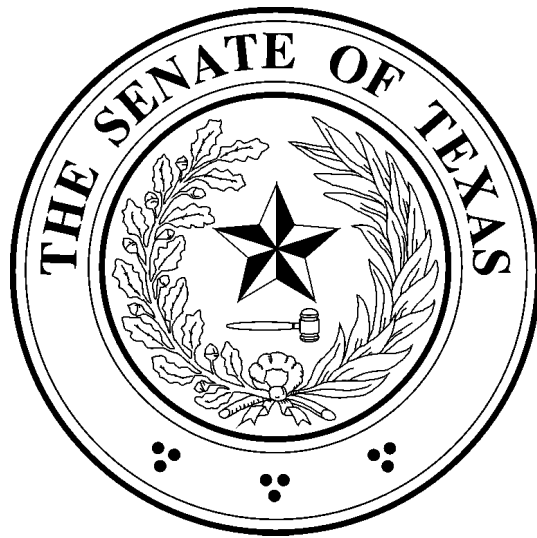


The Senate Interim Subcommittee on Agriculture



Interim Report to the 78th Legislature

November 2002

TEXAS
SENATE NATURAL RESOURCES
COMMITTEE

SENATOR ROBERT DUNCAN
Acting Chairman
SENATOR KIP AVERITT
SENATOR GONZALO BARRIENTOS

SENATOR DAVID BERNSEN
SENATOR TEEL BIVINS
SENATOR CRAIG ESTES
SENATOR EDDIE LUCIO



November 15, 2002

Senator Robert Duncan
Chairman

The Honorable Bill Ratliff
Lieutenant Governor of Texas
Members of the Texas Senate
Texas State Capitol
Austin, Texas 78701

Dear Governor Ratliff and Fellow Members:

The Subcommittee on Agriculture of the Seventy-Seventh Legislature hereby submits its interim report including findings and recommendations for consideration by the Seventy-Eighth Legislature.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert Duncan", written over a horizontal line.

Senator Robert Duncan, Chair

A handwritten signature in black ink, appearing to read "David Bernsen", written over a horizontal line.

Senator David Bernsen

A handwritten signature in black ink, appearing to read "Craig Estes", written over a horizontal line.

Senator Craig Estes



TABLE OF CONTENTS

INTERIM CHARGES	3
ACRONYMS	3
CHARGE 1	
BACKGROUND	5
CURRENT EFFORTS	8
RECOMMENDATIONS	9
<u>CHARGE 2</u>	
BACKGROUND	12
CURRENT DEVELOPMENTS	13
RECOMMENDATIONS.....	16
<u>CHARGE 3</u>	
BACKGROUND	18
CURRENT EFFORTS	19
RECOMMENDATIONS	30
APPENDIX A	32
APPENDIX B	37
APPENDIX C	40

INTERIM CHARGES

The Senate Subcommittee on Agriculture was charged by Lieutenant Governor Ratliff with the following tasks:

1. Study current efforts for the early detection, exclusion, and treatment of diseased plants and animals. The Subcommittee shall assess the need for regulatory and programmatic changes to address this problem.
2. Monitor the development of the 2002 Federal Farm Bill and its impact on Texas. The Subcommittee should assess the need for changes in state law or policies necessary to comply with and benefit from the federal legislation.
3. Study the efficiency, implementation and funding of the Fire Ant Research and Management Account Advisory Committee at the Texas Agricultural Experiment Station for the eradication of fire ants. The Subcommittee shall evaluate state entities currently charged to combat the fire ant problem and make recommendations necessary to ensure a coordinated response.

ACRONYMS

AFPC	Agricultural Food and Policy Center
EQUIP	Environmental Quality Incentive Program
FARM	Financial and Risk Management
FARMAAC	Fire Ant Research and Management Account Advisory Committee
FARMIC	Fire Ant Research and Management Initiative Committee
FSA	Farm Service Agency
IPM	Integrated Pest Management
ORCA	Office of Rural Community Affairs
TAES	Texas Agricultural Experiment Station
TAHC	Texas Animal Health Commission
TAMUS	Texas A&M University System
TCE	Texas Cooperative Extension
TDA	Texas Department of Agriculture
TVML	Texas Veterinary Medical Diagnostic Lab
TWDB	Texas Water Development Board
USDA-APHIS	United States Department of Agriculture - Animal Health Inspection Service
USDA-ARS	United States Department of Agriculture - Agricultural Research Service

CHARGE 1

Study current efforts for the early detection, exclusion, and treatment of diseased plants and animals. The Subcommittee shall assess the need for regulatory and programmatic changes to address this problem.

The following, denoted in italics, was prepared by Dr. Charles J. Scifres of the Texas Agricultural Experiment Station and Dr. Chester P. Fehlis of the Texas Cooperative Extension.

BACKGROUND

Background Threat and Vulnerability of Texas Agriculture to Bioterrorism

The Texas Agricultural and Natural Resources Summit Initiative conducted a summit meeting on “ Biosecurity: Safeguarding Our Agriculture and Food Supply” in May, 2002 in Austin. Some 140 leaders from the food and agricultural sector, consumer groups, and state and federal agencies were involved. They discussed the threat, the current state-federal capabilities and responsibilities to protect the food and agriculture system, the related issues facing Texas agricultural and food industries, and recommendations on enhancing preparedness through improved policies and procedures and science and communication. The report provides a sobering assessment of the current vulnerability of the food and agriculture

system. It particularly highlights the vulnerability of Texas agriculture because of the more than 1200 miles of international border, the high volume of agricultural goods flowing through its several major ports, the diversity and complexity of Texas agriculture and the particular vulnerability related to intensive and concentrated poultry, cattle, and swine operations in the state. It included concerns about the substantial processing and manufacturing industries – all of which are currently highly vulnerable to intentional acts of bioterrorism or even to unintentional or accidental introductions of exotic disease into the state.

Both livestock and crop species are highly susceptible to exotic diseases which have been successfully excluded from the U.S. over the last fifty years. Breeding programs to achieve improved yield and quality, especially in crops, have narrowed the genetic base of these species and made them more vulnerable to exotic disease. The presence of wildlife that are also susceptible to exotic disease, intermingled with livestock in many parts of Texas enhances the vulnerability and complicates the prevention and mitigation following a successful attack.

The ease of access by terrorists to multiple organisms capable of creating rapidly spreading disease in crops and livestock and the relative ease of dissemination in the U.S. food and agriculture system suggest that an attack would be simple and

relatively inexpensive and that the consequences could be very substantial. The existing systems for protecting against and reacting to accidental introduction and outbreaks of exotic disease have worked well. However, it is recognized that an intentional attack may involve multiple locations rather than single points and organisms that may be more virulent than those occurring naturally and that may spread more rapidly. Multiple organisms could be used to confound and complicate the detection, identification and response. Existing response capacities could likely be overwhelmed in the event of an attack involving such multiple foci.

Attacks on the food chain after harvest threaten public health, while the main threat to pre-harvest agriculture is economic. The post-harvest industry has already aggressively pursued steps to reduce their vulnerability to intentional introduction of biological agents or contaminants after harvest. Despite this, the overall vulnerabilities remain very substantial.

A mock exercise on Foot and Mouth disease, conducted in June 2001 under the auspices of the Texas Division of Emergency Management, Department of Public Safety, and Texas Animal Health Commission by the Texas A&M University System tested the current emergency response system for foreign animal disease. It was very useful in solidifying linkages between the functions of the

more than 40 state agencies that must be involved in such events. But, it also showed a large number of areas where additional progress must be made. A mechanism for assured response to identified deficiencies is needed as well as a commitment to continuing these exercises for both foreign animal and plant disease and for the food chain after harvest and slaughter.

CURRENT EFFORTS

Role of TAMUS and Its Constituent Parts in Agricultural Biosecurity

The Texas A&M University System has established and functioning programs that deal with prevention, detection, diagnosis, mitigation and policy matters related to maintaining national and international trade channels following outbreaks of plant and animal disease. The Texas Veterinary Medical Diagnostic Laboratory (see Appendix B) and Texas Cooperative Extension are among first responders when such outbreaks occur. Recognizing the increased threat of intentional introduction of exotic plant and animal disease, the agencies and universities have extended and expanded current capacities to better support the emergency responders with research, education, and service functions. The Board of Regents of the TAMUS established the Integrative Center for Homeland Security which focuses the broad resources of the system on the broad agenda of biological, chemical and nuclear threats to various sectors of the country. The Board also established the Institute for Countermeasures Against Agricultural

Bioterrorism, a component of the broader center to focus the resources of five major system parts on the food and agricultural agenda for home security. These include the College of Agriculture and Life Sciences, the College of Veterinary Medicine, The Texas Cooperative Extension, the Texas Veterinary Medical Diagnostic Laboratory, and the Texas Agricultural Experiment Station. Through this umbrella organization, the research and education capacities of the Agriculture Program are being refocused to be more responsive to needs for new technology, information, and methods to enhance homeland security for agriculture.

RECOMMENDATIONS

Suggested Programmatic Changes

- *Provide resources to develop more rapid, accurate, and economic methods for surveillance, detection, and diagnosis of introduced animal and plant pathogens.*
- *Through establishment of new networks between relevant agencies, assure that food and agriculture are integral parts of the overall Homeland Security planning and implementation of means to prevent, detect, and mitigate against either intentional or accidental outbreaks of plant and animal disease.*
- *Develop more effective and functional linkages between first responders in*

state action agencies (TAHC and TDA) dealing with agriculture and the overall emergency response system that deals with disaster at the community and other jurisdictional levels.

- *Assure capacity to augment limited federal-state diagnostic laboratories in response to emergency outbreaks of plant and animal disease .*
- *Ensure that mock emergency exercises for both plant and animal exotic disease are conducted on a regular basis and that they not only test current emergency response plans and procedures, but also evaluate technology and policy options to improve these systems.*

Suggested Regulatory Changes

- *Ensure that food and agriculture are integral parts of state strategies for detection, exclusion and treatment of diseased plants and animals.*
- *Ensure a more integrated state plan, linked to federal counterparts to provide a total capacity to respond at community and farm levels.*
- *Review current emergency response plans at the state level (Foreign Animal Disease Plan) and revise to make it more responsive to the threat of intentional acts of bioterrorism on agriculture.*
- *Review and recommend changes to current regulatory programs to make them more dynamic and responsive to bioterrorism threat agents, the plants and animals that are affected and the environment in which*

bioterrorism occurs – leading to optimizing the response in terms of economic, environmental, and epidemiologic consequences.

- *Provide mechanisms to ensure that the regulatory system dealing with prevention and mitigation of plant and animal disease is based on the most modern science, making full use of the tools of modern biotechnology and information technology.*

The Subcommittee encourages the continued collaboration and cooperation between all State agencies and the United States Department of Agriculture-Animal and Plant Health Inspection Service (USDA-APHIS). The Subcommittee recommends that TDA and TAHC continue to monitor this relationship to ensure that an appropriate and timely response is given to any animal and/or plant disease situation that may occur within the state.

CHARGE 2

Monitor the development of the 2002 Federal Farm Bill and its impact on Texas. The Subcommittee should assess the need for changes in state law or policies necessary to comply with and benefit from the federal legislation.

The following, denoted in italics, was prepared by Dr. Chester P. Fehlis of the Texas Cooperative Extension and Dr. Charles J. Scifres of the Texas Agricultural Experiment Station.

BACKGROUND

Agricultural policy at the federal level has been immensely important to the economic well-being of Texas agriculture. Actual producer data obtained from FARM (Financial and Risk Management) Assistance subscribers statewide indicates 25 to 30 percent of gross revenue for Texas crop producers comes from Federal farm programs. The production and marketing decisions for commodities, such as cotton, corn, rice, sorghum, wheat, and peanuts, are intertwined with the farm policy provisions and expectations. Producers, agribusiness and lenders in several areas of Texas, including the Panhandle, Southern and Rolling Plains and Coastal Bend are particularly sensitive to changes in federal farm policy. This sensitivity is also reflected in the economic viability of rural communities dependent upon agriculture. Since 1998, without

special federal government assistance, Texas production agriculture would have been financially devastated due to the disastrous weather patterns and low farm commodity prices.

CURRENT DEVELOPMENTS

The 2002 Farm Bill continues direct payments and marketing loan provisions providing a safety net for producers. The addition of counter-cyclical payments, intended to replace ad hoc disaster assistance payments, will provide more certainty regarding Federal assistance during periods of low commodity prices.

In addition, new safety net programs designed to support wool and mohair as well as dairy producers will provide valuable assistance during periods of low prices.

The Federal peanut program was completely overhauled and brought in line with other program crops. The most important change for Texas crop producers was the ability to update crop bases and program payment yields. Significant changes were made to conservation programs but implementation rules are still being crafted. Therefore the impacts on Texas producers are still uncertain.

Through the years, U.S. agricultural policy development and implementation have become more complex. This complexity requires sophisticated tools of analysis for determining individualized impacts of proposed policies and regulations and for interpreting the results to policy makers and producer groups.

The Agricultural and Food Policy Center (AFPC)—a joint effort of the Texas

Agricultural Experiment Station and Texas Cooperative Extension—has earned a national reputation for providing unbiased analytical support to policy makers and commodity groups in addressing and assessing proposed policy options impacting Texas commodity industries. Monitoring performance at the farm level continues to be particularly critical as government explores its role in providing an income safety net for agriculture.

Analysis of farm bill impacts on Texas lead to the following conclusions:

- *Federal farm policy, by definition, is designed on a national level. However, its impacts are substantially different by regions within a state and commodity.*
- *Farm provisions may have different consequences for producers, landlords, tenants, agribusinesses, and rural communities. For example, the change in Federal peanut policy will result in infrastructure changes in the industry. The regional impacts will likely be significantly different from one peanut producing region to the other.*

The farm bill provides a safety net to producers but does not cure all the ills. The educational programs we have conducted (see Appendix A) reveal a need to provide continued analysis to Texas producers on a variety of issues. It is apparent that regional analysis of farm policy and regulatory impacts are warranted. Producers must continue to look for ways to add value to the raw

commodities they produce. The feasibility of these ventures and the resulting impacts on rural communities need to be quantified. In addition, it is important to understand the economic linkages between rural communities and the Texas economy. AFPC could expand activities and provide analytical capabilities in regional farm policy and regulatory impacts, value-added businesses, and economic impacts for rural communities.

Substantial demand exists for value-added research to be extended as a third-party evaluation of proposals for food and fiber processing and business development, including activities such as ethanol plants, soybean crushing and processing, packing plants, and new business ventures. Some of these identified areas are:

- Evaluating and improving proposed business, production, marketing and financial plans.*
- Providing investors and potential funding agencies with a risk feasibility analysis.*
- Aiding existing agribusiness firms in strategic planning under risk.*
- Determining long-term social benefits of new business in rural areas.*

These needs are critical for the future of Texas agriculture and rural communities. Efforts must be expanded to generate additional funding for enhanced analytical

capacity for the benefit of Texas farmers and ranchers. Recognizing the overall importance of national farm and regulatory policy, it is anticipated that policies at the state level also will have an expanded influence on the development of certain agricultural enterprises and value added opportunities. The creation of the State Agricultural Policy Board and the Office of Rural Community Affairs during the 2001 State Legislative session suggests the high priority need to address within-state issues important to Texas agriculture and rural areas.

The Subcommittee would like to note that in addition to the significant improvements that were made to the commodities and conservation titles of the Farm Bill, there were also meaningful advances made in the trade, nutrition, credit, rural development, research, and forestry titles. There was also an energy title included in this Farm Bill, which provides for much-needed renewable energy education and efficiency improvements. (See Appendix C which contains a 2002 Farm Bill Summary.)

RECOMMENDATIONS

- The Subcommittee encourages TDA, Soil and Water Conservation Board, and Texas Water Development Board to continue monitoring the use in Texas of EQUIP funds included in the conservation title. The Subcommittee recommends that the above agencies cooperate on a legislative update on how these funds are being spent and what benefits

the State is receiving. This program will continue to be a key component in conserving agricultural water.

- The Subcommittee strongly encourages ORCA to continue work with the United States Department of Agriculture-Rural Development to allocate federal appropriated funds to rural areas of Texas in need of infrastructure improvement.
- The Subcommittee recommends that the undermentioned agencies analyze, track, and report to the Legislature on the following topics:
 1. ORCA and TWDB on water supply and water quality infrastructure needs,
 2. ORCA on programs included in the rural development title of the Farm Bill: broadband internet service, rural local television broadcast signal loan guarantees, rural strategic investment program, rural business investment program, and rural firefighters and emergency personnel grant program,
 3. TDA on value-added agricultural market development grants and on how federal funding in the nutrition title of the Farm Bill is impacting Texas schools and citizens, and
 4. TWDB on the status of the Water Conservation Program provided in the conservation title of the Farm Bill.

CHARGE 3

Study the efficiency, implementation and funding of the Fire Ant Research and Management Account Advisory Committee at the Texas Agricultural Experiment Station for the eradication of fire ants. The Subcommittee shall evaluate state entities currently charged to combat the fire ant problem and make recommendations necessary to ensure a coordinated response.

The following information, denoted in italics, was prepared by Bastiaan M. Drees, Director, Texas Imported Fire Ant Research & Management Project (Texas Fire Ant Project) and Professor, Department of Entomology, The Texas A&M University System.

BACKGROUND

*The red imported fire ant, *Solenopsis invicta* Buren (Hymenoptera: Formicidae), arrived in Texas during the 1950's. From the point of accidental introduction around the 1930's in Mobile, Alabama, its range expanded through natural mating flights and transport of high-risk items such as nursery stock and sod. It is now found in the eastern two-thirds of the state, with spot infestations in several west Texas counties (Midland, Ector, Lubbock, and El Paso counties). It has displaced many native ant species and affects urban, agricultural and wildlife areas. Recent surveys (Lard et al. 2001) estimate the **statewide economic impact to be \$1.2 billion**. Eradication of this pest, attempted from the 1950's through 1970's, was unsuccessful. Today, there is no method capable of eradicating this pest from the*

southeastern United States because of the likelihood of re-invasion from neighboring, untreated areas. Red imported fire ant biology, impact and development of management approaches are reviewed in Williams et al. (2001), Vinson (1997) and Vinson and Sorenson (1986). Current methods of fire ant management are described in Drees et al. (1999, 2002).

*In 1997, the Texas legislature funded the Texas Imported Fire Ant Research and Management Plan developed in response to Bill Number TX74RHB 2341 (May 12, 1995) at a level of \$2.5 million per year. This project has supported research, education and regulatory programs conducted in collaboration with the Texas Agricultural Experiment Station, the Texas Cooperative Extension, Texas Tech University, University of Texas and the Texas Department of Agriculture. **The goal of this project** is to eliminate the red imported fire ant as a pest of major economic and health significance. **Eradication** of this pest ant species is currently not feasible in the southeastern United States, although attempts are being made in western states to eradicate spot infestations. A description of the project and progress made from 1998-2002 can be found on the web site, <http://fireant.tamu.edu>.*

CURRENT EFFORTS

Red imported fire ants affect almost all aspects of life in infested areas of Texas.

The rationale for addressing problems caused by fire ant eradication is to protect natural resources (i.e., animal and plant diversity, abundance and distributions), the environment (i.e., preventing surface run-off water contamination from mis-use or over-use of certain insecticides), safe-nutritious food supply (i.e., medical health of agricultural field workers), agricultural competitiveness (i.e., added cost of insecticide treatments and movement restrictions for agricultural commodities affected by the USDA imported fire ant quarantine regulations), economic opportunity (i.e., impact of fire ants on tourism, pesticide product and services sales) and quality of life (i.e., nuisance and health threats to people, pets, livestock and wildlife). This project provides funding support for programs designed to address problems caused by the imported fire ant in order to produce both short-term, as well as long-term solutions.

Objectives

Directed research, education and regulatory program categories supported by the Texas Fire Ant Project include:

- Investigations of biological control organisms which can be mass-reared, released or augmented to suppress red imported fire ants, including phorid fly species, *Thelohania* and other diseases of this exotic ant species, and establishment and monitoring of biological control release sites and impact;*
- Investigations of physiological processes and behaviorally-modifying*

- chemicals that can lead to new control or suppression technology;*
- *Investigations of genetics/genomics mechanisms and transformation systems which could lead to the elimination of red imported fire ants;*
 - *Investigations addressing regulatory issues such as development of treatment programs for shipment of fire ant-free articles (i.e., bee hives, hay bales, nursery stock); surveys of red imported fire ant spread;*
 - *Development, implementation and evaluation of Integrated Pest Management (IPM) systems for urban, agricultural commodities and wildlife areas.*

Research Approach

The Texas Legislature's Bill No. TX74HB 2341 (May 12, 1995) established an oversight committee, entitled the Fire Ant Research & Management Account Advisory Committee (FARMAAC) to administer the fire ant project under Section 77.022, Agricultural Code. This advisory committee shall "advise, assist, and direct" the Texas Agricultural Experiment Station in conducting fire ant research. This Bill provides no termination date for the committee and describes its composition and function. The 12 committee members specifically mandated by the act include three governor-appointed individuals representing representatives from municipal governments, the general public and agribusiness, administrative members from collaborating institutions (Texas Agricultural Experiment Station,

Texas Tech University, University of Texas, and Texas Department of Agriculture), and other agencies (Texas Parks and Wildlife Department, Public Utility Commission of Texas, Structural Pest Control Board, chemical industry and oil and gas industry).

With assistance from a second committee, the Research Review Panel selected by FARMAAC, a request for proposals is issued bi-annually and proposals are reviewed and prioritized for funding using specific criteria. Selected proposals are forwarded to the Director of the Texas Agricultural Experiment Station for funding approval and disbursement. Periodically a third committee, the Peer Review Committee comprised of 6 to 7 scientists from states other than Texas, reviews the entire project and individual programs funded by the project to assure research quality, progress and assure that research addresses the project's goal. Oversight from these three committees will guarantee that available funding continues to support the most promising programs and maintain collaboration between participating institutions.

Objective 1 -Biological control program agents will continue to be studied, screened for host specificity, mass rearing methods (i.e., artificial diets, laboratory culturing) developed, mass produced and released in laboratory trials and field sites to assess efficacy. The approach to be used has been described by S. D.

Porter (1998). Programs will focus of Pseudacteon species of phorid flies, diseases of imported fire ants such as Thelohania and Beauveria species/strains. Efforts will be made to select, mass produce, release and monitor impact of the best combination of agents within the context of Integrated Pest Management (IPM) programs. A bait formulation of Beauveria bassiana is being developed as a "bio-pesticide." Successful programs will document reduced fitness and population levels of red imported fire ants.

Objective 2 -Hormone systems, such as those involving juvenile hormone(s) and their regulation of physiological pathways such as the production of vitellogenin for egg production and involved in queen maturity (i.e., ovariole or ovary development, de-alation or wing-dropping) will continue to be a major area of focus. These pathways may be manipulated to affect control and suppression of imported fire ant populations. Similarly, behaviorally-modifying chemicals such as those which cause worker execution of developmental stages of winged reproductive male and female fire ants will continue with the hope of providing methods for managing fire ant populations in the field, possibly using novel bait-formulated products. Successful programs will result in potentially patented products and demonstrations documenting suppression of imported fire ants under laboratory and/or field conditions.

Objective 3 -The study of the genetics/genomics of the red imported fire ant, symbiotic organisms (i.e., yeasts, bacteria) and natural enemies (i.e., *Thelohania*, *Beuveria* and *Strepsiptera*) may provide methods of exploiting natural male sterility, incorporating marker genes in transformed queen ants, or rendering symbiotic organisms and natural enemies with abilities to eliminate their hosts will continue. This area of new technological capabilities has the promise to control or even eradicate imported fire ants as did the use of sterile male flies in the screw worm eradication programs during the last half of the 1900's. The bacterium, *Beuveria bassiana*, has already been transformed with genetic markers that will enable researchers to follow the longevity and movement of this organisms in field trials once approved for field application. This is a long-term project with the potential for break-through technologies. Successful projects will add knowledge to the genetic structure of red imported fire ants, their symbionts and natural enemies and demonstrate the ability to transform organisms.

Objective 4 - Only the eastern two-thirds of Texas are infested and quarantined for red imported fire ants. Movement of high-risk items such as hay bales, sod, nursery stock, bee hives and soil-contaminated equipment is the primary method of movement of the ant to new locations in West Texas and beyond. No treatment programs exist for some of these articles. Project funds will be used to support methods development for assuring ant-free high-risk articles. In addition, if/when

USDA-APHIS funding for enforcement of federal quarantine regulations be, one again, be unavailable, Fire Ant Project funds will be provided to the Texas Department of Agriculture to support these activities.

In addition, the Texas Department of Agriculture has the obligation to the USDA-APHIS to survey all “edge” counties in Texas to detect further spread of the imported fire ant. These surveys have historically been sub-contracted to collaborating institutions (University of Texas, Texas Tech University). These activities are expected to be continued, in part, because other ant species are also monitored in these surveillance efforts.

With parts of California (Orange, Riverside and Los Angeles Counties) and Australia (Brisbane, Queensland) currently conducting eradication programs, and with regulatory agencies in California and New Mexico developing mechanisms for the USDA-APHIS to lift quarantine status from infested areas, there is increased interest in eradicating spot infestations in west Texas to remove them from federal quarantine (i.e., Midland and Ector Counties) or prevent quarantine (i.e. Lubbock and El Paso Counties). Should outside funding be secured spot eradication efforts may be initiated in parts of Texas.

All of these activities should help reduce the spread of imported fire ants across

Texas and perhaps lead to reductions in the ant's current distribution.

Objective 5 - The development, implementation and evaluation of Integrated Pest Management (IPM) systems is the method by which all research advances and regulatory methods will be incorporated to improve currently available methods of fire ant management and to achieve the goal of the project. Numerous researchers and research groups are currently are and will continue to be involved with developing and evaluating IPM programs for wildlife areas (i.e., quail habitats, Attwater Prairie Chicken Preserve) and agricultural commodity production systems (i.e. cotton, pecans, soybeans, hay, livestock).

The Texas Cooperative Extension system, with agents in almost every Texas county, will continue to play a major role in this process and serve to transfer technology to the field through educational programs, demonstrations and mass media methods. The web site, <http://fireant.tamu.edu> will be maintained and developed to continue to provide a mechanism for information outreach.

Publications, fact sheets, newsletters, scientific publications, trade magazine articles, reports, school curricula and other educational support materials will be developed to help transfer new technology and increase awareness of current ant management options.

County Extension Agents - IPM (Fire Ant Project) in Dallas, Houston, Austin and San Antonio, supported by faculty and staff in College Station, will continue to develop and provide educational programs supporting the Texas Fire Ant Project. An attempt will be made to establish one additional agent for Fort Worth, the third largest metropolitan area in the state. In addition, titles of the agents will be changed to Extension Agents - IPM (Urban) to better reflect their program activities because of the interrelationship between imported fire ants and other major structural, nuisance and landscape pests. These agents will continue to promote community-wide fire ant management programs, evaluate and demonstrate new technology such as biological control and new products, and promote technical research and regulatory advances made by the Texas Fire Ant Project's collaborators.

IPM program development and outreach education should improve current ant management methods, thereby reducing fire ant problems and pesticide use for their control.

Financial Support

Beginning in 1997 (for FY1998-1999), the Texas Legislature funded implementation of the Texas Imported Fire Ant Research & Management Plan at a level of \$2.5 million per year. During that year, funding was incorporated into

the Texas Agricultural Experiment Station core funding. The act (Section 1. g.) states that “the administrative expenses of the advisory committee may not exceed 20 percent of the total amount of funds available for expenditure by the advisory committee.” In FY2001-2002, the Texas Agricultural Experiment Station withheld \$500,000/yr. for program implementation, reducing funding available for research, education and regulatory programs to \$2 million/yr. FARMAAC will continue to assure that remaining funding is directed towards addressing the goal of the Texas Imported Fire Ant Research & Management Project. In addition to legislative support provided to the Texas Agricultural Experiment Station to act as the steward for this multi-agency program, efforts continue to access sources of outside funding such as the ongoing multi-year USDA-ARS Area-Wide Fire Ant Suppression Project for which TCE expects roughly \$150k per year and industry grants to support product evaluations. Efforts will also be made to acquire additional funding by collaborators through grant proposals to leverage their program funding and donations and sales of items through the project’s web site(s).

*Under a policy proposed by the Texas Department of Agriculture and adopted by the Texas Fire Ant Project in 1998, **no state funding can or will be used to buy or apply insecticide products for imported fire ant control programs.***

Donated product, however, has been applied to conduct “pilot showcase”

community-wide fire ant management programs to document impact of approaches such as the “Two-Step Method of Fire Ant Control” (Merchant and Drees 2002). Similarly, the program does not have the capacity to fund implementation of research resulting in the ability to suppress the ant. Biological control agents, once demonstrated to suppress ant population levels, for instance, will require additional funding in order to mass produce and establish release sites beyond sites established primarily for research purposes.

Co-workers

A technical committee, entitled the Fire Ant Research & Management Initiative Committee (FARMIC) has been formed to provide support and suggested actions for FARMAAC. Members of this committee include individuals from collaborating institutions, including the Texas Agricultural Experiment Station or TAES (S. B. Vinson), Texas Tech University (H. Thorvilson), University of Texas (L. Gilbert), Texas Department of Agriculture (D. Kostroun), and the Texas Cooperative Extension (B. Drees). Additional members represent administrations of these institutions, including the Texas Agricultural Experiment Station (F. Gilstrap), Texas Tech University (D. Auld), and other agencies such as the Texas Parks and Wildlife Department (R. George), United States Department of Agriculture (C. Onstadt and L. Wendel). From FY1998 through FY2001 the project funded about 35 projects annually involving over 40 investigators from many institutions (see

<http://fireant.tamu.edu> for listing of funded projects, collaborators and agency affiliations too length to list herein). Several cooperators (i.e., S. D. Porter, E. Vargo, J. Fuxa) are from out-of-state institutions that bill to accounts maintained within TAES or the Department of Entomology.

For the FY2002-2003 biennium, changes in guidelines for submitting multiple investigator proposals in five areas of directed program objective (above), only 10 programs were funded, although the number of collaborators remained largely unchanged. This trend is expected to continue over the next 6 years and beyond, providing funding commitments from TAES administration are maintained and honored.

RECOMMENDATIONS

- The Subcommittee recognizes that the leadership of the Texas Imported Fire Ant Research and Management Project has successfully coordinated efforts regarding fire ant control and recommends that it should proceed to operate and work towards the goal of eliminating the red imported fire ant as a pest of major economic and health significance in Texas.
- The Subcommittee recommends FARMAAC continue to progressively educate Texas citizens on how to eliminate fire ants and that FARMAAC

maintains its public demonstration sites showing the benefits of its recommended elimination strategies.

APPENDIX A

**Appendix A:
Update on Texas Cooperative Extension
2002 Farm Bill Education Activities**

TCE provided Texas producers with timely and relevant information throughout the entire Farm Bill process beginning in 2001 while Congress considered different program options. Through the combined efforts of campus, district and county-based TCE faculty, Texas is leading the nation in terms of educational efforts related to the 2002 Farm Bill. The following list summarizes the major activities of TCE to better educate clientele:

- Two TCE faculty served as coordinators and editors for a national publication on the potential policy options and consequences for the 2002 Farm Bill. This project brought together more than 60 policy experts to co-author brief leaflets on 39 distinct issues of importance to the farm bill. Each article was a stand-alone piece that could easily be used by both policy makers and farm bill stakeholders to identify major issues, policy options, and consequences. The entire set of articles was published in one volume, on a CD, and on the Farm Foundation website. During the farm bill debate, these papers were the most viewed information on farm policy on the entire web. This effort recently received the Outstanding Policy Issues Education Award from the National Public Policy Education Committee.

- Conducted countless initial farm bill information meetings for producers and other agribusiness stakeholders across the state prior to passage of the farm bill. These meetings provided agricultural interest with valuable up-to-the-minute information on the status of the bill, allowing them to prepare for potential impact of the bill and the decisions the bill would require them to make.
- Upon the passage of the bill, TCE faculty worked closely with USDA/FSA to cooperatively prepare an action plan to conduct educational programs utilizing traditional producer meetings and electronic communication via the web. Initially, producer educational meetings focused on the contents of the Farm Bill and information that producers would need to assemble for program sign up. A second round of meetings was held to demonstrate base and yield evaluation software and assist with questions regarding updating base acreage and program yields. As of October 18th, there have been 224 educational meetings conducted across the state with nearly 14,000 producers in attendance. This is in addition to the thousands of phone calls and e-mails that have been answered by TCE faculty.
- TCE and the Farm Service Agency (FSA) signed a memorandum of

agreement to jointly conduct educational activities regarding Farm Bill implementation. TCE economists have provided training to all FSA County Executive Directors and staff on the use of software developed to assist producers in evaluating base and yield updating decisions. In addition TCE faculty and FSA staff conducted joint educational meetings in essentially every county in the state during the months of August and September.

- The 2002 Farm Bill provided producers with the one time option to update base acres and farm program yields. TCE and TAES faculty in the Agricultural and Food Policy Center developed a comprehensive software analysis package to assist producers in evaluating base and yield updating decisions, then conducted state-wide training for specialists and agents on the contents of the Farm Bill and the use of software. This software has been adopted and endorsed by the Farm Service Agency (FSA) nationally. Thus far, the software has been accessed via the web by more than 75,000 producers across the United States. More than 17,000 producers from 171 different counties in Texas have analyzed their base and yield update decision on nearly 8 million acres with the software. TCE county based faculty have worked one-on-one with producers across the state to assist with using the base and yield analyzer. As an example of the importance of the decision, a sample of 25 Panhandle area producers have found an

average gain of \$18,753 by updating their bases and yields. Assisting producers make the right decision regarding their options can result in millions of dollars in increased revenue for Texas producers.

- Developed a comprehensive web site to disseminate information and serve as the “one stop information source” on the provisions of the 2002 Farm Bill. The website has been and continues to be the focal point of Extension educational efforts on the 2002 Farm Bill. It contains presentation materials, a real time question and answer forum, interactive educational software, the base and yield analysis software, and a calendar of TCE educational activities. The continuously updated and readily available dimensions of this program delivery has allowed Texas Cooperative Extension to respond effectively and timely to the information needs of Texas producers. County and district based faculty have immediate access to the latest Farm Bill information, and TCE faculty can refer their clientele directly to the resource. Information delivery is more efficient allowing TCE to reach a larger base of clientele than would otherwise be possible. To date, the site has had almost 20,000 views of materials.

APPENDIX B

Appendix B:

Prepared by Dr. Lelve G. Gayle of the Texas Veterinary

Medical Diagnostic Laboratory

The Texas Veterinary Medical Diagnostic Laboratory (TVMDL) is the state agency responsible for the laboratory diagnosis of animal diseases in Texas. The introduction of a foreign animal disease (i.e. Foot and Mouth Disease, “Mad Cow Disease”, Highly Pathogenic Avian Influenza, Classical Swine Fever, Rinderpest, etc.) into Texas would have devastating economic and social consequences.

Historically, the United States Department of Agriculture (USDA) has strictly controlled and restricted the laboratory diagnosis of foreign animal diseases to the USDA Foreign Animal Disease Diagnostic Laboratory at Plum Island, New York. After the devastation of Foot and Mouth Disease and “Mad Cow Disease” in England, USDA correctly concluded that the Federal government does not have the laboratory capacity or the man power to protect the animal industries of the United States.

In June 2002, the USDA announced the selection of five strategically located state veterinary diagnostic laboratories (“core labs”) and seven smaller veterinary diagnostic laboratories (“satellite labs”) to do the following: 1) Upgrade facilities

to Biosafety Level-3, 2) Purchase equipment, and 3) Train personnel to have the capability and capacity to diagnose foreign animal diseases. As a “core” laboratory, TVMDL received \$2 million in the form of a one-time grant to be expended over two years to upgrade to mission capability. It is our goal to be fully operational in the fall of 2003. TVMDL will be dependent on USDA to provide protocols and reagents to perform these tests.

Since this is a one-time grant with no assurance of continued federal support, TVMDL is requesting \$430,000 for personnel from the State Legislature as an Exceptional Item during the upcoming legislative session to continue to support this mission. Additionally, we are requesting \$200,000 to upgrade to Biosafety Level-3 and equip a small section of TVMDL’s Amarillo laboratory to provide minimal foreign animal disease diagnostic capabilities for that geographic region.

APPENDIX C

from the U.S. House of Representatives Agriculture Committee's web page:

agriculture.house.gov/fbconfsum.pdf

Farm Bill Conference Summary

April 30, 2002

Title I - Commodities

Loan rates, Direct Payments and Target Prices for Covered Commodities					
	Loan Rate		Direct Payment	Target Price	
	2002-2003	2004-2007	2002-2007	2002-2003	2004-2007
Corn (bu)	\$1.98	\$1.95	\$0.28	\$2.60	\$2.63
Sorghum (bu)	\$1.98	\$1.95	\$0.35	\$2.54	\$2.57
Barley (bu)	\$1.88	\$1.85	\$0.24	\$2.21	\$2.24
Oats (bu)	\$1.35	\$1.33	\$0.024	\$1.40	\$1.44
Wheat (bu)	\$2.80	\$2.75	\$0.52	\$3.86	\$3.92
Soybeans (bu)	\$5.00	\$5.00	\$0.44	\$5.80	\$5.80
Minor Oilseeds (lb)	\$0.0960	\$0.0930	\$0.0080	\$0.0980	\$0.1010
Cotton (lb)	\$5.200	\$5.200	\$0.0667	\$0.7240	\$0.7240
Rice (cwt)	\$6.50	\$6.50	\$2.35	\$10.50	\$10.50

- ❑ **Base Acres:** Allows producers to retain their current AMTA base acres and add oilseed acres, or to update base acres using 1998-2001 acres planted and prevented planted to all covered commodities.
- ❑ **Payment Yields:** Allows producers who update base acreage to the average of 1998-2001 plantings to update yields for counter-cyclical payments. The update is the higher of 70% of the difference between current AMTA yields and a full yield update based on 1998-2001 yields on planted acreage **OR** 93.5% of 1998-2001 yields on planted acreage. Provides a “plug” of 75% of the county average yield for years in which the actual farm yield is less than the county average yield.
- ❑ **Timing of Payments:** A producer could elect to receive up to 50% of the **direct payment** beginning December 1 of the year prior to the year the crop is harvested, and the balance of the direct payment in October of the year the crop is harvested. For **counter-cyclical payments**, a producer can receive up to 35% of the projected payment in October of the year the crop is harvested; an additional 35% beginning in February of the following year; and the balance after the end of the 12-month marketing year for the specific crop.
- ❑ Includes authority for **LDPs on grazed wheat, oats, barley and triticale**. Provides for LDPs for the 2001 crop on non-AMTA farms, and waives beneficial interest requirements for the 2001 crop. Also implements a program of incentive payments to develop marketing opportunities for Hard White Wheat.
- ❑ Corrects USDA error to provide certain producers payments that were undelivered for crop years 1998, 1999, 2000, and 2001.

Dairy: Maintains a permanent \$9.90 Milk Price Support Program and establishes a 3 1/2 year National Dairy Program to provide assistance to all U.S. producers. The program will provide a federal payment each month equal to 45 percent of the difference between \$16.94 and the Boston Class I price. Payments are made on up to 2.4 million pounds of production for a producer annually.

Peanuts: Provides a quota buyout of 11 cents a pound per year over 5 years (55 cents total); provides a target price of \$495/ton; and allows for the payment of storage costs for peanuts under loan. Provides \$355/ton loan rate and \$36/ton fixed payment rate.

Sugar: Eliminates the one-cent a pound loan forfeiture penalty and gives authority to the Secretary to establish quota allotments.

Wool and Mohair: Provides marketing loans or loan deficiency payments based on a loan rate of \$1.00 per pound for graded wool, \$.40 per pound for non-graded wool, \$4.20 per pound for mohair and \$.40 per pound for unshorn pelts.

Honey: Provides marketing loans or loan deficiency payments based on a loan rate of \$.60 per pound.

Apples: Provides assistance for apple producers who have suffered low market prices.

Pulse Crops: Establishes marketing loans and loan deficiency payments for small chickpeas, lentils and dry peas at the following loan rates:

Small Chickpeas		Lentils		Dry Peas	
2002-2003 \$/cwt	2004-2007 \$/cwt	2002-2003 \$/cwt	2004-2007 \$/cwt	2002-2003 \$/cwt	2004-2007 \$/cwt
\$7.56	\$7.43	\$11.94	\$11.72	\$6.33	\$6.22

Specialty Crop Purchases: Increases carryover-spending authority for Section 32 commodity purchases. Directs additional commodity purchases by requiring not less than \$200 million of Section 32 funds per year to be used to purchase fruits and vegetables and other specialty food crops. At least \$50 million of that amount is to be used for fresh fruits and vegetables for schools through the DoD Fresh Program.

Step 2 Adjustment: Suspends the 1.25 cent price differential threshold for Step 2 marketing payments through July 31, 2006.

Payment Limitations: Relative to the House-passed bill, the framework reduces the limit on direct payments from \$50,000 to \$40,000; Reduces the limit on counter-cyclical payments from \$75,000 to \$65,000; Reduces limit on LDPs and MLGs from \$150,000 to \$75,000; Contains a separate payment limitation for the peanut program; Retains current rules on spouses, 3-entities, and actively engaged requirement. Adopts a \$2.5 million adjusted gross income cap on eligibility for participation in farm programs; Retains the use of generic certificates in the loan program. Total dollar limitation is reduced from \$550,000 in the House bill to \$360,000 in the conference framework.

- ❑ Creates a new commission to study and make recommendations regarding farm program payment limitations and the impact of payment limit policy changes on farm income, land values and agribusiness infrastructure.

Title II– Conservation

Program	Notes	Cost
Conservation Reserve Program (CRP)	Increases acreage cap from 36.4 million to 39.2 million acres. Retains priority areas. Expands wetlands pilot to 1 million acres with all states eligible.	\$1.517 billion
Wetlands Reserve Program (WRP)	Increases acreage cap to 2.275 million acres.	\$1.5 billion
Grasslands Reserve Program (GRP)	A new program to enroll up to 2 million acres of virgin and improved pastureland. Program would be divided 40/60 between agreements of 10,15, or 20-years and agreements and easements for 30-years-and permanent easements.	\$254 million
Farmland Protection Program (FPP)	Since 1996, the program has provided \$53.4 million to protect 108,000 acres. The new funding is a nearly 20-fold increase over amount committed to this program since the last farm bill.	\$ 985 million
Wildlife Habitat Incentives Program (WHIP)	Since 1996, approximately \$62.5 million has been spent through this program to provide cost-share payments on 1.6 million acres. The new funding is greater than a 10-fold increase over amount committed to this program since the last farm bill.	\$700 million
Environmental Quality Incentives Program (EQIP)	Phased up to achieve a \$1.3 billion annual funding level. Priority areas are eliminated. Funds are split 60/40 between livestock and crop producers.	\$9 billion
Water Conservation Program	Water Conservation Program provides cost-share incentives and assistance for efforts to conserve ground and surface water. \$50 million is reserved specifically to assist producers in the Klamath Basin.	\$600 million
Conservation Security Program (CSP)	A new national incentive payment program for maintaining and increasing farm and ranch stewardship practices.	\$2 billion
Small Watershed Rehabilitation Program	Provides essential funding for the rehabilitation of aging small watershed impoundments that have been constructed over the past 50 years.	\$275 million
Underserved States	Continues program begun in Agricultural Risk Protection Act of 2000.	\$50 million
Desert Terminal Lakes	Provides funding to help conserve desert terminal lakes.	\$200 million
Total		\$17.1 billion

Title III - Trade

Program	Notes	Cost
Market Access Program (MAP)	Increases program spending to \$200 million annually by 2006.	\$650 million
Technical Assistance for Specialty Crops (TASC)	Provides exporter assistance to address barriers that restrict U.S. specialty crop exports.	\$19 million
Foreign Market Development Cooperator Program (FMD)	Increases program spending from \$27.5 to \$34.5 million per year, with a continued significant emphasis on the importance of the export of value added agricultural commodities into emerging markets.	\$67 million
Food for Progress	Increases funding caps for transportation and administrative costs and sets a minimum level of commodities to be purchased for use in this food aid program.	\$308 million
Global Food for Education Initiative	Continues Pilot Program for Fiscal Year 2003.	\$100 million
Total		\$1.144 billion

Title IV - Nutrition

- ❑ Total Cost – \$6.4 billion
- ❑ Reinstates benefits for legal immigrants who have lived in the United States for at least 5 years. Also restores benefits for legal immigrant children and disabled individuals without minimum residency requirements.
- ❑ Provides five months of transitional benefits for households leaving Temporary Assistance to Needy Families (TANF).
- ❑ Includes provisions to simplify and streamline the food stamp program so that it better aligns with other public assistance programs and helps both recipients and state administrators.
- ❑ Reforms and streamlines the food stamp program quality control system.
- ❑ Increases funding for The Emergency Food Assistance Program to \$140 million per year. Provides commodities to food banks and soup kitchens and expands other commodity distribution programs.
- ❑ Provides an increase in funding for both the Senior and WIC Farmers' Market Nutrition Programs.
- ❑ Provides additional commodities for the school lunch program and includes a pilot through which fresh fruits and vegetables will be provided free in schools.

Title V—Credit

- Generally reauthorizes USDA farm lending programs and provides greater access to USDA farm credit programs for beginning farmers and ranchers. Increases the percentage that USDA may lend for down payment loans and extends the duration of these loans; and establishes a pilot program to encourage beginning farmers to be able to purchase farms on a land contract basis.

Title VI - Rural Development

Program	Notes	Cost
Rural Local Television Broadcast Signal Loan Guarantees	Provides funds to allow rural residents in unserved or underserved areas to access their local television stations.	\$80 million
Broadband Service in Rural Areas	Provides funds that allow rural consumers to receive high-speed, high-quality broadband service.	\$100 million
Value-Added Agricultural Market Development Grants	Provides \$40 million a year for grants to assist producer owned valued-added businesses.	\$240 million
Rural Strategic Investment Program	Creates regional investment boards that may receive up to \$3 million for economic development.	\$100 million
Rural Business Investment Program	Provides \$280 million in guarantees for rural business investment companies to provide equity investment for businesses.	\$100 million
Funding for Rural Development Backlogs Program	Funds backlogged applications for water and wastewater programs.	\$360 million
Rural Firefighters and Emergency Personnel Grant Program	Provides funding to train rural firefighters and emergency personnel.	\$50 million
Total		\$1.03 billion

- **Community Water Assistance Grant Program:** Sets aside appropriated funds for communities facing emergency drinking water shortages.

Title VII - Research

Reauthorizes and establishes new agricultural research and extension programs. Increases funding for the Initiative for Future Agriculture and Food Systems and increases program level from \$120 million a year to \$200 million annually in FY2006.

- Cost -- \$1.3 billion.

Title VIII - Forestry

New funding is committed for a new cost-share program to assist private non-industrial forest landowners in adopting sustainable forest management practices.

- Cost -- \$100 million.

Title IX – Energy

Program	Notes	Cost
CCC Bioenergy Program	Provides mandatory funding for the CCC Bioenergy Program, which will enable the Secretary to continue making payments to bioenergy producers who purchase agricultural commodities for the purpose of expanding production of biodiesel and fuel grade ethanol.	\$204 million
Biobased Product Purchasing Preference	Establishes a new program for the purchase of biobased products by Federal agencies. Funding will be used to test biobased products.	\$6 million
Biodiesel Fuel Education	Creates a grant program to educate government and private fuel consumers about the benefits of biodiesel fuel use.	\$5 million
Renewable Energy System & Energy Efficiency Improvements	Establishes a loan, loan guarantee & grant program to assist farmers in purchasing renewable energy systems and making energy efficiency improvements.	\$115 million
Biomass Research and Development Act of 2000	Reauthorizes and funds the Biomass Research and Development Act through FY 2007.	\$75 million
Total		\$405 million

Title X - Miscellaneous

Country of Origin Labeling: For meat, fruits & vegetables, fish and peanuts. Requires the Secretary to provide guidelines for voluntary labeling by September 30, 2002. This program would become mandatory in two years. For a Commodity to be labeled USA product, it must be born, raised and processed in the United States. Commodities that are ingredients in processed products would not fall under the labeling requirement.

Family Farmer Bankruptcy Protection: Extends Chapter 12 Bankruptcy provisions to December 31, 2002.

Swine Production Contracts: Provides growers who have swine production contracts the same statutory protections as provided livestock sellers and poultry growers.

Disclosure: Clarifies that livestock and poultry producers can discuss contracts with state & federal agencies and other individuals having a fiduciary or familial relationship.

Other –

Name of Bill: The Farm Security and Rural Investment Act of 2002.

Length of Bill: 6 years