hours annually. Those holding private certification are required to earn three hours annually. The Division approved 737 hours of continuing education units during FY96. Many of the training sessions approved for course providers consisted of multiple sub-sessions. Each of these required the issuance of individual continuing education credit hours. The total number of training sessions approved for continuing education during FY96 was 248.

The program to certify the competency of private and commercial applicators in the safe use and han-

ESD's RoseMary Martinez (right), Administrative Secretary in Compliance, accepts a Director's Award from Director Keith Kelly. Martinez has been with the Department for six years and was commended for her outstanding work.

dling of restricted use pesticides is complemented through a cooperative agreement with the U.S. Environmental Protection Agency.

The agricultural pesticide industry often changes products and practices which creates a need to continually update examinations. For several years ESD has been in the process of revising and updating all 20 of its pesticide proficiency examinations.

This task was completed in FY96 with the revision of two commercial category examinations for forest pest control and seed treatment. The new examinations now include updated information on worker safety regulations, general pesticide safety, the latest drift reduction methods and more questions relating to specific categories.

Groundwater Protection Program

Negotiations are continuing with the Arizona Department of Environmental Quality (ADEQ) concerning the degree of regulation to place on the remaining pesticides included on the groundwater protection list that have not had any confirmed detections in routine monitoring programs. Efforts are underway to limit the scope of chemicals to be regulated through this program to a selected few materials of special concern rather than all of the active ingredients that have been placed on the groundwater protection list.

Other concerns relate to the nature and extent of establishing buffer zones around wells and perennial streams within which pesticide applications would be restricted.

ADEQ also has proposed new criteria to use to establish the groundwater protection list. The current list is overly long and includes in excess of 120 active ingredients. Use of the new criteria is subject to the formal rule approval process. If adopted, it would reduce the length of the list to about half its present size.

A draft of the second educational video on chemical movement through soil produced through the cooperation of the Arizona Department of Agriculture, the University of Arizona and the Natural Resources Conservation Service was completed. This video is currently in review by a number of experts across the country.

Emergency Exemptions

The Department requested and was granted by the U. S. Environmental Protection Agency a number of emergency exemptions for the use of several pesticides on crops for which they were not registered to control whiteflies and several pathogenic fungi. The crops included cotton, cucurbits, leaf lettuce and cauliflower. With the exception of cotton, these are all minor crops for which the choice of registered pesticides is quite limited relative to major crops.

Of special interest was the approval to use two insect growth regulators, buprofezin and pyriproxyfen, on cotton in response to well documented resistance by whiteflies to the standard control materials. In order to limit the future development of whiteflies resistant to these growth regulators, use patterns were designed to reflect experience gained in Israel where both materials have been successfully used for several years.

It is unusual for the EPA to authorize the use of more than one material in response to a single pest emergency. Data generated by the University of Arizona and the Arizona Cotton Research and Protection Council greatly facilitated EPA approval of these materials.

Office of Agricultural Safety

The EPA proposed a number of changes to the federal Worker Protection Standard (WPS). Director Keith Kelly submitted comments to the EPA on these proposed changes. These comments helped the EPA to make decisions on whether changes should be made or not. His comments were based on the experiences of Arizona as being one of very few states that had an existing worker safety program. The comments utilized information provided by Arizona citizens.

The EPA did make the following changes to the federal worker protection standard:

1. The signs for posting pesticide treated areas now can be smaller than the fourteen by sixteen inches required initially in situations where the large size would be impractical, such as in some greenhouse situations.
2. The signs used for posting pesticide treated areas now may have a second language, other than Spanish, on them. The old requirement was that the signs had to be written in English and Spanish. The second language to be written on the signs must be the language spoken by a majority of workers. This new requirement will have little impact in Arizona. However, it does allow added protections in those areas of the country where Spanish is not the

predominant language.

3. The third change is the length of time decontamination supplies need to be available in the field after the application of a pesticide. The EPA changed this requirement for low risk, low toxicity products, from the current 30 days (which still applies to all other products) to seven days.

The Train the Trainer programs were held throughout FY96. These workshops educate and empower individuals to instruct field workers and agricultural employees who handle pesticides on pesticide safety and the WPS.

The scheduling of these meetings on an *as needed* basis, has been successful. Anyone who wanted training was asked to contact the Department to get his or her name on a training list. As soon as 20 or more persons requested training, a session was held in a convenient location. This *as needed* basis for scheduling programs has helped ensure Department personnel's time is being well utilized.

Through the Train the Trainer program there now are approximately 1,400 Department- trained persons across the state able to train both workers and handlers. A listing of these trainers and their locations is maintained by ESD to allow others wanting people trained to contact the Division for names of qualified trainers in their area.

Through an *ad hoc* committee of regulatory agencies dealing with farm workers, ESD participated in numerous educational meetings put on for workers and employers.

The informal meetings were held on two consecutive nights. The first night was for employers to attend. The meeting allowed the attending agencies to make a short presentation and then to interact with employers attending.

The second night was for employees and followed the same format. For these meetings the Environmental Services Division brought along a display with numerous packets of information dealing with the Worker Protection Standard and other pesticide related topics. This information was received well.

ESD Inspectors Alex Leivas and Frank Zamudio continue to actively participate with migrant related programs.

Some of these include: (1) Migrant Health Services, a program to help deal with migrant health issues; (2) the Bi-National Council of Governors-Pesticide Task Force, a program to help coordinate migrant health-related issues between Mexico and the United States; (3) the Rural Colorado Commission, a program to help open better lines of communication between Mexico and the states along the Colorado River; and (4) a number of health fairs, done in cooperation with the Rural Health Clinics, which allow for outreach in the rural communities.

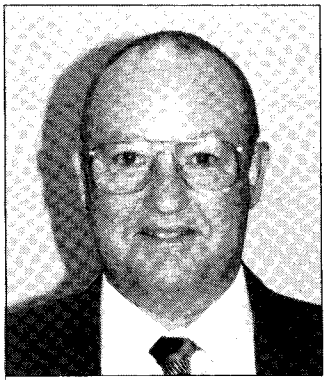
Two highlights from the above four migrant related groups are:

1. The Rural Colorado Commission is trying to set up procedures so that workers can receive WPS training in Mexico. This will allow the workers trained in pesticide safety to enter the United States and go to work as soon as they are hired.
2. The Bi-National Council of Governors-Pesticide Task Force is developing a project to show where contamination occurs when people do routine pesticide mixing and loading activities. The project uses fluorescent dye which shows under a black light. Their goal is to demonstrate what can be done to avoid any overexposure.

In the Department's continuing effort to ensure all ESD inspectors are comfortable working with the worker protection standard, Leivas and Zamudio have been traveling throughout the state to do joint inspections with other ESD inspectors. This has been a learning experience for all parties involved.

One of the highlights of this year's continuing education course, sponsored by the Department, was the lively discussion of the worker protection standard. This topic got people involved, and it was an opportunity to answer many questions from the audience regarding the prior year's changes to the WPS. This discussion also gave Department personnel insight into the concerns and potential impediments as seen by the regulated public.

PLANT SERVICES DIVISION



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Associate Director

PROGRAM MANAGERS

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Non-Programmatic Integrated Pest Management

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Programmatic Integrated Pest Management

Donna Diaz
Ports of Entry

Jim McGinnis
Native Plant

Al Davis
Citrus, Fruit & Vegetable

Dr. Ahmed Nasser
Pest Survey & Detection

Kathleen Willey
Seed & Hay

MISSION

To provide the citizens of Arizona with a reliable, affordable and safe source of agricultural plant products through the rational enforcement of statutes, rules and policies. To provide the assurance of fresh fruit and vegetable products of a uniformly acceptable quality in the Arizona market. To protect the agricultural industry as well as the general public from dangerous pests which may harm their plants and stimulate the use of chemical controls. The division's employees are dedicated to the judicious application of the authority vested in them and seek constantly to improve the quality of service delivered to the agricultural industries and the private citizens of the state.

FY96 Highlights

The Africanized Honeybee Program and all apiary regulations ended on June 30, 1995. This caused Plant Services Division (PSD) to refer phone inquiries regarding Africanized honeybees to the University of Arizona Cooperative Extension Offices, beekeepers, pest control operators or fire departments as of July 1, 1995. The transition took several months for the public to get used to the idea. The transition now is complete with the exception of an occasional phone call.

PSD now has two complete years of programmatic budgeting and activity reporting behind it. The computerized tracking system is showing management where time and expenses are and is assisting staff to make management decisions on priorities and program goals.

On March 5, 1996, PSD was confronted with the biggest challenge ever when Karnal bunt was discovered in a wheat kernel grown in Arizona. The U.S. Department of Agriculture, (USDA) Animal Plant Health Inspection Service (APHIS) placed a quarantine on all Arizona wheat. Governor Fife Symington declared an emergency, and the USDA and the Department entered into a cooperative agreement to detect and eradicate Karnal bunt from Arizona. More than 4,000 fields, covering 180,000 acres of wheat were sampled for Karnal bunt. At the peak of activity in June 1996, the Arizona Department of Agriculture, Plant Services Division, hired 115 new Karnal Bunt Project employees and dedicated more than a dozen existing personnel to the project. The Department is attempting to get the USDA to regulate the disease (bunted kernels) rather than the spores to allow export of Arizona wheat to other states and countries.

Ports of Entry

With the continuing changes in priorities and activities within the Plant Services Division this year, it has become even more important for

the Ports Program to successfully provide the first line of defense in protecting Arizona's agriculture industry and communities from dangerous plant and animal pests and diseases. In addition to inspecting commercial vehicles for pests and quarantine violations, the Ports Program is assisting the Animal Services Division in intercepting livestock shipments which do not meet Arizona entry requirements. The port inspectors also have been actively involved in the Karnal Bunt Program ensuring that all equipment is processed accordingly to prevent the spread of this disease. The port inspectors have also assisted USDA in issuing federal limited permits on wheat shipments.

The Ports Program rejections increased 34 percent from FY95. Of all commodities rejected, 79 percent were infested with pests. Red imported fire ants and other "A" rated pests accounted for 19 percent of these interceptions.

One of the milestones accomplished by the Ports Program was the finalization of an interagency agreement with the Arizona Department of Transportation's Motor Vehicle Division (MVD). After several partnering sessions, the agreement was signed on January 31, 1996. Our relations with Motor Vehicle have never been better. We have complete cooperation with most of the MVD Ports in supplying us with load report information on agriculture shipments destined to Arizona.

The Ports Program has been working closely with HELP, Inc. and Lockheed-Martin in conjunction with the Motor Vehicle Division in the development of a PrePass Program for commercial vehicles entering Arizona. This program will enable commercial carriers to contract with HELP, Inc., which will allow them to enter Arizona without stopping at Ports of Entry and showing their credentials. This became a major issue with the Ports Program. At the beginning, the declaration of agriculture commodities was not taken into consideration for the PrePass program. After several deliberations, it has been determined and stated in the contracts that all agriculture commodities must be declared, and the Ports Program has the option of requesting a higher pull-in rate for those high-risk carriers during the fire ant season. The PrePass program is to be established at the San Simon, Sanders, Ehrenberg, and Topock Ports of Entry. This program is scheduled to be in operation by September, 1996.

The dedication and team support of the inspectors has made the Ports Program most effective.

Native Plant Law

Arizona has a great number of plants that cannot be found in other states. The southwestern desert has developed plants that are unique and rare. Their blossom colors are astounding, and they have a wide range of variations within the same species.

It is the Arizona Native Plant Law that protects these most sought after plants. The law also protects those people involved in the movement of these plants. The law requires that a person must have a permit issued by the State of Arizona to be in possession of any protected native plant taken from the original growing site in Arizona. Moreover, it is unlawful to destroy, dig up or mutilate any protected plant.

The director-appointed technical advisory board annually reviews the protected native plant list in order to assess whether plant species, communities or populations are being depleted. The board made six recommendations for changes to the protected native plant list in FY96.

The Department entered into a cooperative agreement with the U.S. Fish and Wildlife Service pursuant to Section 6© of the Endangered Species Act of 1973. The purpose of the agreement is to provide a means to encourage the protection and conservation of the ecosystem upon which endangered and threatened flora depend. The Department participated in eight projects involving listed and candidate plant species. Currently, Arizona has 16 threatened and endangered species.

To regulate the collection of protected native plants, PSD, with its eight district offices, enforces the native plant law through investigation, public awareness programs, training for other agencies and issuance of permits.

Antiquities Act

The record of past cultural heritage is one of Arizona's richest legacies. Prehistoric culture is fascinating to everyone in the nation. Unfortunately, the remains of the prehistoric Arizonans are victims of ever increasing vandalizing and looting for commercial or personal gain.

The Department has the responsibility to assist in the enforcement of the antiquities act and to protect and preserve evidence of Arizona's culture. During FY96 the native plant office investigated four incidents of alleged violations.

The Department continues to monitor known sites and works closely with other agencies to reduce the threat of losing Arizona's cultural heritage.

As a state regulatory agency, the

Department is directed to educate the public about cultural resources and to foster an appreciation of ethnic and aesthetic values. The Department strives to help the public develop a stewardship ethic toward cultural resources. The goal is to make the public recognize the need for laws to protect these resources and to understand the meaning of the laws and how they are enforced.

Seed and Hay Program

The Arizona Seed and Hay statutes went through major revisions in FY96. In both statutes, sections were added under Penalties and Violations to enable the Director to fine, suspend, or revoke a person's license, as opposed to just revoking a license as stated in the old statutes. This gives the Department more enforcement flexibility in regulating both industries through fines or citations instead of revoking a license and forcing the business to cease operations. The statutes also underwent revisions of verbiage and terms to bring them in line with RUSSL (Recommended Uniform State Seed Law) and other current laws.

In July of FY96, the Seed and Hay Program became a separate program with a separate budget and manager. Prior to this time, the program had been managed under the IPM program.

On March 5, 1996 Karnal bunt was confirmed in a sample of desert durum wheat in Arizona. This put the state under an extraordinary emergency and subsequent statewide quarantine of all wheat produced in the state.

The Department, working in conjunction with the USDA/APHIS and USDA Agricultural Research Service (ARS) groups, went on to develop and implement protocols, policies and compliance agreements to manage the wheat crop in the state. Work is ongoing in the management of the quarantine and the revitalizing of the wheat industry in Arizona.

SEED AND HAY STATISTICS
JUNE 30, 1996

Samples & Licenses

Seed Samples	1,397
Stop-Sale Orders (violations)	477
Seed Dealer Licenses	822
Seed Labeler Licenses	174
Hay Dealer/Broker Licenses	60

Seeds Shipped into Arizona (pounds)

Agronomic	26,119,795.61
Vegetable	405,865.96

Phytosanitary

Applications (field inspections)	288
Number of Acres on Phytosanitary Applications	58,221.49

Pest Detection & Survey

Arizona Revised Statutes § 3-202 grants the Department its authority to deal with pests of Arizona agriculture. The need for the Department to act decisively with pests that pose an imminent threat to the state's plant industry and the public mandates regular and systematic surveys to prevent the introduction, establishment and spread of these organisms.

In order to standardize the system to accomplish this goal, the Pest Detection and Survey Manager continues to plan and coordinate a statewide program for pest detection.

Fruit Fly Survey

The fruit fly survey continues to operate statewide with major activities in Maricopa, Pinal, Pima and Yuma Counties. Trap densities are maintained at five or more traps per trapable square miles in target areas. There are currently over 5,000 traps placed statewide.

Since July 1995, 29 sterile Mediterranean fruit flies (medflies) were intercepted, all of them in Yuma County. Twenty-four flies were found in backyard citrus and five in commercial citrus. These sterile flies were the result of large sterile medfly releases by California to help control their increasing medfly problems. The medflies trapped in Arizona so far have been sterile.

California Red Scale Survey

Over eight hundred California red scale (CRS) traps were placed in Maricopa, Yuma and Pinal Counties in the fall of 1995 and spring of 1996. Known areas of infestation were delimited in the backyard citrus in Maricopa County for future eradication.

Traps which were in commercial citrus in Yuma and Pinal Counties were negative for CRS. With the exception of two groves which were delimited and are under treatment, all the commercial groves in Maricopa County are free of CRS.

Gypsy Moth Survey

Arizona's extensive pheromone trapping program for the gypsy moth continues to function through the combined efforts of Department personnel, USDA, Animal and Plant Health Inspection Service Plant Protection and Quarantine (APHIS-PPQ) and the U.S. Forest Service (USFS).

The Department placed 569 traps on state and private lands, and the USFS placed 146 traps on national forest lands. Despite Arizona remaining free of this pest, the significant risk of infestation is of major concern because neighboring states of Utah, Colorado, Oregon and Washington were at one time either battling infestation or winding down control efforts.

Although the Department's ports of entry reopened in July 1993, inspections of recreational vehicles, boats and trailers for gypsy moth are not being conducted at the Department-occupied ports of entry. This is because the Arizona Department of Transportation and the MVD maintain that unless adequate safety and site specifications for these inspections are provided, they won't consent to the Department inspecting the vehicles. These provisions would cost approximately $2,860,000. This problem needs to be solved to avert a major gypsy moth infestation.

Since March of 1993, the Department has inspected household goods at Fort Huachuca Military Base in Sierra Vista. This is because U.S. military personnel move to Ft. Huachuca from Ft. Devins, Massachusetts and other bases such as Rickenbacher Air Force Base, Ohio; Dover Air Force Base, Delaware; and McGuire Air Force Base, New Jersey, which are biologically significant.

All these states are under federal quarantine for the gypsy moth, which is a serious defoliator of many species of trees and shrubs. Because it is difficult to do a 100 percent inspection of all incoming goods, the area around the military base and the town of Sierra Vista is adequately trapped. No gypsy moths have been intercepted in this area, and the state presently is free of this pest.

Citrus Tristeza Virus Survey

Of all known virus pathogens of citrus, citrus tristeza virus (CTV) is the most destructive citrus disease. Depending upon the strain encountered, this virus has the ability to kill or severely reduce the productivity of a citrus tree.

Arizona's more than $100 million citrus industry is seriously threatened by the arrival of the brown citrus aphid (BCA) in the United States. The BCA is a very efficient vector of CTV.

In 1994 a task force was formed to assist the Department with issues related to CTV/BCA. The task force is comprised of representatives from the citrus industry, the University of Arizona and the USDA. The Department Task Force members developed a survey protocol with emphasis on sampling backyard citrus and locating Meyer Lemon trees, symptomless carriers of CTV. Meyer Lemon trees are prohibited by quarantine rule R3-4-230. Unfortunately, the trees are desirable backyard trees and are often brought undetected into the state in private vehicles from California and other states.

Of the 839 samples collected by Department inspectors in the spring of 1995 and 1996, nine were found to be positive. Six positive samples originated from a single nursery that was advertising Meyer Lemon trees for sale.

The other three positive samples originated in Yuma and were in a residential area within the city limit.

In the spring of 1997, the Department will initiate a large scale survey of 5,000 samples from backyard citrus. Of these, 2,725 samples will be collected in Metropolitan Phoenix, 1,365 in Yuma, and 455 each in Metropolitan Tucson and Casa Grande.

Imported Fire Ant Survey

Forty-five high risk nurseries with over 1,000 acres were surveyed in FY96. Imported fire ants were intercepted in ten locations and were eradicated. Other high risk locations also were inspected, including 250 holding areas, 879 roofing material locations and eleven residences. Twelve interceptions were made in the quarantine holding areas, and the pests were eradicated.

Beneficial Insect Releases

Four million wasps (*Aphytis melinus*), natural enemies of California red scale (CRS), were released in an attempt to combat this pest in backyard citrus in metropolitan Phoenix. The wasps were released during the fall of 1995 and spring of 1996 at six locations. This integrated pest management approach to pest control may help to keep CRS, which is an ornamental and citrus pest, from spreading to commercial citrus, a more than $100 million industry in Arizona.

Other Pests & Surveys

Snails -- Since July of 1995, "A" rated and "X" rated snails were found in more than forty shipments from Florida and were eradicated.

Wooly Whitefly -- In November 1995, wooly whitefly was intercepted in a Phoenix nursery. Wooly whitefly which

is not known to occur in Arizona, poses a serious threat to citrus. The nursery was delimited and the pest eradicated. In June 1996, the pest was detected in backyards and commercial citrus in Yuma. A delimiting survey which followed showed that the infestation was too large to eradicate. The Department, in cooperation with the University of Arizona and the USDA, is assessing the situation and will outline integrated pest management (IPM) strategies to reduce the explosive whitefly population to a manageable level.

Other Surveys -- Other pest survey programs that have been undertaken by the Department in FY96 are Japanese beetle, 145 traps; hickory shuckworm, 142 traps; apple maggots, 76 traps; European corn borer, 70 traps; Khapra beetle, 70 traps; Southwest corn borer, 120 traps; and walnut huskfly, 17 traps.

Programmatic Integrated Pest Management

On March 4, 1996, REVA, a variety of durum wheat seed, was found to be contaminated with Karnal bunt spores. The contamination was discovered by Ron Ykema, state pathologist, at the Arizona State Agricultural Laboratory. Ykema made the discovery while performing a routine regulatory test on the seed. On March 5, 1996, the Nogales USDA laboratory confirmed the identification.

An extensive activity began, encompassing several concepts. All contaminated or infected grain obviously had to originate in some identifiable field. Finding and identifying the present crop on that field was important for two reasons: 1) to stop the production and spread of the disease from that field and 2) to determine the extent of the spread of the disease. All of this contaminated grain needed to be found to prevent any further spread of the disease. Records from the seed companies were examined in an effort to locate everyone to whom the seed had been sold. Finally, all the contaminated grain itself needed to be identified and contained so that it would not contaminate other grain. PSD tried to provide services to the grain industry so that as much grain as possible could be marketed from Arizona. To financially assist Arizona, the Department secured emergency funding from the State of Arizona and also a grant from the USDA. With this money, the Department hired over 160 employees.

Seven work units were established strategically throughout the state. Growers then had local contacts who could assist them with the interpretation and enforcement of the rules as well as someone local who could coordinate activities such as pre-harvest and post-harvest sampling, decontamination of equipment, filling out forms, etc.

Meetings with agricultural officials of other states were held in an effort to pave the way for Arizona grain either destined to these states or passing through these states. High level meetings between the Director Keith Kelly, Governor Fife Symington, and other state governors and agricultural leaders as well as USDA officials from Washington were conducted in an effort to provide for the safe and economical movement of Arizona's grain.

By the end of July, 99 percent of the more than 4,700 wheat fields in Arizona had been tested for Karnal bunt. Only four percent of the fields were contaminated with spores and only 23 fields were infected with Karnal bunt. While Karnal bunt remains a serious problem for Arizona's grain and seed industry,

Three Citrus, Fruit and Vegetable Standardization employees greet visitors at Ag Day 1996. Behind them is CF&V's annual and acclaimed display of produce from all over the state. From left to right, Food Products Supervisor Dale Thomas and Food Products Inspectors Tom Kimmell and Joe Grencevicz. See page 47 article.

Arizona's survey and detection for Karnal bunt is the most comprehensive Karnal bunt survey ever conducted in the United States.

Quarantine-nursery Program

Under Arizona Revised Statutes § 3-201.01, the Department is mandated to establish quarantines, eradicate pests and administer nursery certification programs. Keeping pests out of Arizona not only benefits the public but also the state's $6.3 billion agricultural industry, including the green industry with annual sales of $662 million in 1994. See tables on page 44.

Rules and Administrative Orders

During FY96 the Pine Straw Administrative Order was enacted. The order required fumigation of pine straw arriving from imported fire ant (*Solenopsis invicta, S. richteri*) infested states. Previously, truck loads of pine straw, used on golf courses as decorative mulch, were consistently found infested with imported fire ants and other serious pests.

On the advice of the Brown Citrus Aphid/Citrus Tristeza Virus Task Force, the Brown Citrus Aphid Administrative Order was enacted to require treatment of nursery stock from the entire State of Hawaii and counties in Florida infested with the brown citrus aphid (*Toxoptera citricida*). The aphid transmits citrus tristeza virus, a serious plant disease that kills citrus trees. The aphid was identified for the first time in the continental United States, November 1995.

The Nut Tree Pest Rule was revised to add New Mexico counties infested with the pecan nut casebearer (*Acrobasis nuxvorella*), to add pecan phylloxera (*Phylloxera devastatrix*) to the list of regulated pests, and to include a new treatment option for pecan trees entering the state from infested areas. The previous rule allowed two treatment options: fumigation with methyl bromide or a hot water dip. The revised rule allows growers to propose other methods for approval by the Director.

Permits and Compliance Agreements

The Quarantine-Nursery Program continued to issue permits and compliance agreements. The permits and agreements facilitate the import or export of regulated commodities while still meeting the intent of Arizona's quarantine rules. Permits with California, Washington, Oregon, Utah, Colorado, Idaho, New Mexico, Florida and New York regulate shipments of deciduous fruit, citrus fruit, corn and nursery stock. Compliance agreements issued to shippers and receivers of regulated commodities cover citrus fruit, nursery stock, dried citrus pulp, snails, deciduous fruit as well as many others.

Pests

Quarantine feasibility assessments continued for new pests. A survey and assessment was begun for oleander leaf scorch (*Xylella fastidiosa*) and the smoke tree sharp shooter (*Homalodisca lacerta*), a type of leafhopper. The bacterial scorch disease, transmitted by sharp shooters, kills oleanders in California and is a potential threat to our nursery industry. Although signs of the disease have not been spotted, the sharpshooter has been detected in Maricopa County.

Inspection for and eradication of serious plant pests such as imported fire ant and California red scale (*Aonidiella aurantii*) continued to be an important program function. Imported fire ant, brought into the state with nursery stock from infested areas, was eradicated from four nurseries. California red scale, a serious pest of citrus trees and ornamentals, was addressed at thirteen nurseries.

In January citrus trees at a Maricopa County nursery, infested with woolly whitefly (*Aleurothrixus floccosus*), were destroyed. This economic citrus pest had never been found infesting an Arizona nursery. All nurseries with citrus were inspected and found free of the pest. In June the whitefly was detected in backyard and commercial citrus by a Yuma County district inspector. By the time the pest was detected, the infestation was too large to be eradicated.

An action plan was developed in a renewed effort to eliminate California red scale in commercial citrus in Maricopa county. Scale was lighter in the two groves which had been under a treatment regime but additional trees were found infested in an adjacent grove. The trees were severely trimmed to remove heavily infested branches in an effort to prevent further spread within the grove. The Department treated the adjacent backyard property to prevent re-infestation of the treated grove. The Department's authority includes the abatement of crop pests on residential properties.

Arizona's $66 million out-of-state nursery shipping industry depends on receiving certificates needed to meet other states' entry requirements. Because of the Federal Karnal Bunt Quarantine (301.89), California Department of Food and Agriculture initially required shipments of nursery stock to be accompanied by certificates which stated the nursery stock did not originate from or

near wheat fields infected with Karnal bunt. The Department was able to certify all shipping nurseries. Later, California allowed shipments without certificates if the shipping nursery appeared on an approved shipper list developed by the Department.

British Columbia and the State of Washington rejected shipments of bare root roses found infested with purple nutsedge (*Cyperus rotundus*) nutlets. Purple nutsedge, a common noxious weed in the southwest, is not found in the northwest. Washington state is considering a quarantine rule which would require nutsedge certification on all Arizona nursery shipments. A survey was performed for this weed in all rose fields, and inspectors explained the importance of removing the nutlets prior to shipping next season.

Noxious Weed Program

Yellow Starthistle Biological Control Program (Gila County) -- Biocontrol in Pleasant Valley (Young) made progress during FY96. The following items were accomplished:

- Establishment of an additional release site at north end of Young just east of Cherry Creek Store. Six hundred individuals of hairy weevil (*Eustenopus villosus*) were released on July 20, 1995.
- Visit to Pleasant Valley by Dr. Charles Turner (USDA/ARS), an authority on biocontrol of Yellow Starthistle (YST), on June 6.
- Collection of 500 mature seedheads from the site on the Haught property for analysis. These were sent to the ARS's Biological Control of Weeds Laboratory (Albany, California) in late September.

The small project the Department conducted on the Jim Smith Ranch near Jake's Corners in Tonto Basin produced **NO** results. In June 1994, 600 individuals of the Yellow Starthistle seedhead gall fly *Urophora sirunaseva* were released into a population of YST on the Smith property. On June 6, 1995, Dr. Turner (USDA/ARS) and Everett Hall, Department Noxious Weed Specialist, stopped at this site and made close observations. No evidence of the activities of *Urophora* were observed.

Yellow Starthistle Management Area for Gila County -- Everett Hall attended a meeting of the Pleasant Valley Community Council (formerly Young Town Council) on September 15 to introduce the idea of forming a Gila County Yellow Starthistle Management Area. *[A weed management area is a concept created by the U.S. Forest Service in the northern United States. It is not as formal as a weed control district in that it is a combination of public agencies, companies, farmers, ranchers and concerned citizens pooling expertise, equipment and personnel to control or eradicate a noxious weed or combination of same within a defined area. Funding of projects is normally shared.]* Interest is strong to form a weed management area (WMA). The Arizona Department of Transportation is interested in joining a WMA. A weed management area would have to include not only the Young/Pleasant Valley area but also the Tonto Basin and the Payson/Star Valley infestations.

Public Awareness Program in the Payson/Star Valley Area -- The Department and the Gila County Cooperative Extension Service began a Yellow Starthistle awareness project in the Payson area. In October Everett Hall gave a presentation on horse-poisoning plants to the Payson Horse-Owner's Association (included Yellow Starthistle).

FY96 NURSERY CERTIFICATION ACTIVITIES

Arizona Certified Nurseries	64
Brown Garden Snail/Rose Virus Inspection	33
Ozonium Root Rot Certification Inspections	23
Shipment Inspections	52
Out of State Shipment Inspections	52

FY96 NURSERY PEST EXCLUSION ACTIVITIES

Businesses Selling Plants	1,811
Full Inspections	1,790
Spot Inspections	2,859
Imported Fire Ant Inspections	941
California Red Scale	1,112
Detection of Pests Not Established In Arizona	41
Detection of Pests of Limited Distribution in Arizona or of Unknown Risk	36

Yellow Starthistle Infestation in Peoria (Maricopa County) -- Incipient infestations of Yellow Starthistle continued to be present in the vicinity of 75th Avenue and Peoria Avenue in FY96. The horse property in the southeast corner of 75th Avenue and Peoria Avenue has seen a steady decline in populations of YST over the past two years due to mowing and pulling by the property owners as well as partial removal (clipping) by Phoenix District Inspector Diane Chidlaw and Noxious Weed Specialist Everett Hall. Hall was told by the owner of this property in March 1996 that it had been sold to the Walgreen Corporation. Construction of a new drugstore complex (including a parking lot) would begin in May.

Infestations existing along Mt. View Drive adjacent to 75th Avenue (on the west) are a continuing problem since the City of Peoria's Streets and Parks Department has been very slow in removing the Yellow Starthistle plants along the street right-of-way here. L and L Equine Services, a horse-boarding business, has a few YST plants at the east end of their pasture. The south side of the pasture is adjacent to the infested north side of Mt. View Drive. The owner/operator of L and L Equine Services agreed to remove the starthistles by hand late June 1996. The situation is being monitored by Inspector Chidlaw. Everett Hall observed that over the past two years, there has been a gradual decline of Yellow Starthistle populations in Peoria.

Diffuse Knapweed Biological Control in Gila County -- A biological control program for Diffuse Knapweed (*Centaurea diffusa*) was started in July 1994 on the Francis Cline Ranch at the north end of Pleasant Valley. Three species of Diffuse Knapweed insects were released into the 35-acre infestation. This program has been carried out by the Arizona Department of Agriculture with the USDA/APHIS, Plant Protection Quarantine (PPQ). Diffuse Knapweed insects were supplied at no cost by the APHIS Biological Control Laboratory in Bozeman, Montana. No releases of insects were made during FY96 due to the unavailability of these from the Bozeman Laboratory.

Arizona Interagency Noxious Weed Committee -- During FY96 Everett Hall, Committee Chairman, presided at monthly meetings of the Interagency Noxious Weed Committee. Two additional agencies have become members in FY96.

Noxious Weed Short Course --The Arizona Interagency Noxious Weed Committee cooperated with the Cooperative Extension Service (New Mexico State University and University of Arizona) in holding the Second Annual Noxious Weed Short Course at San Juan Community College in Farmington, New Mexico in early July 1995. Everett Hall made presentations on state weed policy and quarantine as a method of weed control. The Committee and the Extension Service made the decision early in the planning stage of the Third Annual Short Course to hold it once again in 1996 in Farmington.

Highlights

- New Noxious Weed Regulations -- On July 10, 1995, the proposed noxious weed regulations became official. This gave Arizona two regulations to deal with noxious weeds: Regulation R3-4-244, "Regulated and Restricted Noxious Weeds" and R3-4-245, "Prohibited Noxious Weeds." There are three categories of noxious weeds: Regulated (six species), Restricted (15 species) and Prohibited (31 species). There are a total of 52 species regulated.
- Kikuyu Grass Research Project -- A Yuma County farmer, Don Eykamp, was issued a permit by the Department to grow 80 acres of Kikuyu grass (Pennisetum clandestinum) at Roll, Arizona (Yuma County). Research is being done under auspices of University of Arizona.
- Noxious Weed Survey Database -- In July 1996, a database was developed to keep track of survey work done by District inspectors and cooperators.
- Conference on Invasive Wetlands Plants -- Everett Hall attended the Third International Conference on Invasive Riparian and Wetland Plants held at Arizona State University October 25 to 28, 1995.

Plant Identification (Systematic Botany) at State Agricultural Laboratory -- During FY96, 146 plants were identified by Everett Hall. These were specimens submitted by district inspectors and program cooperators.

Phytosanitary Field Inspection Training Program -- A Phytosanitary Field Inspection Training/Reference Manual, begun FY95, was continued and expanded during FY96.

Training Classes -- In FY96 training classes in barley diseases (Casa Grande and Willcox), cotton diseases (Willcox) and general introduction to phytosanitary inspection (Willcox, Casa Grande and Phoenix) were presented.

Cotton PLOWER & Plow-up Program

This year 84 growers on 27,726.6 acres in central and western Arizona and 10 growers on 20,944 acres in southeastern Arizona failed to meet their tillage deadline. In preparation for abating the

non-compliance fields, PSD inspectors and secretaries prepared hundreds of *Order of Abatement of Public Nuisance Dangerous Crop Pest* forms prior to and immediately after the tillage deadlines. 87 of those orders of abatement were served to the owners of the non-compliance fields.

During the 1996 legislative session, the Department received direct authority to conduct PLOWER (Plow Earned Rebate) appeals through amendments to Arizona Revised Statutes (A.R.S.) § 3-204 and § 3-205. Previously, the PLOWER appeal hearings were conducted under the authority of an intergovernmental agreement between the Department and the Arizona Cotton Research and Protection Council (ACRPC).

This year, the Department, in conjunction with the Arizona Cotton Growers Association (ACGA) and the ACRPC, developed appeal criteria which consisted of an 80 percent refund of a grower's $3.25 per bale assessment, if the grower was in compliance at least two of the past three years, and another 20 percent if the grower brought all of his fields into compliance within seven days after the deadline. As a result of the new criteria and the IPM Cotton Program management, for the first time since the formation of the Department, no cotton PLOWER appeal hearings were held by Director Keith Kelly.

Of the 84 non-compliance growers, 56 accepted the Department's refund offer, 11 failed to respond to certified letters sent to them regarding their potential refund, 10 growers were ineligible for a refund and seven farms failed to report the number of bales ginned and to remit the required assessment to ACRPC.

ACRPC collected $276,087.50 in bale assessments from the cotton gins as penalties against the non-compliance growers. ACRPC, in conjunction with the Department, refunded $185,364.85 of the penalties back to the growers who met the required criteria. ACRPC is still trying to collect the PLOWER bale assessments from the seven growers who failed to remit their assessments as required by A.R.S. § 3-1086.

The Department contracted for the tillage of three farms totaling 922 acres. 405 acres were tilled in Pinal County at a cost of $11,424.72, 196 acres were tilled in Graham County at a cost of $7,503.00 and 186 acres were tilled in Cochise County at a cost of $6,101.00. The landowners have been billed and liens have been placed on the fields in Graham and Cochise Counties. The property in Pinal County is state land.

In October of 1995, the ACGA Board of Directors adopted a resolution endorsing a reduction in the 60 day host free period to 45 days for cotton growers who plow-up by their zone's tillage deadline. The earlier planting date was requested to help growers avoid whitefly problems in late season.

The ACGA requested that the reduction be in effect for the 1996 planting season. The ACGA also requested that the pink bollworm and the cotton boll weevil complex rule, R3-4-204, be amended to remove the requirement in section (E)(3) to detach the cotton stalks and incorporate the plant debris within the soil. On November 11, 1995, Director Keith Kelly issued a Director's Administrative Order which authorized growers, who met the tillage deadline, to plant fifteen days early. Shortly thereafter, the formal rule change process was begun.

On June 19, 1996, the ACGA Board of Directors adopted a new plow-up proposal which eliminates the existing 60 and 45 day host free periods and establishes a staggered statewide 15 day host free period. The proposal does, however, allow individual tillage zones to petition the Department and its Cotton Advisory Committee to establish more stringent plow-up or planting dates.

Organic Certification Program

The Arizona Organic Food Certification Program draft rule package is nearly complete.

The Department will proceed with the formal rulemaking process as soon as the National Organic Program issues the national standards with which all organic certification programs must comply. Upon receipt of the national standards, PSD will review the draft rules to ensure that the proposed program meets the national requirements. The national program is expected to be in place by the end of 1996 or early 1997. Due to changes in the proposed rules, brought on by ongoing recommendations for the national program by the National Organic Standards Board, the Department has submitted proposed amendments to the organic statutes, A.R.S. § 3-302 through § 3-305. The most significant of those amendments removes the requirement in § 3-305 on fees that certification and recertification be based on gross annual receipts or acres of land certified.

Colored Cotton Program

In January and February of 1996, the state's 1,344 acres of colored cotton were harvested. The colored cotton ginning was conducted at three gins located in Maricopa County and was completed by the end of March. One gin failed to have its ginning

equipment inspected and certified by the Department prior to ginning white cotton and was issued an order by the Department which resulted in a $2,500 fine. The other two gins were thoroughly cleaned and then inspected and certified by the Department in May. Amendments to the colored cotton fee statute, A.R.S. § 3-1086.01, concerning the remittance of the colored cotton bale assessment and the colored cotton civil penalties statute, A.R.S. § 3-205.02 concerning cotton appliance violations, were proposed and passed by the legislature this year. Additional statutory amendments concerning enforcement of the colored cotton rule, R3-4-205.02, have been submitted for consideration in the 1996/97 legislative session. In September of 1995 and again in February of 1996, the Colored Cotton Advisory Committee met to discuss amendments to the colored cotton rule.

The most significant amendment requires seed companies to verify that growers they contract with to produce white cotton seed meet the Arizona Crop Improvement buffer requirements. Another amendment would allow colored cotton growers, harvesters and ginners to compost or dispose of colored cotton trash in an approved landfill. Their recommendations were accepted by the Department and have been submitted for approval through the formal rulemaking process.

Citrus, Fruit & Vegetable Standardization

Al Davis
C, F & V Manager

Citrus, Fruit and Vegetable Standardization (CF&V), a program within the Plant Services Division, monitors and enforces the quality standards for all fresh fruit and vegetables produced and marketed in Arizona.

Effective July 1996, a cooperative agreement was signed with USDA Agricultural Marketing Service, Fresh Produce Branch, which provides for the Arizona Department of Agriculture, Citrus, Fruit and Vegetable Standardization program to assume the administrative management of the Nogales border Shipping Point Inspection and the Terminal Market Inspection program.

The cooperative agreement also provides for Citrus, Fruit and Vegetable to manage the Shipping Point Inspection and Terminal Market Inspection programs in Phoenix and Yuma. All funds and assets of these programs, which include two office buildings, four 15 passenger vans, several computers, desks, etc., are being transferred into the Department's Arizona Federal-State Inspection program. These two programs will increase the number of Department employees by approximately 70.

The Citrus, Fruit and Vegetable Standardization program and the Shipping Point Inspection program in Yuma and Phoenix will eventually develop cost reduction efficiencies to the agriculture industry through cross-training of the inspectors.

These two programs meet periodically with the governor-appointed industry advisory council. This advisory council represents the citrus, fruit and vegetable industry in both Mexico and Arizona. The members are leaders in their respective fields. The council reviews and makes recommendations to the CF&V inspection and federal-state inspection programs. Both programs are totally funded through license fees, inspection fees and assessments. These fees are reviewed yearly and adjusted as needed.

Citrus, Fruit and Vegetable Standardization continues to support the statewide gleaning program. This program resulted in over 25,000,000 pounds of produce being collected and distributed to food banks and others during FY96.

The Citrus, Fruit and Vegetable Standardization and the Federal-State Inspection programs continue to operate within the guidelines of the A.R.S. §§ 3-411, 3-471, 3-481, and 3-251.

COMMODITY DEVELOPMENT AND PROMOTION

John L. Wake
Assistant Director

PROGRAM MANAGERS

Gina Broyles Lane
Export Promotion

Michele Pino
Arizona Grown Program

MISSION
To stimulate, educate, encourage and foster the production and consumption of Arizona agricultural products. Arizona Revised Statutes §§ 3-102B.5.

The Office of Commodity Development and Promotion (CD&P) focuses on developing national and international markets for Arizona agricultural products.

Arizona Grown

The *Arizona Grown* program, which began in 1993 in the newly established Office of Commodity Development and Promotion, is the Department's effort to help Arizona food companies capture more of the $6.4 billion Arizona food market. The program is a liaison between Arizona agricultural companies that make consumer-ready products and Arizona retailers and consumers. *Arizona Grown* familiarizes retailers and consumers with the quality and diversity of Arizona's agricultural products. It encourages retailers to stock Arizona foods and assists retailers in contacting Arizona suppliers. The program also encourages retailers to label Arizona products with the *Arizona Grown* logo so consumers can easily select Arizona products.

Nine retail supermarket chains representing 350 stores, or 75 percent of the supermarkets in Arizona, participate in the *Arizona Grown* program. The number of farm, ranch, food processing and food retailing companies that participate in the *Arizona Grown* program doubled to 70 participants.

Over 17,000,000 Media Impressions

In addition to familiarizing consumers with Arizona products using retail promotions, the program has generated media exposure -- without buying advertising -- by combining *Arizona Grown* "education" with nutrition education. The program has generated over 17,000,000 "impressions" on television and radio and in newspapers and magazines. The program has a very close and productive relationship with the Office of Nutrition Services of the Arizona Department of Health Services and many agricultural organizations.

Eat Right -- The Arizona Grown Way School Curriculums

The Office initiated and coordinated a public/private partnership which completed the creation of a set of school curriculums that combine *Arizona Grown* education with nutrition education. The set of curriculums which will help teachers throughout Arizona to teach agriculture and nutrition education is called, *Eat Right -- The Arizona Grown Way*. Separate curriculums were

created for kindergarten to third grade, fourth to sixth grade, seventh to eighth grade and ninth to twelfth grade.

CD&P also created curriculums entitled *Arizona Agriculture: Growing Better Every Day* and *Arizona Grown Fascinating Facts.* The *Nutrition and Agriculture Classroom Resource* curriculum created by CD&P lists associations such as the American Cancer Society, Arizona Division, which can provide additional classroom resources to teachers. The curriculums sets are distributed to teachers, at no cost, principally through the Arizona Prevention Resource Center at (602) 727-2772 or toll-free (800) 432-2772.

The *Eat Right -- The Arizona Grown Way* curriculums were prepared by an advisory board with members from the following organizations: Arizona Beef Council; Arizona Department of Agriculture; Arizona Department of Education; Arizona Department of Health Services; Arizona School Food Service Association; Dairy Council of Arizona; Maricopa County Farm Bureau; University of Arizona Cooperative Extension, Maricopa County; Vegetable Growers Association and Western Growers Association.

International Market Development

While the market for food and agricultural products in the United States is mature, the demand for U.S. food and agricultural products in foreign countries is growing rapidly. As income and population in foreign countries increase, the demand for high quality U.S. foods increases as well. In addition, the North American Free Trade Agreement (NAFTA) and the Uruguay Round General Agreement for Tariffs and Trade (GATT) agreement are creating new and unfulfilled export opportunities that other countries are fighting to capture. It is important that Arizona develop strong, long-term trade relationships with importing countries before our competitors do.

Festival de Alimentos y Bebidas, Mexico City

Three Arizona companies participated at this premier food trade show in Mexico City. One company signed export contracts worth $500,000 during the show. Another company secured a distributor and expected export sales within 12 months of $480,000.

Gina Broyles Lane, (left) Commodity Development and Promotion, and Sandra Stauch (right), California Department of Food and Agriculture, worked at the "Fresh from the West" booth in Tokyo, Japan at the 1996 FOODEX trade show. CD&P's booth featured *Arizona Grown* broccoli, lettuce, and cauliflower.

FOODEX, Tokyo

CD&P coordinated an exhibit at FOODEX held in Tokyo, Japan, which promoted Arizona and California winter vegetable exports to the rapidly growing Japanese market. FOODEX is the world's largest food trade show. Exhibitors estimated that their exports would increase by more than $2.8 million due to their participation in the exhibit. In addition, two technical seminars in Osaka and Tokyo were presented to 65 Japanese vegetable importers detailing the quality, availability and proper handling of Arizona and California winter vegetables. USDA funded the operating expenses for this cooperative promotion with the Western Growers Association, the California Department of Food and Agriculture and the Western United

States Agricultural Trade Association.

Yuma Air Freight Project

CD&P worked closely with the efforts of the Yuma County Airport Authority to land direct air freight service between Yuma and Japan. The Yuma County Airport is positioned to become an important air freight center when the heavily congested Los Angeles International Airport (LAX) can no longer handle the rapidly growing air cargo traffic from Japan. Direct air freight service will create important new opportunities for Arizona agriculture to export to Japan.

U.S. Food Export Showcase, Chicago

This show sponsored by the National Association of State Departments of Agriculture is held in conjunction with the largest food trade show in the United States. Over 6,000 foreign food buyers attended. Arizona exhibitors rate the show highly. For example, one Arizona exhibitor estimated its sales would increase by $150,000 within 12 months due to participating in the Arizona Pavilion.

Cattlemen's Weekend, Prescott

The Office worked with the Prescott Livestock Auction to bring important Mexican buyers to this Arizona cattle auction. Despite the peso devaluation and the economic crisis in Mexico, several bulls with an estimated value of over $16,000 were sold to Mexico.

Mexican cattlemen are expected to eventually import large numbers of breeding stock from the United States when the Mexican economy improves. The Department would prefer that the Mexican cattlemen buy Arizona breeding stock.

Trade Policy

Boxed Beef Pilot Program in Sonora

CD&P coordinated the Department's efforts to allow Arizona boxed beef to be marketed more freely in Sonora, Mexico.

The governors of Sonora and Arizona agreed to an historic international trade agreement in Ciudad Obregon, Sonora in May 1996. It is unprecedented for two states to resolve an international trade dispute without federal intervention.

A dispute arose in 1995 over Arizona beef exports to Sonora. The Arizona and Sonora beef industries are very intertwined -- Arizona cattlemen buy millions of dollars of feeder cattle from Sonora each year -- and after NAFTA, the Arizona industry increased its exports of beef cuts to some Mexican states. However, due to a technical regulation in Sonora, it was impossible to sell Arizona boxed beef (pre-cut beef packaged in boxes) in most supermarkets in Sonora.

The Arizona Department of Agriculture, the Arizona beef industry and the Arizona-Mexico Commission worked for months with their Sonoran counterparts to reach a resolution and maintain the positive relationship between the two beef industries.

Sonora's Governor Manlio Fabio Beltrones proposed, and Arizona's Governor Fife Symington accepted, a six-month pilot program that allows Arizona boxed beef to be sold in certain Sonoran supermarkets while at the same time allowing Sonoran officials time to update their regulations to accommodate boxed beef.

Commodity Councils

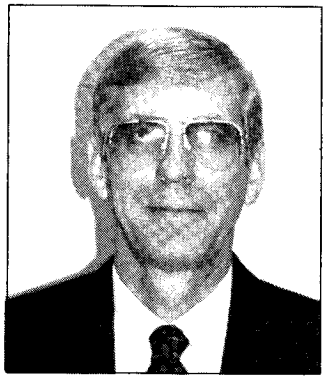
The Office handled part of the administration functions for four commodity councils. These functions were performed according to interagency agreements between the councils and the Department.

The councils are the Arizona Citrus Research Council, the Arizona Grain Research and Promotion Council, the Arizona Iceberg Lettuce Research Council and the Arizona Wine Commission.

Office research found that it would be more efficient if all administrative functions provided under contract by the Department for the councils were under the Administrative Services Division. In addition, the Department would be able to provide better service to the councils if the administrative functions were consolidated.

After discussion and approval from the councils, it was decided to consolidate all council administration functions in Administrative Services Division beginning July 1, 1997.

STATE AGRICULTURAL LABORATORY



Dwight Harder
Assistant Director

PROGRAM MANAGERS

Doug Marsh
Chemical Residue Analysis

Paul Knapp
Product Control

Vacant
Biological Identification

Anna Pfender
Karnal Bunt

David Mills
Karnal Bunt

MISSION

To efficiently provide quality agricultural and environmental laboratory analysis, identification, certifications and training services to the Arizona Department of Agriculture and others as provided by law. As an integral part of many of the Department's regulatory activities, the State Agricultural Laboratory's ultimate goal is to contribute to assuring quality agricultural products, the protection of environment and the public's health and safety.

Overview

The State Agricultural Laboratory's (SAL) purpose is to efficiently provide quality agricultural and environmental laboratory analysis, identification, certification and training services to the Department and others as provided by law.

Agribusinessmen use an assortment of commercial feeds, chemical fertilizers and pesticides to enhance the quality and quantity of agricultural products. Chemistry laboratories play a vital role in the regulatory and surveillance activities of these products. The SAL also conducts tests to determine if residual aflatoxins, pesticides or drugs are present in agricultural products, soil, air, vegetation or water.

Agricultural pests such as the red imported fire ant, the Mediterranean fruit fly, reniform nematode, citrus tristeza virus, citrus canker, hydrilla and yellow starthistle are high profile issues. However, these are just a few of the hundreds of agricultural pests in which the biology laboratories play a key role in the Department's regulatory programs.

A comprehensive quality assurance program was followed by all chemistry laboratories during FY96. Pesticide formulation and residue testing programs utilize a quality assurance project plan approved by the U.S. Environmental Protection Agency (EPA). Quality assurance activities such as multiple analytical determination on violative samples, blanks, controls, spiked controls, multi-level calculation and documentation reviews are a critical part of assuring that analytical data is defendable. The laboratories use official analytical methods recognized by federal agencies and the courts. In preparation for legal action, regulatory samples are processed using strict "chain of custody" procedures, and all analytical work is thoroughly documented by chemists.

The SAL participated in the Smalley check sample programs for aflatoxins residues in milk, cottonseed and corn as well as the national aflatoxin Share Program. The lab also took part in the EPA National Enforcement Investigations Center check sample program for pesticide residues and formulations.

Chemistry laboratories require a wide variety of "high tech" analyti-

cal instrumentation. The instrumentations used include high pressure liquid chromatographs; ultra-violet/visible, infrared, atomic absorption and fluorescence spectrophotometers; gas chromatographs; three gas chromatograph/mass spectrometers, an ion chromatograph, a gel permeation chromatograph; and a laboratory computer system electronically connected to the analytical instruments, integrating their outputs and computing the data received into meaningful results.

Laboratory Certifications

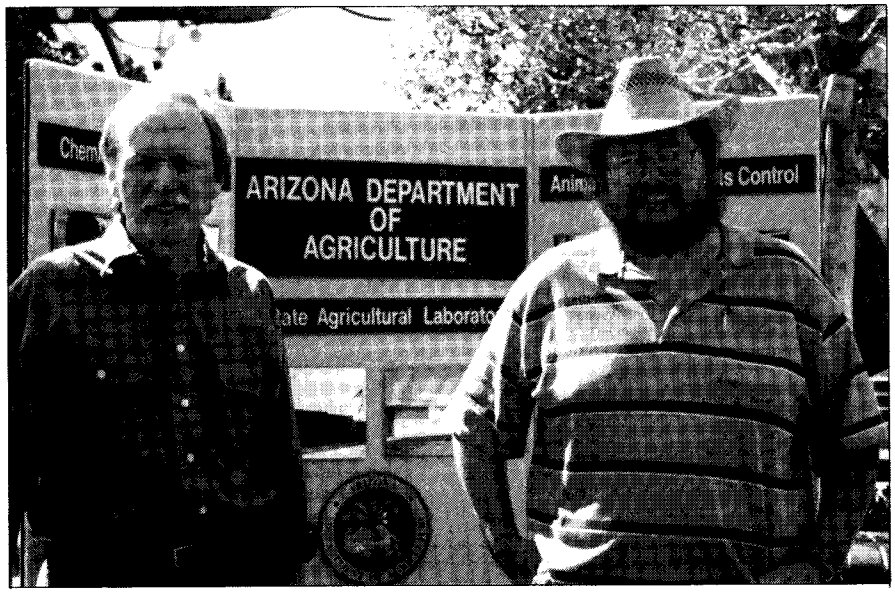
The SAL has statutory authority to certify other laboratories for a wide variety of laboratory services including sampling. The services include:

- Determination of specific element and ion content of water for irrigation or livestock purposes.
- Determination of specific element and ion content of plant tissue for the evaluation of plant nutrients.
- Determination of specific element and ion content of soil for the evaluation of plant nutrient content and for element and ion content which cause plant growth limitations.
- Determination of contents of processed meats and food products including the percentage of meat and nonmeat ingredients.
- Verifying for analysis the accuracy of the guaranteed label of certified samples for feeds, fertilizers, animal manures, plant growth stimulants, soil amendments, soil conditioners or pesticides.
- Verification of seed germination percentages, purity analysis or other named seed or plant propagative material testing procedures.
- Identification of insects, plant pathogens, animal pathogens, nematodes and animal parasites.
- Testing of milk products for quality and market standards.
- Determination of mycotoxins, antibiotics or drug residues in plant or animal tissue.
- Determination of mycotoxins, antibiotics or drug residues in plant or animal products, animal feed or feed ingredients.
- Determination of specific pesticide or hazardous or toxic elements in plant or animal tissue.
- Determination of specific pesticide or hazardous or toxic elements in air and water used in livestock production, irrigation water, soil, agricultural products or animal feed.

Biological Identification

The Biological Identification Program laboratory is responsible for correctly identifying insects, snails, plant pathogens, weeds and for providing seed germination and purity data. For FY96 this lab provided 14,623 determinations on specimen submissions. The staff serve as consultants for many of the Department's regulatory programs and provide Department personnel with hands-on training in pest identification and field detection of pests. To facilitate export of various agricultural commodities to foreign countries and other states, laboratory staff train Department personnel in field recognition of plant diseases and provide certificates of analyses to growers. Additional duties of laboratory

State Agriculture Laboratory staff members man the SAL's educational booth at Ag Day 1996 last March. Paul Knapp (left), head of Product Control, and Chris Baptista, entomologist in the Biological Identification lab, give the public a sampling of the SAL's responsibilities.



staff include evaluations of permit applications and laboratory facilities for importation of plant pathogens, insects and genetically engineered organisms into Arizona. The Department's biological reference library and specimen collections are maintained and catalogued by members of this laboratory.

In March of 1996, Karnal bunt was discovered in Arizona by the laboratory plant pathologist. Through June 30, 1996, 10,574 wheat samples had been tested for Karnal bunt including preharvest, harvest, railcars, bins, elevators, trucks and national survey samples.

This major accomplishment required 90 percent of the State Agricultural Laboratory's staff resources during the first month of the crisis and the hiring of over 160 additional qualified laboratory personnel over a five week time frame. The lab ran 24 hours a day, seven days a week at the Phoenix facility and opened a satellite facility in nearby Maricopa for six weeks during peak harvest season.

Chemical & Residue Analysis

During FY96 the Chemical Residue Analysis Program continued providing regulatory pesticide residue analyses to Arizona's pesticide law enforcement agencies. Most samples resulted from an alleged misuse of pesticide. These samples require very time-consuming and sophisticated analysis techniques with a high percentage of samples requiring validation of a new analytical technique. A total of 414 analyses of this type were analyzed during the fiscal year. Matrices included agricultural produce, plant materials, soil, air, clothing and water.

The Residue laboratory performed 464 analyses for mycotoxin residues during FY96. These tests were completed on behalf of Arizona's feed law regulatory officials and human health department. The two mycotoxins of primary concern are aflatoxin and fumonisin. The majority of these tests were done on cottonseed, cottonseed products or corn.

The Residue program also played a key role in protecting Arizona's milk supply by testing milk samples for aflatoxin, drug and pesticide residues, completing 1,133 analyses during the time period. The Residue program also provided training and expert consultation services to its customers and conducted a certification program for the analysis of aflatoxin in commercial feed products for five statewide private laboratories.

Product Control Lab

The Product Control Program laboratory analyzed feed samples for numerous constituents such as protein, fat, fiber, urea, calcium, phosphorus, salt and trace minerals.

The staff also analyzed monthly collaborative check samples from the American Association of Feed Control Officials (AAFCO) as part of its quality assurance program. The total number of analyses on feed and feed-ingredients in FY96 was 550. During FY96 the Formulations lab staff also performed 29 analyses on meat samples for protein, fat, total water, water added and salt.

Fertilizer samples were analyzed for many components including nitrogen, phosphorus, potash, sulfur and micronutrients. Monthly collaborative check samples from the Magruder check sample program were also analyzed as part of the laboratory's quality assurance for fertilizer analysis. During FY96, 985 fertilizer analyses were completed.

The Product Control Program laboratory did a total of 38,523 analysis of livestock blood and raw milk in FY96. Livestock blood is tested for the presence of a bacterial organism which causes the disease brucellosis in livestock and undulant fever in humans. Presently, Arizona is a brucellosis free state.

This laboratory program also tested 13,012 analyses on raw milk and Arizona produced dairy products for bacterial levels, presence of antibiotics, added water, sanitation indicator bacteria, cellular levels and fat content. Water samples from dairies and meat processing plants also were analyzed.

During FY96 the Product Control staff performed a total of 160 analyses of the active ingredients in pesticide formulations for the Department's Environmental Services Division to check the label guarantees of pesticide products, including carbamates, organophosphates and natural and synthetic pyrethroids.

In addition, 38 tank mix and concentrated termiticide formulations were analyzed for the Arizona Structural Pest Control Commission.

The laboratory also participated in the check sample programs of the American Association of Pesticide Control Officials (AAPCO) and the U.S. Environmental Protection Agency-National Enforcement Investigation Center (EPA-NEIC).

CENTRAL ADMINISTRATIVE SERVICES

John F. Hagen
Deputy Director

PROGRAM MANAGERS

Dan Mosser
Assistant Director - Budget

Carol DeFazio
Fiscal Services

Patrick Stevens
Human Resources

Sheila Burgan
Administrative Support

Roger Smallwood
Management Information Systems

Pam Orr
Procurement

Cathy Bischoff
Strategic Planning and Training

MISSION

To provide Arizona Department of Agriculture managers, employees and external customers timely and efficient delivery of services, including the following: budget, fiscal services, management information systems, co-administration of grants, strategic planning and training, human resources management, risk management, procurement, payroll and facilities management.

FY96 Highlights

Fiscal year 1995 to 1996 was highlighted by several major milestones, both within Central Administrative Services and Department-wide. The most significant for the state's agricultural industry was the administrative response to the discovery, in March 1996, of Karnal bunt, a non-toxic wheat fungus that subjected the state to a federal quarantine requiring extraordinary efforts in virtually every area of Central Administrative Services. The most significant milestone for Department employees was the successful reclassification of all inspector grades and the administration of merit pay increases. Other notable milestones included implementing the merger of the Federal-State Inspection Service into the Department and preparing to transfer responsibilities for administration of commodity councils from the Office of Commodity Development and Promotion to Central Administrative Services at the conclusion of the fiscal year. Preparing to administer the Agricultural Employment Relations Board, effective at the beginning of the next fiscal year, was also a significant undertaking late in the year. Maintaining momentum from the latter half of fiscal year 1995 was a significant undertaking. That included continuing strategic planning and training programs, settling into our renovated historical building at 1688 West Adams, planning and participating in Department Day (after not observing a Department Day the previous year), and participating in Arizona's version of National Ag Day.

In January of 1996 the Department's "Administration" (including the Office of the Director, Central Administrative Services and the Ag Consultation and Training Program) was selected by the Legislature for an in-depth program audit, called a Program Authorization Review (PAR), focussing attention on the need to write desk procedures and performance measures for all responsibilities. The issue of as-

sessment of administrative fees on agency internal special purpose funds, a chronic challenge, was subsumed within the PAR framework, which mandated an agency self-assessment report by April 1, 1997.

Central Administrative Services employees took on greater responsibilities in FY96 in Department-wide activities such as the State Employees Charitable Campaign, Ag Day and Department Day, and accepted significantly increased responsibility for enrolling in and completing job-specific training and personal development. Some staff members were recognized by Director Kelly at Department Day; others participated in a variety of volunteer organizations, including the Arizona Quality Alliance Board of Examiners and the National Agriculture Alumni and Development Association, among others.

Federal-State Inspection Merger

Central Administrative Services learned in November of 1995 that a long-sought after merger with USDA's Federal State Inspection Service in Arizona would become a reality, thanks in large measure to Governor Fife Symington's personal efforts. In every other state, the federal government contracted with state agriculture departments to provide inspection services. In Arizona, because the Department of Agriculture was not established until January 1, 1991, the federal government had contracted with the Arizona Cattlegrowers Association. Discussions and negotiations ensued over a period of five years until conceptual agreement was reached in late calendar year 1995. Over the next several months, an agreement was hammered out between the federal government and PSD's Citrus Fruit and Vegetable Standardization office, detailing the establishment of a fund account, budget, transfer of payroll responsibilities, procedures for accounts payable and receivable, transfer and adaptation of computer programs, development of new positions and job classifications, provision for financial audits, establishment of administrative fees, disposition of program vehicles, relocation of staff into the Department headquarters, and transfer of title for real property and equipment located in Nogales, Arizona, and elsewhere. The tasks required the efforts of virtually all Central Administrative Services personnel, in coordination with the Governor's Office of Strategic Planning and Budgeting, the State's Joint Legislative Budget Committee staff and the General Accounting Office in order to prepare for the historic signing of the agreement in spring of 1996.

Fiscal Services and Budget

During FY96 Fiscal Services continued routinely to distribute standard monthly USAS (Uniform State Accounting System) financial reports to associate and assistant directors, as well as to program managers -- fostering internal fiscal management from the program level (and below) throughout the Department as a whole..

In-house training focused on making understandable the standard USAS financial reports being distributed, since a key component of the system of internal controls operative under program budgeting provides accountability at the program level. Revenues and expenditures are accumulated and reported by unique *indexes* at the program level. Program managers are encouraged to monitor and question financial activity reported in their indexes/programs to assure accuracy and propriety.

In September 1995 the Department submitted a single year budget request for fiscal year 1996 to 1997 (FY97), in anticipation of requesting a biennial appropriation for fiscal years 1997 to 1998 and 1998 to 1999.

Fiscal Services staff turnover continues to present an operating challenge.

Procurement

The Department entered into a special agreement with the State Procurement Office late in the year to assure that Karnal bunt and other high-priority purchasing needs would be given high-level attention. The agreement required consolidation of agency procurement authority, leading to new training opportunities for personnel involved in purchasing at locations other than 1688 West Adams.

Among the diverse procurement challenges facing the Department in FY96 were the following: jet charters for industry and Department and federal government personnel to travel to the interior of Mexico; public affairs consultants for the Arizona Grain Research and Promotion Council to effectively pursue grain industry policies at the state, federal and international levels in the face of the Karnal bunt quarantine; production of a Department video; and a gas chromatography/mass spectrometer for use by the State Agriculture Laboratory. All of these required extraordinary coordination between the customers and the State Pro-

curement Office. "Routine" purchases included everything from live bugs and a horse to books, computers, respirators and ammunition.

Employee Recognition Program

MIS Director Roger Smallwood and committee members unveiled a major Department-wide employee recognition program in connection with the 1996 Department Day, held at the Bureau of Land Management Training Center in Phoenix. The program features "On the Spot" awards made to employees for demonstrating teamwork integrity, quest for quality, customer service, morale building and/or good citizenship. Recognition can be made by anyone by presenting an "On the Spot" award to the recipient, with copies to the recipient's supervisor and to the recipient's division coordinator for the program. Monthly drawings for nominal gifts randomly reward lucky recipients.

Management Information Systems

The MIS section underwent a complete change of staff during the first part of FY96 with the appointment of Roger Smallwood as manager and Mark Hernandez as staff. Both came from the Department of Economic Security. With the assistance of the Automated Information System (AIS) Users Committee, previously appointed by Director Kelly, the MIS unit was completely overhauled, beginning the transition back to a customer-oriented program led by managers and advised by information technology users.

The review started the process of standardizing the software used in each unit. By the middle of the year all divisions were standardized. Updates to equipment were reviewed and changes were made in the placement on several of the automation resources throughout the agency. Changes in the data backup systems now insure a safe and secure data recovery program.

Improvements were made in the printer locations, and high speed printers were installed throughout the agency. A bar-coding system was established for field testing in FY97. Karnal bunt program requirements led to acquisition of a map graphics system. Use of the internet was expanded to 20 users in the Department during FY96, and MIS began exploring creation and management of a home page on the worldwide web. Use of laptop personal computers for employee telecommuting was initially explored during the year.

Human Resources

The discovery of Karnal bunt in Arizona wheat imposed significant professional challenges on the entire Arizona Department of Agriculture, but the accomplishments of Human Resources stand out as virtually unprecedented. Governor Symington declared a statewide emergency in March 1996, a week before the United States Department of Agriculture followed up with a declaration of an "extraordinary emergency," carrying with it a quarantine and millions of dollars to pay for personnel to respond to the crisis.

Within two weeks of receiving a

Central Administrative Services's Carol DeFazio, Fiscal Services Manager (center), confers with Animal Services Division's Ellis Kane (left), Meat and Poultry Inspection, and Associate Director Sheldon Jones (right) regarding fiscal management for ASD.

request to do so, the Human Resources unit under Patrick Stevens, and with the cooperation of State Personnel, established 340 temporary non-covered Karnal bunt inspector and laboratory positions, and then, through job fairs and newspaper advertisements, recruited 285 Karnal bunt temporary employees for both the State Agricultural Laboratory and the Plant Services Division.

Some 112 Karnal bunt agricultural inspectors underwent pre-employment physicals and all employees, including 185 laboratory personnel, underwent new hire orientations.

The massive and sudden recruitment produced high quality employees, many of whom had extensive agricultural or laboratory experience and advanced degrees, including at least one attorney and several Ph.Ds.

Successful efforts on the part of Human Resources enabled 90 limited and seasonal positions to be established for the new Federal-State Inspection Service program, effective with the merger on July 1, 1996.

Efforts in the previous year to upgrade Department positions resulted in 18 separate inspector classifications being upgraded, effective January 1, 1996, impacting 186 positions within the Department.

Additionally, the merit pay increase ($40,000 added to base pay of Department employees) was administered according to a Department procedure that resulted in no employee grievances.

Strategic Planning and Training

Agency strategic planning and employee training continued in FY96, encompassing development of program mission statements and performance measures as a part of the combined strategic planning and budgeting process.

A variety of training opportunities were offered to employees throughout the Department via videotape, special consultants and both.

When Cathy Bischoff moved to the Department of Health Services, her position was reconfigured and moved from Central Administrative Services to the Office of the Director, and assumed by Ed Sanchez, formerly of the State Land Department.

Administrative Support: Facilities, Mail, Telephones

Services to employees located at 1688 West Adams underwent several changes during the year, including decentralizing the Department's fleet and central stores and, at the end of the year, establishing the Procurement Office as an entity separate from Administrative Support.

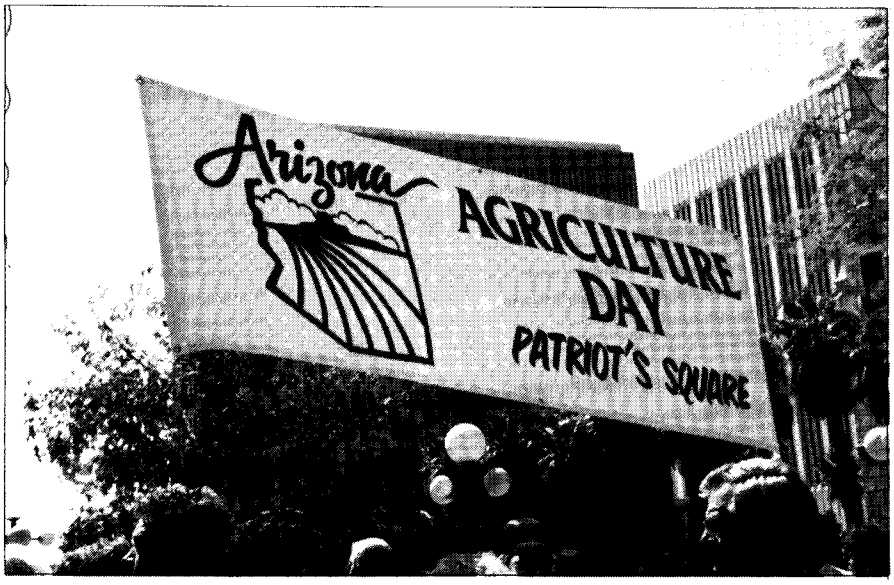
Risk management -- including completion of the annual Department risk survey, coordination of risk management grants, and chairing the agency loss prevention committee -- helped to minimize losses. The Risk Management Section of the Department of Administration supported agency efforts by offering a 45-week Associate in Risk Management (ARM) course, successful completion of which will result in risk management certification.

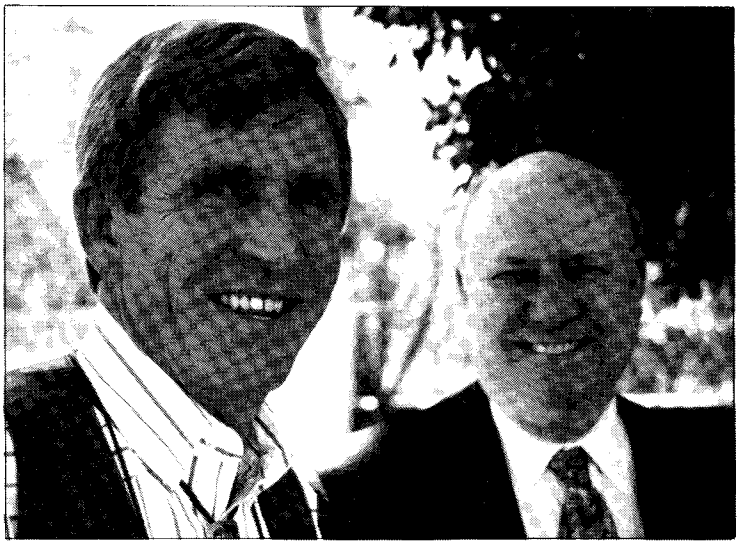
Telecommunication in FY96 was characterized by decentralization of telephone billings, greatly improving accountability at all organizational levels, and operation of the agency switchboard, which doubled as the Department's reception desk.

Cash handling -- including mail receipt of license fees for Animal Services, Environmental Services, and Plant Services -- was decentralized, reducing demands on the mailroom, yet increasing program accountability for timely deposit of funds.

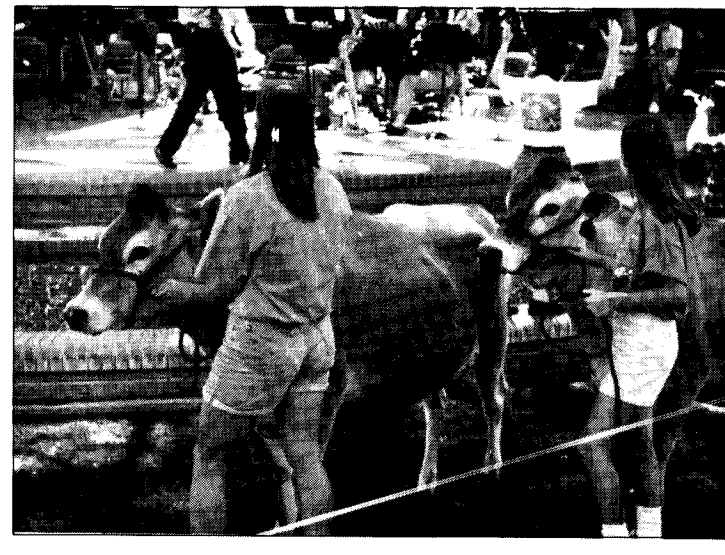
Facilities management highlights included completion of building renovation projects -- such as service counters -- which were deleted in the previous year due to budget.

Clockwise, from top: (1) Ag Day Banner displayed at Patriots' Park; (2) Animal Services Division's Bob Payne helps with ticket security; (3) Ag Day Committee Chairman, Brett Cameron, CD&P, oversees the day's activities; (4) Honorary Chairman, Director Keith Kelly (left), greets The Honorable Joe Lane, Office of the Governor, who presented the Governor's Ag Day 1996 proclamation.





Arizona Agricultural Day 1996

Clockwise, from top: (1) Ag Day 1996 booths at Patriots' Park; (2) Students ready two cows for milking contest held for local students; (3) Animal Services Division's Linda Boyce greets people at ASD's educational booth; (4) Plant Services Division's Carole Besore (left) and Peg Eiben (right) admire student mural which was entered into the mural contest. See complete story on page 7.

March, 1997 Patriots'Park Phoenix, Arizona