The background of the entire page is a close-up photograph of the Texas state flag, showing the blue canton with a white star, the white field, and the red field.

SUNSET ADVISORY COMMISSION

Texas Animal Health Commission

Staff Report
April 2006



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In 1977, the Texas Legislature created the Sunset Advisory Commission to identify and eliminate waste, duplication, and inefficiency in government agencies. The 12-member Commission is a legislative body that reviews the policies and programs of more than 150 government agencies every 12 years. The Commission questions the need for each agency, looks for potential duplication of other public services or programs, and considers new and innovative changes to improve each agency's operations and activities. The Commission seeks public input through hearings on every agency under Sunset review and recommends actions on each agency to the full Legislature. In most cases, agencies under Sunset review are automatically abolished unless legislation is enacted to continue them.

TEXAS ANIMAL HEALTH COMMISSION

SUNSET STAFF REPORT

APRIL 2006



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SUMMARY

Summary

Times have greatly changed since the Legislature established the Texas Animal Health Commission. Created in 1893 as the Texas Livestock Sanitary Commission, the Commission primarily regulated the control of cattle fever ticks, which had caused an epidemic of tick fever that threatened the state's robust cattle industry. Since then, the Legislature – which renamed the Commission in 1959 – has expanded the Commission's animal health responsibilities to include protecting all domestic and exotic livestock and fowl from foreign, emerging, and domestic animal diseases.

In the 113 years since its creation, the Commission has successfully prevented large-scale animal disease outbreaks and has effectively controlled the spread of disease in Texas. Yet, while the Commission's focus on animal health has remained constant over the years, the environment in which the Commission operates has changed dramatically.

The growing number and types of animal diseases provide an increasing threat to Texas' animals. Because some animal diseases – such as avian influenza – can be transmitted from animals to humans, this increase in disease threatens people, as well. In addition, society has become incredibly mobile, facilitating the rapid spread of disease, particularly highly infectious diseases such as exotic Newcastle disease and foot-and-mouth disease.

The ability for disease to spread quickly can have a devastating effect on Texas' economy, as livestock accounts for the largest sector of the state's agriculture industry. Technology also has changed the way the livestock and poultry industries operate, including how animal diseases are diagnosed, treated, and traced. Finally, threats not imagined a century ago – such as acts of agroterrorism – present additional challenges



The Commission's statute has not kept pace with a changing animal health environment, limiting its disease prevention and control ability.

for the Commission, which plays a lead role in Texas' emergency management activities for animal issues.

Sunset staff examined the Commission's ability to prevent, control, and eradicate animal diseases in Texas, and concluded that, while the Commission is well-managed and effectively meets its mission, the Commission's statute has not kept pace with a changing animal health environment. This has resulted in increasing limitations on the Commission's ability to prepare for and respond to disease threats and emergencies affecting livestock and fowl. Clearer statutory direction, authority, and flexibility would help the Commission adapt to this shifting landscape, and thus stand better equipped to prevent and control animal disease outbreaks.

The following material provides a summary of the Sunset staff recommendations included in this report.

Issues and Recommendations

Issue 1

The Commission's Statute Has Not Kept Pace With Its Increasing Emergency Management Responsibilities.

Key Recommendations

- ◆ Authorize the Commission to plan for, prepare for, and respond to both natural and man-made emergencies that may have an impact on livestock and fowl.
- ◆ Authorize the Commission to impose a statewide or widespread quarantine on livestock and fowl when needed to prevent or contain a disease outbreak.
- ◆ Clarify the Commission's authority to determine the appropriate method of carcass disposal for diseased livestock.

Issue 2

The Commission Has Limited Authority to Control Diseases Spread to Livestock and Fowl by Other Species, Potentially Resulting in Preventable Disease Outbreaks.

Key Recommendation

- ◆ Clarify that the Commission has authority to act to prevent, control, or eradicate diseases that affect livestock and fowl, regardless of what species carries the disease.

Issue 3

Lack of Clear Authority Regarding Feral Swine Limits the Commission's Ability to Prevent the Spread of Disease to Domestic Swine and Other Livestock.

Key Recommendations

- ◆ Clarify that the Commission can regulate the movement of feral swine as a disease-control measure.
- ◆ Authorize the Commission to register feral swine holding facilities.

Issue 4

Lack of Clear Compliance Procedures Can Lead to an Inconsistent Approach to Enforcement Across the Commission's Eight Field Areas.

Key Recommendations

- ◆ Require the Commission to establish an agencywide compliance policy and internal operating procedures to guide compliance activities.
- ◆ Require the Commission to provide information regarding the process for accepting complaints on its website.
- ◆ The Commission should track categories of violations to identify common problems that could be addressed through targeted regulation or education efforts.
- ◆ The Commission should make its compliance database available to employees statewide to facilitate better sharing of information and consistency in staff's approach to compliance.

Issue 5

Anticipated Changes in the Commission's Workforce Could Leave the Agency Vulnerable to a Significant Loss of Knowledge Critical to Its Operations.

Key Recommendations

- ◆ The Commission should develop and implement a succession plan to prepare for impending retirements and workforce changes.
- ◆ The Commission should formally document its duties in writing by updating its manuals and making them available to all employees electronically.
- ◆ The Commission should train and develop staff to move into at-risk positions.

Issue 6

Texas Has A Continuing Need for the Texas Animal Health Commission.

Key Recommendation

- ◆ Continue the Texas Animal Health Commission for 12 years.

Fiscal Implication Summary

None of the recommendations in this report would have a significant fiscal impact to the State.

ISSUES

The Commission's Statute Has Not Kept Pace With Its Increasing Emergency Management Responsibilities.

Summary

Key Recommendations

- ◆ Authorize the Commission to plan for, prepare for, and respond to both natural and man-made emergencies that may have an impact on livestock and fowl.
- ◆ Authorize the Commission to impose a statewide or widespread quarantine on livestock and fowl when needed to prevent or contain a disease outbreak.
- ◆ Clarify the Commission's authority to determine the appropriate method of carcass disposal for diseased livestock.

Key Findings

- ◆ An increased awareness of the threat of an agroterrorism attack, as well as the impact of natural disasters on animals, has expanded the Commission's role in emergency management.
- ◆ Natural and man-made emergencies can have a devastating impact on livestock and fowl, humans, and the state's economy.
- ◆ The Commission lacks clear legislative direction to engage in emergency planning activities, an increasing and essential Commission function.
- ◆ Outdated authority for issuing quarantines and disposing of diseased livestock carcasses may limit the Commission's ability to control the spread of disease during an emergency.

Conclusion

Natural and man-made emergencies can have an impact on animal health, as well as public health and the economy. As the state's lead agency for animal issues, the Texas Animal Health Commission conducts emergency management planning related to livestock and fowl for the state and local jurisdictions, coordinates with federal emergency management planners, and offers planning and biosecurity advice and instruction to industry representatives and producers. However, the Commission lacks clear statutory authority to prepare and plan for such emergencies, even as the Commission's role in emergency management has significantly expanded in recent years.

Also, several of the Commission's tools for responding to and recovering from emergencies are outdated. Limitations on issuing statewide or widespread quarantines and disposing of diseased livestock carcasses could hamper the Commission's disease control efforts. Clarifying that emergency management is a critical part of the Commission's mission, and updating the Commission's authority regarding quarantines and carcass disposal, would assist the Commission in its efforts to control the spread of diseases in an emergency.

Support

An increased awareness of the threat of an agroterrorism attack, as well as the impact of natural disasters on animals, has expanded the Commission's role in emergency management.

- ◆ After the terrorist attacks of September 11, 2001, state and federal officials designated emergency management as a priority for the State, leading to

What Is Agroterrorism?

Agroterrorism is the malicious use of plant or animal pathogens to cause devastating disease in the agricultural sector. It may also take the form of hoaxes and threats intended to create public fear of such events.

increased planning and preparation for a potential terrorism attack in Texas. Texas' large agricultural industry makes the state particularly vulnerable to a bioterrorism or agroterrorism attack, including the intentional introduction of an animal disease, such as foot-and-mouth disease or anthrax.¹ In fact, the Governor's Division of Emergency Management,

which oversees the State's response to all man-made and natural disasters, cites the intentional introduction of animal disease into livestock or fowl populations as the number one threat to Texas.

- ◆ Recent events also have increased awareness of the effect of natural disasters on livestock and fowl. During Hurricane Rita in fall of 2005, state officials included evacuation, sheltering, and relocation of all animals – including

State-Level Councils

- ◆ The State Emergency Management Council comprises 32 state agencies and organized volunteer groups that prepare for and respond to disasters, including natural and man-made disasters.
- ◆ The Texas Homeland Security Council is made up of state agencies and representatives from the Governor's Office directly involved in the policies, programs, or funding of activities relevant to homeland security or infrastructure protections.

livestock and fowl – as essential components of the State's response. This was due, in part, to the large number of people who refused to evacuate without their animals during Hurricane Katrina, making animal rescue and sheltering a primary concern for emergency managers and planners. The Commission led these efforts, as well as handled carcass disposal during Hurricane Rita. During the recent statewide drought and widespread wildfires that occurred around Texas, the Commission dealt with similar issues.

- ◆ Recognizing the incredible impact that natural and man-made disasters can have on animals, the Governor added the Commission to the State Emergency Management Council in 2001, and the Texas Homeland Security Council in 2005, described in the accompanying textbox. The Texas Disaster Act, which establishes these Councils, authorizes state agencies to engage in emergency management activities during a declared emergency.² As a member of these organizations, the Commission participates in planning, training, and exercise activities to prepare for response during an emergency.
- ◆ Because of the Commission's expertise in animal health, the State Coordinator of Emergency Management designated the Commission as the state's lead agency for all animal issues during emergencies, including natural and man-made disasters and agroterrorism acts, as well as naturally occurring

animal disease outbreaks. The Commission also participates on the Texas Emergency Response Team, a joint effort between the Commission and the U.S. Department of Agriculture (USDA), to prepare for and respond to foreign animal disease outbreaks and other disasters.

Examples of the Commission's roles in emergency management include identifying owners of displaced animals; restraining and capturing livestock; establishing quarantines; disposing of carcasses; coordinating evacuations and sheltering animals; consulting with federal, state, and local officials on animal and public health concerns; and addressing chemical or biological agroterrorism issues.

- ◆ Currently, the Commission's emergency management staff consists of one full-time employee. This emergency management coordinator attends all state emergency management meetings; conducts emergency management planning for the Commission, state and local governments, and industry groups; and coordinates the Commission's responsibilities associated with membership on the State Emergency Management Council and Texas Homeland Security Council.

The Commission's coordinator also has developed the Foreign and Emerging Animal Disease Plan, which serves as the State's response plan should an outbreak of a foreign or emerging animal disease occur in Texas, and currently is developing a natural disaster plan. Both of these plans serve as appendices to the State Emergency Management Plan, the State's comprehensive emergency preparation and response plan. Even after these plans are written, the coordinator will continue to work on them, because, to remain viable, these plans must be regularly updated to reflect current situations, resources, and threats.

- ◆ Although the Commission has one employee specifically designated to work on emergency management, almost all agency staff statewide are involved in emergency management in some fashion. For example, Commission employees have been assigned to assist cities, counties, regional planning jurisdictions, and industry groups with emergency management planning, as well as helping individual producers establish biosecurity measures on farms and ranches. In fiscal year 2005, the Commission spent 6,834 hours on emergency management responsibilities, including 4,277 hours on emergency planning activities and 2,557 hours responding to disease- and disaster-related emergencies. Commission staff also has participated in eight disaster response exercises.

Natural and man-made emergencies can have a devastating impact on livestock and fowl, humans, and the state's economy.

- ◆ Emergencies, both natural and man-made, can pose serious health and safety threats to livestock and fowl. Events such as a flood or drought can displace or kill large numbers of livestock and fowl or facilitate the



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spread of disease among these animals. For example, USDA estimates that Hurricane Katrina resulted in more than 10,000 lost cattle and 6.2 million lost chickens across the affected states.³ Similarly, the Commission and USDA reported that approximately 4,500 livestock died during recent wildfires in the Texas Panhandle.⁴ Damaged or lost infrastructure prohibited owners from effectively holding and caring for their animals, leaving many animals to starve or stray from the property. The conditions that result after a disaster can increase the spread of disease. Preventing disease outbreaks also may necessitate depopulating animals and properly disposing of the carcasses.



Animal diseases that are zoonotic, or transmissible to humans, could present widespread public health threats.

Animal disease outbreaks and agroterrorism attacks could also have devastating effects on animal health. Diseases cause a variety of effects on livestock and fowl. For example, such diseases could affect animal productivity, causing high abortion rates, difficulty conceiving, or birth of weak animals. Disease symptoms could include blisters, fever, diarrhea, nervous disorders, trembling, convulsions, or bleeding from body openings, as well as death.

- ◆ Some animal diseases pose a risk to human health as well. Brucellosis, tuberculosis, and anthrax, for example, are zoonotic, or transmissible from animals to humans. Other diseases, such as some strains of avian influenza, have recently become zoonotic and could potentially present widespread public health threats. Humans can contract zoonotic diseases through direct contact or by consuming diseased animal products. Thus, the Commission's role in animal-health-related emergency management also has a significant impact on human health.
- ◆ Because agriculture – and livestock in particular – accounts for a significant percentage of Texas' economy, a large-scale outbreak of a disease, such as foot-and-mouth disease, could seriously affect the state's economic health. Even the suspicion of the presence of certain diseases could result in such negative effects. Because Texas has the largest livestock industry in the country, an animal health emergency would have a significant impact on the United States' agricultural economy as well. Economic effects could include international and interstate export bans, higher food prices, a drastic decrease in demand, increased testing and regulatory requirements, and losses of billions of dollars in revenue.

Natural disasters can also have serious economic impacts on the livestock industry. Estimates indicate the damage done by Hurricanes Katrina and Rita – just to livestock – will reach more than \$75 million.⁵ The Louisiana agriculture industry alone lost more than \$1 billion, including death of animals, production costs, and lost revenue.⁶

The Commission lacks clear legislative direction to engage in emergency planning activities, an increasing and essential Commission function.

- ◆ The Commission's statute does not address its authority to prepare and plan for emergencies, even as the Commission's role in emergency management continues to expand. As the Commission has assumed a lead role in emergency planning for animal issues for the State, local governments, the livestock and fowl industries, and individual production operations, the amount of time Commission staff spends planning for emergencies has dramatically increased. As previously mentioned, in fiscal year 2005, Commission staff spent 6,834 hours on emergency management activities, including 4,277 hours on planning. As a result, the Commission must devote an increasing amount of time and resources to performing an activity that is clearly needed, but is not clearly addressed in its enabling law.
- ◆ Although the Commission can engage in emergency management activities under the Texas Disaster Act when the Governor declares a disaster, statute does not address the Commission's responsibility and authority for emergency management activities performed outside of a disaster declaration.⁷ The Commission performs most of its emergency management activities when no disaster declaration has been made. Routine planning, training exercises, and other responsibilities as a member of the State Emergency Management Council occupy a significant amount of the Commission's time, although statute does not specifically mention the Commission's authority to engage in them outside of a disaster declaration.
- ◆ The Commission's authority to assist with local emergency management planning also is not clear. The Commission relies on local responders to act first during emergencies and, thus, considers establishing reliable local response plans an essential function. Because the Commission is recognized as having expertise in animal issues regarding both animal disease and disasters, the Commission is well-suited to advise local governments and other entities how to effectively plan to address animal issues during an emergency. To guide local governments, the Commission developed the Animal Issues Committee Plan, which provides guidelines for preparing for and responding to animal issues during an emergency, and is an appendix to the State Emergency Management Plan. The Commission also has assigned staff to represent the Commission in all 254 counties and on all 22 Disaster District Committees in Texas. Currently, 35 counties have established local animal issues committees to develop local response plans, and about 100 more are developing such plans.
- ◆ Without clear statutory direction to perform expanding emergency management activities, the Commission may experience difficulty consistently prioritizing its emergency management activities among its traditional statutorily mandated duties. Field staff must be drawn away from their normal duties and sent to respond.



Commission staff spent 6,834 hours on emergency management activities in fiscal year 2005.



Field staff must be drawn away to respond to emergencies.

For example, during the 2003 exotic Newcastle disease outbreak in West Texas, 60 percent of Commission staff was sent to respond at some point during the outbreak. During emergencies, the Commission's area offices become short-staffed, and the Commission may not be able to perform some of its routine surveillance activities, leaving the state vulnerable to disease outbreaks. While the Commission obviously would need to require some staff to move from their daily responsibilities to help with the immediate threats of an emergency, the Commission should ensure that it has a plan to carry on standard surveillance activities, at some level, so that the potential for a disease outbreak is not compounded.

Outdated authority for issuing quarantines and disposing of diseased livestock carcasses may limit the Commission's ability to control the spread of disease during an emergency.

- ◆ The Commission lacks authority to issue a statewide or widespread quarantine to stop animal movement, potentially delaying the Commission's ability to respond to a large-scale animal disease outbreak. Currently, the Commission's quarantine authority limits it to establishing a quarantine on the affected animals or the affected place.⁸ As a result, the Commission must establish quarantines county by county, although some diseases could easily spread across most of the state within a day. When established, this antiquated method of establishing quarantines did not anticipate fast-moving diseases, such as foot-and-mouth disease, or the highly mobile society that exists today.



The Commission's response in the first 24 hours after identifying signs of disease is the most critical.

For example, to stop livestock and fowl movement statewide, the Commission would have to issue individual quarantines in each of Texas' 254 counties. This process includes posting quarantine notices on each courthouse door and publishing a notice in a newspaper in each county. Because diseases can spread rapidly, the Commission's response in the first 24 hours after identifying the signs of disease is critical, as animals sold at a market could be dispersed among a dozen states within 24 hours.⁹ Thus, to effectively control the spread of disease, the Commission may need to restrict movement immediately by establishing a quarantine in widespread areas until Commission staff can determine how far a disease has spread.

In comparison, the Texas Department of State Health Services (DSHS) has widespread quarantine authority for rabies, which DSHS regulates through its Zoonosis Control Division. This authority allows DSHS to quarantine animals statewide – including restricting the transportation of animals – to prevent and contain a rabies epidemic. The Health and Human Services Commissioner may declare a statewide quarantine for any zoonotic or other communicable disease as a means to fulfill DSHS's mission of protecting human health.¹⁰

- ◆ The Commission also has limited discretion to determine the appropriate method of carcass disposal of diseased livestock, which could have serious disease or environmental implications.¹¹ These implications could be greatly

exacerbated during an emergency, when the Commission needs to quickly dispose of a large number of carcasses. The textbox, *Limitations of Burning and Burying*, further explains the disadvantages of burning and burying diseased livestock carcasses.

Limitations of Burning and Burying

- ◆ Burning or burying animal carcasses does not eliminate all diseases.
- ◆ Burning can threaten people and the environment with smoke, toxic fumes, and airborne debris, which can start resultant fires.
- ◆ Because of environmental dangers, staff may have to burn carcasses at some distance from where the animals died. Transporting the carcasses could spread disease and cause significant adverse effects, such as residue being picked up by animals and birds.
- ◆ Disposing of the residual ash and remaining carcass parts can be problematic.
- ◆ Environmental factors – such as wind speed and direction; relative humidity; anticipated precipitation; and proximity to residential and commercial establishments, roads, power lines, and underground gas pipes – present challenges.
- ◆ Burial pits may not be permitted and are not always practical. Where allowed, burial sites must be sized and constructed properly and located in accordance with environmental laws and rules.
- ◆ Groundwater pollution from burial can result in some geographic areas or during certain weather conditions.
- ◆ Sufficient land space may not exist for burial on the animal owner’s property, depending on the size of the premises and the number of animals that died. Also, burial requires heavy construction equipment to dig trenches and pits for appropriate disposal.

Currently, statute limits the Commission to burning or burying diseased livestock carcasses, which may not eliminate or stop the spread of all diseases.¹² Some burn- or burial-resistant diseases may require alternative methods of carcass disposal, such as rendering, composting, digesting, or incinerating, to effectively eradicate or control the spread of disease.

For example, the best method of carcass disposal for animals infected with transmissible spongiform encephalopathies (TSEs) – such as bovine spongiform encephalopathy (or mad cow disease), scrapie, and chronic wasting disease – is alkaline hydrolysis, the only method that completely destroys the prions that cause these diseases. Burning and burial do not completely destroy all pathogens. By not completely destroying disease-causing agents, other animals could be exposed and become infected.

Burning or burying diseased carcasses may also be undesirable options because of environmental or public health concerns limiting the Commission’s ability to comply with statute and effectively prevent the spread of disease. For example, flood or high water-table conditions may eliminate both



*Burning or
burying diseased
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burning and burial as viable carcass disposal options because standing water would make it difficult to maintain an effective fire or dig into the ground, as well as possibly contaminating the water supply. Similarly, because carcasses infected with some diseases, such as anthrax, must be burned or incinerated, land or environmental constraints may prevent the burning of an infected animal carcass. As evidenced during the recent wildfires across the state, drought conditions can restrict burning as an option because of burn bans and the risk of starting a wildfire. Also, burning a large number of carcasses in a short time period could result in air-quality issues, especially if the only fuel source is inappropriate. Environmental concerns regarding carcass disposal hampered animal health officials during the recent foot-and-mouth outbreak in the United Kingdom, as burying the carcasses caused serious water and air pollution effects, which subsequently affected human health.

Recommendations

Change in Statute

1.1 Authorize the Commission to plan for, prepare for, and respond to both natural and man-made emergencies that may have an impact on livestock and fowl.

This recommendation would establish emergency management as a vital responsibility of the Commission's mission in statute, thus allowing the Commission, as part of its routine activities, to perform emergency management duties currently not explicitly authorized in statute. The Commission would have authority to prepare and plan for, respond to, and recover from disaster events, including disease outbreaks; hurricanes; floods; tornadoes; wildfires; and acts of terrorism affecting livestock, exotic livestock, domestic fowl, and exotic fowl. In doing so, the Commission should ensure that it has established priorities to guide staff statewide in balancing emergency management duties with traditional disease surveillance, control, and eradication responsibilities. This recommendation would also clarify the Commission's authority to assist with local emergency management planning. This recommendation would not affect the Commission's responsibilities under other statutes, such as the Texas Disaster Act, or any responsibilities delegated to the Commission by state emergency management authorities.

1.2 Authorize the Commission to impose a statewide or widespread quarantine on livestock and fowl when needed to prevent or contain a disease outbreak.

To address the spread of fast-moving and highly infectious diseases, this recommendation would authorize the Commission to issue a statewide or widespread quarantine on livestock and fowl as a means of quickly stopping the movement of animals potentially infected with disease. The Commission would issue the quarantine, including defining the borders of the quarantine. Given the immediate threat posed by a disease outbreak, and the need to act quickly, the Commission could delegate, by rule, the authority to issue a quarantine to the Executive Director, who would promptly notify Commission members when a quarantine has been issued. Existing statutory penalties for violating a quarantine would apply to violating a statewide or widespread quarantine as well.

1.3 Clarify the Commission's authority to determine the appropriate method of carcass disposal for diseased livestock.

Under this recommendation, the Commission would have authority to determine and implement the most effective method, including methods other than burning or burial, for disposing of diseased livestock carcasses. This would allow the Commission to consider factors such as the most appropriate disposal method for the particular disease, environmental implications, geographic location, number of carcasses, and weather conditions when deciding what method of carcass disposal to employ. To more quickly respond to carcass disposal issues, the Commission could delegate this authority to the Executive Director, by rule.

Fiscal Implication

These recommendations would not have a direct fiscal impact, as the Commission currently conducts its emergency management activities with its existing resources. However, emergency management duties have placed a strain on the agency's budget and staff. To adequately perform increasing emergency management activities in the future, the Commission may need additional resources. As such, the Commission should pursue these additional resources through the legislative appropriations process.

¹ Federal Emergency Management Agency, *Interim Tool Kit, Appendix E* (July 2002), p. E-31.

² Texas Government Code, ch. 418.

³ U.S. Department of Agriculture, *A Preliminary Assessment of the Effects of Katrina and Drought on U.S. Agriculture* (Washington, D.C. September 2005), p. 4.

⁴ Governor's Division of Emergency Management, *Texas Wildfires Situation Report no. 97* (March 27, 2006). Online. Available: www.txdps.state.tx.us/dem/siterepindex.htm. Accessed: March 28, 2006.

⁵ Louisiana Ag Center, *Disaster Recovery: Preliminary Estimates of Cumulative Economic Impact By Hurricanes Katrina and Rita to Louisiana Agriculture Due to Reduced Revenue and Increased Costs* (October 2005), p.1.

⁶ Ibid.

⁷ Texas Government Code, ch. 418.

⁸ Texas Agriculture Code, sec. 161.061. An affected place may extend to a county, district, pasture, lot, ranch, farm, field, range, thoroughfare, building, stable, or stockyard pen.

⁹ "Foot-and-Mouth Disease Marches Westward," Texas Animal Health Commission, March 2001 (news release).

¹⁰ Texas Health and Safety Code, sec. 81.081.

¹¹ The Commission only has authority for disposal of diseased livestock carcasses. Carcass disposal regulations for poultry fall under the jurisdiction of the Texas Commission on Environmental Quality.

¹² Texas Agriculture Code, sec. 161.004.

The Commission Has Limited Authority to Control Diseases Spread to Livestock and Fowl by Other Species, Potentially Resulting in Preventable Disease Outbreaks.

Summary

Key Recommendation

- ◆ Clarify that the Commission has authority to act to prevent, control, or eradicate diseases that affect livestock and fowl, regardless of what species carries the disease.

Key Findings

- ◆ Nonlivestock animals can transmit disease to livestock and fowl.
- ◆ The Commission does not have clear authority to address diseases in other species that could result in a disease outbreak among livestock and fowl.
- ◆ Introducing or reintroducing animal disease can have devastating effects on livestock and fowl, humans, and the economy.

Conclusion

The Texas Animal Health Commission has responsibility to protect livestock and fowl from disease. To accomplish this task, the Commission performs disease-control activities, such as restricting movement and requiring testing of livestock and fowl. However, species that do not fall under the Commission's jurisdiction can spread diseases that threaten livestock and fowl. Some of these diseases also affect humans.

Although the law clearly outlines the Commission's responsibility to protect livestock and fowl from disease, statute is not clear on whether this includes the authority to act to prevent, control, or eradicate diseases in other species that threaten livestock and fowl. Without clear direction, the Commission is limited in its ability to protect the species it regulates.

Clarifying that the Commission has authority to control and respond to diseases in other species in situations that threaten livestock and fowl would allow the Commission to more quickly and effectively prevent disease outbreaks among livestock and fowl in Texas.

Support

The Commission has the responsibility to protect livestock and fowl in Texas from disease.

- ◆ The Legislature established the Commission in 1893 to protect Texas cattle from tick fever, which caused death in almost all infected animals. Since then, the Legislature has expanded the Commission's responsibilities to include protecting animals from any disease or agent of transmission for disease. Statute defines "animal" to include livestock, exotic livestock, domestic fowl, and exotic fowl, and the Commission's authority extends only to these animals.¹ The textbox, *Regulated Species*, further describes the animals under the Commission's jurisdiction.

Regulated Species

The Commission regulates livestock, exotic livestock, domestic fowl, and exotic fowl. These animals include the following.

Livestock – Cattle, horses, mules, asses, sheep, goats, and hogs.

Domestic fowl – Any species of fowl domestically propagated and maintained for food, eggs, or agricultural exhibition and recreation. Examples include chickens, turkeys, ducks, geese, guinea, and squabs.

Exotic livestock – Grass- or plant-eating, single-hooved or cloven-hooved mammals that are not indigenous to Texas and are known as ungulates, including animals from the swine, horse, tapir, rhinoceros, elephant, deer, and antelope families. Examples include llamas, moose, reindeer, and elk.

Exotic fowl – Any avian species, including ratites, that is not indigenous to Texas. Examples include ostriches and emu.

- ◆ To carry out its disease-control responsibilities, the Commission has authority to regulate movement, establish quarantines, inspect shipments, and require testing of livestock and fowl. For example, the Commission can restrict the movement, including movement within the state, of livestock and fowl as a disease-control measure, regardless of whether movement is unrestricted in interstate or international commerce.²



*The Commission's
disease-control
authority is
limited to livestock
and fowl.*

The Commission also can establish a quarantine on infected or exposed livestock and fowl, or on a site where disease exists or that has been exposed to disease.³ In addition to in-state quarantines, the Commission can place a quarantine against all or part of another state, territory, or country where a disease that threatens livestock or fowl exists.⁴ The Commission also regulates importation of livestock and fowl to Texas by establishing the method for inspecting and testing those animals. To bring livestock or fowl into the state, an owner or transporter must have a veterinary health certificate, which verifies that a veterinarian examined the animal prior to movement and found it free of disease, and, in most instances, an entry permit issued by the Commission.⁵

Under its statutory authority, the Commission has adopted rules requiring vaccination and testing for disease of livestock and fowl. For example, the Commission requires slaughter plants to collect and submit blood samples and other specimens from cattle, swine, and other animals to a Commission lab for testing. The Commission also requires cattle imported from another state or country without a comparable brucellosis status to Texas to be tested for brucellosis at the port of entry.

Nonlivestock animals can transmit disease to livestock and fowl.

- ◆ Animals outside of the Commission's regulatory authority can spread disease to livestock and fowl. These diseases can include foreign animal diseases, such as foot-and-mouth disease, or diseases that the Commission has worked to eradicate, such as tuberculosis (TB).

For example, in some states outside of Texas, white-tailed deer carry TB, which they can transmit to cattle and elk. Given the frequent commingling of deer and livestock, an outbreak of TB in livestock could easily occur if livestock became exposed to infected deer. Deer can also serve as hosts for cattle fever ticks, which can carry tick fever. Both the Commission and the U.S. Department of Agriculture (USDA) have worked to control fever ticks in cattle for more than 100 years. Because of their mobility, deer can quickly spread ticks to land grazed by cattle, where cattle – which typically die from tick fever – may subsequently become infested with fever ticks. In fact, the Commission recently has quarantined and required treatment of cattle infested with fever ticks spread by deer. In addition, waterfowl, such as ducks and geese, can transmit avian influenza to domestic and exotic fowl. And, as discussed in Issue 3, feral swine carry pseudorabies and swine brucellosis, which they can spread to domestic swine populations.

- ◆ A recent example of how species other than livestock and fowl can quickly spread diseases that directly threaten livestock and fowl occurred in Florida. In November 1999, Florida animal health inspectors discovered tropical bont ticks, historically found in the Caribbean, on tortoises imported into the state. Tropical bont ticks can carry heartwater, a fatal foreign animal disease. Heartwater primarily affects ruminants, including cattle, sheep, and goats – which fall under the Commission's responsibility – and deer. Animals that develop the disease have a mortality rate of between 40 percent and 100 percent.⁶

Animal health officials from California to Maine became concerned when the ticks found in Florida tested positive for heartwater, as the disease can spread rapidly. For example, birds, such as cattle egrets – which travel to Texas – can quickly spread bont ticks infected with heartwater across a wide area. Florida officials noted that a heartwater outbreak among livestock and deer could spark a seriously devastating economic and animal health disaster.⁷ After discovering the ticks, Florida's Department of Agriculture and Consumer Services – which houses the state's Division of Animal Industry – passed



Waterfowl can transmit avian influenza to domestic and exotic fowl.

an emergency rule targeting heartwater disease transmission by restricting the importation into the state of all wildlife without an official certificate of veterinary inspection showing the animals to be free of disease. In passing the rule, Florida's agriculture department noted that "introduction of the disease into Florida would be disastrous to the state's beef and cattle industry and the state's ruminant wildlife."⁸

The Commission does not have clear authority to address diseases in other species that could result in a disease outbreak among livestock and fowl.

- ◆ The Commission cannot clearly take action to prevent, control, or eradicate diseases in animals other than livestock, exotic livestock, domestic fowl, or exotic fowl, even when those diseases threaten livestock and fowl. No other state agency has responsibility for ensuring other animals do not transmit disease to livestock and fowl. As a result, the Commission's ability to protect the species it regulates is limited.
- ◆ The Commission's ability to address disease in wildlife is not clear, leaving livestock and fowl vulnerable to diseases that can be spread by wildlife, which frequently comes into contact with livestock and fowl. The Texas Parks and Wildlife Department (TPWD) has jurisdiction over native wildlife and game species, including mule and white-tailed deer, pronghorn antelope, desert bighorn sheep, collared peccary or javelina, wild turkey, ducks, geese, quail, and doves.⁹ TPWD's mission includes managing and conserving wildlife and providing recreational opportunities, such as hunting, that involve wildlife. TPWD does not have the authority or resources – such as staff veterinarians – for disease prevention or control. Instead, TPWD relies on the Commission's animal disease expertise. Although Commission and TPWD staff have worked cooperatively when a disease that threatens livestock or fowl appears in wildlife, staff from both agencies have said that the statutory delineation of responsibilities related to animal disease could be clearer.
- ◆ The Commission does not have clear authority to control an unregulated species that has a disease that threatens livestock or fowl. Some animal species do not fall under the regulatory jurisdiction of any specific entity. Other state agencies have authority related to other species for limited purposes. For example, the Texas Department of State Health Services (DSHS) regulates the occurrence of rabies in canines and has authority to establish quarantines related to rabies. DSHS also has responsibility to minimize the incidence of diseases transmissible from animals to humans and, as such, addresses these diseases from the human perspective. The Texas Structural Pest Control Board licenses individuals to exterminate rats, raccoons, and other pest species inhabiting a structure, but also does not have disease-control authority.



A recent outbreak of monkeypox that spread via imported rats illustrates how the Commission occasionally may need to deal with a species over which no agency has specific authority. In 2003, monkeypox – a rare zoonotic viral disease found primarily in Africa – occurred for the first time in the Western Hemisphere after a San Antonio man imported a diseased Gambian giant-pouched rat. The man transported the rat across multiple state lines, with the rat transmitting the disease to prairie dogs. The prairie dogs then infected humans with monkeypox, which has symptoms similar to those of smallpox. Although the Commission does not have authority over Gambian rats or prairie dogs, monkeypox posed a serious threat to both livestock and humans, prompting the Commission to issue a hold order, or movement restriction. However, statute does not clearly spell out the Commission’s authority to restrict movement of any animal other than livestock or fowl.

Introducing or reintroducing animal disease can have devastating effects on livestock and fowl, humans, and the economy.

- ◆ Given the swift-moving nature of many animal diseases, introduction of a new, emerging, or foreign animal disease could quickly result in a widespread disease outbreak among livestock or fowl. For example, Commission staff estimates that one case of foot-and-mouth disease could spread from Texas throughout the United States and to Canada and Mexico in less than two weeks. Although the disease affects several species of livestock, other species can carry the disease and transmit it to livestock. Because diseases that affect livestock and fowl can spread quickly, the Commission must respond rapidly to an outbreak at the first indication of disease. However, statute’s lack of clarity about the Commission’s jurisdiction over other species carrying diseases that threaten livestock and fowl may delay the Commission’s ability to respond.
- ◆ Some of the diseases spread by other species to livestock and fowl are zoonotic diseases, those transmissible from animals to humans. Therefore, as the risk of livestock or fowl contracting a disease increases, the risk of humans contracting a disease from direct contact with a diseased animal or through consuming a product made from a diseased animal increases as well. In fact, 75 percent of new diseases affecting humans are zoonotic diseases.¹⁰
- ◆ The presence – or even suspected presence – of disease can result in significant economic harm to Texas’ livestock and poultry industries. The introduction or reintroduction of disease can cause these industries to experience losses of millions of dollars as the result of reduced exports, refusal of some markets to accept livestock or fowl from Texas producers and increased testing costs, as well as costs associated with depopulating diseased animals and cleaning and disinfecting premises.



Disease can cause significant economic harm to Texas’ livestock and poultry industries.

Because the livestock and poultry industries play a significant role in Texas' economy, and because Texas' livestock and poultry industries contribute greatly to the United States' agriculture market, disease among livestock and fowl can have a significant impact on both the state and national economies. For example, Taiwan imposed a ban on importation of U.S. beef after the United States' first case of bovine spongiform encephalopathy (BSE) – also called mad cow disease – was discovered in Washington state in 2003. Before the ban, Taiwan imported \$76 million in U.S. beef annually.¹¹ Taiwan lifted the ban in April 2005, but quickly reinstated it after the United States' second case of BSE was confirmed in a beef cow in Texas. The Texas case involved the first U.S. native-born cow diagnosed with BSE. The United States' third case of BSE was diagnosed in a red crossbred cow in Alabama in March 2006.



Disease can result in other countries banning U.S. livestock products.

- ◆ Reintroduction of an eradicated disease could cause Texas to lose its federally designated disease-free status or could jeopardize the state's progress toward becoming disease-free. Losing disease-free status could lead to more rigorous testing requirements and economic losses for animal producers and the state, as disease-free status allows animal producers to more easily export livestock and poultry and requires less stringent regulations. For example, USDA declared Texas free of TB in the state's cattle in 2000. However, in 2001, the Commission discovered two TB-infected cattle in Texas, causing the state to lose its TB-free designation and imposing stricter regulations on the state and the industry.

Michigan currently is experiencing a similar – although much more damaging – situation. The state lost its TB-free status in June 2000, after white-tailed deer in the state spread TB to cattle. USDA required Michigan to adopt a testing program for all cattle, goats, bison, and captive cervids, greatly increasing regulatory costs to the state and the industry. In addition, the situation has threatened all interstate movement of cattle from Michigan because of other states' concerns that cattle in Michigan might be exposed to infected deer or other infected cattle.¹²

Recommendation

Change in Statute

2.1 Clarify that the Commission has authority to act to prevent, control, or eradicate diseases that affect livestock and fowl, regardless of what species carries the disease.

This recommendation would give the Commission clear authority to protect livestock and fowl from disease, even if the disease threat comes from a species not under the Commission's authority. The Commission's existing authority to regulate movement, establish quarantines, inspect shipments, and require testing would apply. However, the Commission's authority regarding species other than livestock or fowl would be limited only to instances when a disease that threatens livestock or fowl has been confirmed or is suspected to exist in another species and the Commission determines that a threat to livestock or fowl exists. This authority would not authorize the Commission to infringe upon or

supersede any other agency's authority, such as the Texas Parks and Wildlife Department's authority to regulate wildlife. In those situations, the Commission would assume responsibility for disease-control efforts, but would work collaboratively with the other agency.

Fiscal Implication

This recommendation would not result in a fiscal impact to the State. The Commission would only get involved with nonlivestock species when those species carry a disease that threatens livestock and fowl. These activities would be considered part of the animal health activities necessary to control a disease in livestock or fowl, and thus the Commission could perform these activities with existing resources.

¹ Texas Agriculture Code, sec. 161.001(a)(1).

² Ibid., sec. 161.054(a).

³ Ibid., sec. 161.061(b).

⁴ Ibid., sec. 161.061(a).

⁵ Ibid., sec. 161.081.

⁶ Florida Department of State, *Florida Administrative Weekly*, vol. 25, no. 51 (December 23, 1999), sec. IV, p. 5856. Florida Department of Agriculture and Consumer Services, Division of Animal Industry, "Temporary Restrictions on Importation of Animals," rule no. 5CER99-1. Effective December 9, 1999. Online. Available: faw.dos.state.fl.us/fawframes.html. Accessed: February 6, 2006.

⁷ Memorandum from the Florida Wildlife Commission, Division of Law Enforcement, to reptile dealers, importers, pet shops, and interested persons, December 21, 1999.

⁸ Florida Department of State, *Florida Administrative Weekly*.

⁹ Texas Parks and Wildlife Code, sec. 1.101. The definition of wildlife does not include exotic livestock. Game animals are defined in Texas Parks and Wildlife Code, sec. 63.001, while game birds are defined in Texas Parks and Wildlife Code, sec. 64.001.

¹⁰ L. Taylor, S. Latham, & M. Woolhouse, "Risk Factors for Human Disease Emergence," *Philosophical Transactions of The Royal Society of London* 2001, 356 (1411): 983-989.

¹¹ "Taiwan Reopens Market to U.S. Beef," Office of Communications, U.S. Department of Agriculture, January 25, 2006, Release No. 0023.06, (news release).

¹² U.S. Department of Agriculture, Animal and Plant Health Inspection Service, "Q&A About the Bovine Tuberculosis Emergency Declaration" (Washington, D.C., September 2002). Online. Available: www.aphis.usda.gov/lpa/pubs/fsheet_faq_notice/faq_ahbemer.pdf. Accessed: January 24, 2006.

Lack of Clear Authority Regarding Feral Swine Limits the Commission's Ability to Prevent the Spread of Disease to Domestic Swine and Other Livestock.

Summary

Key Recommendations

- ◆ Clarify that the Commission can regulate the movement of feral swine as a disease-control measure.
- ◆ Authorize the Commission to register feral swine holding facilities.

Key Findings

- ◆ Feral swine transmit disease to domestic swine, threatening the health and economic viability of Texas' domestic swine population.
- ◆ Unclear authority to regulate the movement of feral swine and feral swine holding facilities limits the Commission's ability to prevent the spread of disease from feral swine to livestock.

Conclusion

Feral swine carry diseases, such as swine brucellosis and pseudorabies, that they can transmit to domestic swine and other livestock. The dramatically increasing number and range of feral swine, coupled with increased movement of these wild hogs for hunting and other purposes, has increased the risk of spreading diseases to domestic swine and threatens Texas' federally designated disease status.

To protect domestic swine from this disease threat, the Texas Animal Health Commission has imposed restrictions on movement of feral swine and established a registration program to create standards for maintaining feral swine holding facilities. However, the Commission's authority to regulate movement of feral swine or register feral swine holding facilities, as well as its ability to adopt and enforce rules regarding feral swine, is unclear. Clarifying the Commission's authority regarding feral swine would enable the Commission to more effectively meet its statutory responsibility to control the spread of disease to domestic swine populations.

Support

The Commission protects domestic swine from disease.

- ◆ The Commission is responsible for preventing, controlling, and eradicating disease in livestock, including domestic swine, and fowl. Domestic swine are typically raised in a controlled environment for breeding, meat, or other byproducts, and make up a large part of the state's agricultural industry. In 2002, domestic swine accounted for \$128 million in sales in Texas.¹

To control the spread of disease in domestic swine and other livestock, the Commission employs such control measures as establishing quarantines, regulating movement, and requiring testing for disease. For example, the Commission restricts the movement of animals suspected of exposure to disease until an official diagnosis can determine if the animals are infected.

- ◆ Through its disease-control activities, the Commission works to achieve and maintain federally designated disease-free status. The U.S. Department of Agriculture (USDA) grants this status based on the prevalence of disease among commercial swine populations to states that participate in national disease eradication programs. Texas participates in USDA's eradication programs for swine brucellosis and pseudorabies. Currently, the commercial swine population in Texas is free of pseudorabies, and the Commission expects the state to become swine brucellosis-free by summer 2006.
- ◆ In contrast to domestic swine, feral swine are wild hogs that descended from Eurasian boars, domestic hogs that escaped or were released for hunting purposes, or cross-breeds of the two. Feral swine are not domesticated and serve primarily as the targets of sport hunters. These animals also cause extensive damage to agricultural crops and to the environment. Although more populous in rural habitats, feral swine exist in most areas of Texas. The demand for feral swine has increased in recent years, as slaughter plants market meat from the animals as a delicacy to other countries and specialty meat markets. This economic opportunity prompts people to capture and transport feral swine from their original habitats to holding pens and slaughter facilities.
- ◆ Currently, no agency has statutory authority specific to controlling feral swine or disease in feral swine. Feral swine do not fall under the definitions of livestock or native wildlife, so neither the Commission nor the Texas Parks and Wildlife Department (TPWD) has jurisdiction over the animals. Because TPWD regulates hunting and trapping of all animals, its regulations include feral swine. However, TPWD regards feral swine as unregulated domestic livestock gone wild or as an introduced species similar to exotic deer, sheep, and antelope species, and, therefore, TPWD has no authority to establish a season, bag limit, or possession limit for hunting these animals. In addition, the Texas Department of Agriculture (TDA) received \$500,000 in fiscal year 2006 to test various hog-control technologies.² TDA's role



Feral swine are served as a delicacy in some countries.

focuses on controlling financial losses from wild hogs' vagrant behavior and crop destruction, but does not address the threat of disease in feral swine.

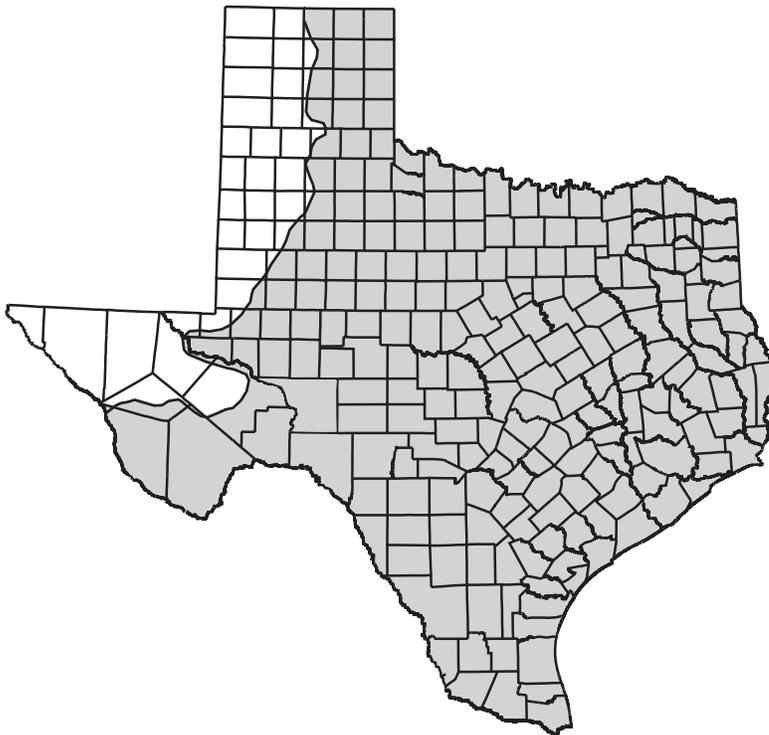
Feral swine transmit disease to domestic swine, threatening the health and economic viability of Texas' domestic swine population.

- ◆ Feral swine spread diseases, such as Aujeszky's disease – commonly known as pseudorabies – and swine brucellosis, to domestic swine and other livestock, primarily through direct contact and movement. Both pseudorabies and swine brucellosis are fatal diseases for some livestock, wild animals, and domestic pets. In addition, swine brucellosis is zoonotic, or transmissible from animals to humans.
- ◆ The number of feral swine in Texas has skyrocketed in recent years. This larger population increases the likelihood of feral swine transmitting disease to domestic swine and other livestock. Currently, an estimated 2 million feral swine live in Texas, which represents approximately 50 percent of all feral swine in the United States.³ Feral swine also reproduce rapidly and can double in population every four months.⁴ As seen in the map, *Feral Swine Distribution in Texas*, feral swine currently can be found in almost every county in Texas.⁵



Feral swine can be found in almost every county in Texas.

**Feral Swine Distribution in Texas
2004**





Texas is the only state not free of swine brucellosis.

- ◆ Epidemiological traces conducted by Commission staff suggest that all swine brucellosis and pseudorabies cases in domestic swine in Texas within the last 10 years have resulted from contact with feral swine. These outbreaks have prevented Texas from attaining swine brucellosis-free status from USDA, making Texas the only state that has not achieved this disease-free status. As a result, the Commission and Texas' swine industry must adhere to stricter testing requirements, exportation policies, and other regulations.
- ◆ The reintroduction of swine brucellosis or pseudorabies into commercial swine populations would result in economic loss to both the swine industry and the State. A swine disease outbreak could greatly affect the animals' productivity by causing high abortion and mortality rates. In addition, feral swine interaction with domestic swine threatens Texas' ability to achieve or maintain federally designated disease-free status. A disease outbreak would result in increased surveillance and control costs for the Commission, as testing and monitoring requirements would increase. Losing disease-free status also would affect the swine industry, as disease-free status allows animal producers to more easily export swine and requires less stringent testing regulations.
- ◆ While feral swine primarily pose a threat to domestic swine, they can transmit diseases to other animals as well. Because of the wide distribution of feral swine throughout the state, and their highly mobile nature, as well as the increased movement of feral swine for hunting and slaughter purposes, feral swine could quickly cause a widespread epidemic in livestock throughout the state. For example, if foot-and-mouth disease were to be introduced into the feral swine population, feral swine could transmit the highly infectious disease to cattle, elk, sheep, bison, goats, deer, and llamas, as well as domestic swine. This type of outbreak could be devastating to almost all sectors of animal agriculture, and could limit or halt the exportation of Texas livestock or their products.
- ◆ Reintroduction of brucellosis into commercial swine also poses a human health threat to Commission staff, slaughter plant workers, and others exposed to the blood of infected swine. Undulant fever, the human counterpart to brucellosis, can be transmitted through contact of infected swine blood with mucous membranes or an open wound, and is characterized by joint pain, fatigue, headache, chills, fever, sweats, and loss of weight or appetite. Increasing the likelihood that domestic swine are infected with swine brucellosis increases the chances that Commission staff or others could become infected as well.

Unclear authority to regulate the movement of feral swine threatens the Commission's ability to protect the health of livestock.

- ◆ Although statute grants the Commission authority to regulate the movement of animals to control disease, statute does not clearly give the Commission

authority to regulate the movement of feral swine.⁶ As defined by statute, “animal” includes livestock, exotic livestock, domestic fowl, and exotic fowl.⁷ Because feral swine are not considered livestock, they do not fall under the Commission’s authority. Thus, although the Commission has the responsibility to control disease through the regulation of movement, the Commission’s authority to regulate movement of feral swine, even when that movement threatens livestock, remains unclear.

- ◆ Although the agency does not have specific statutory authority to do so, the Commission has adopted rules regarding movement of feral swine. Without statutory authority to establish rules on feral swine, the Commission also does not have clear authority to enforce those rules. The most common violation of feral swine movement regulations involves diversion from an authorized destination, or moving the animals somewhere other than a holding facility or slaughter plant without proper tests.
- ◆ Movement of feral swine increases the opportunity for the spread of disease and, subsequently, disease outbreaks. As the market for feral swine has grown, the movement of these animals for hunting and slaughter purposes has increased as well. In addition to moving feral swine to and from holding facilities and slaughter plants, hunters trap feral swine and move the animals to game preserves and ranches for sport hunting. Each time feral swine are moved, domestic swine may be threatened.
- ◆ The increased movement of feral swine also jeopardizes Texas’ ability to achieve swine brucellosis-free status and to retain pseudorabies-free status. Without disease-free status, Texas has limited ability to export pork products, resulting in economic losses to both the State and the swine industry, as previously discussed.

The Commission’s lack of clear authority to regulate feral swine holding facilities limits its ability to enforce standards to prevent the spread of disease from feral swine to livestock.

- ◆ Livestock markets refuse to sell feral swine because they must keep these wild hogs separate from all other livestock, as feral swine often carry disease. As a result, individuals gather and confine feral swine in holding facilities until they can sell the hogs to a slaughter plant. To address the problem of feral swine transmitting diseases to domestic livestock, the Commission requires owners of feral swine holding facilities – where swine are confined until moved to slaughter – to register the facilities with the Commission. However, while current law gives the Commission a clear role in protecting domestic swine, the statute does not specifically grant the Commission authority to register or inspect feral swine holding facilities.

Under rules adopted by the Commission, registration of feral swine holding facilities requires documentation of feral swine movement, which provides the Commission with records for epidemiological purposes. The textbox,



*Holding facilities
confine feral swine
until they are
moved to slaughter.*

Registration Requirements, lists the registration conditions for owners of feral swine holding facilities.⁸ As of March 2006, the Commission had 73 registered feral swine holding facilities in Texas.

Registration Requirements

The Commission requires owners of feral swine holding facilities to abide by seven conditions for registration.

- ◆ Domestic swine may not be penned or maintained within 1.5 miles of the feral swine holding facility.
- ◆ The holding facility must be double-fenced, with fences four feet apart. Animals are not to be kept in the space between the two fences.
- ◆ The facility is for feral swine being held for slaughter only.
- ◆ These swine must go directly to slaughter from the facility.
- ◆ Dealers must maintain records and include the number of swine handled, dates the animals were moved in or out, and the ranches where they were trapped. Records must also include the name and location of the slaughter facility to which the dealer delivered the swine.
- ◆ The approval of a feral swine holding facility will continue until the owner requests to cancel it or an inspection by Commission staff reveals a violation.
- ◆ Feral swine shall not be commingled with commercial swine.

Commission staff inspects registered facilities to ensure they comply with registration requirements and adequately prevent feral swine from escaping and spreading disease. On average, Commission staff inspects each feral swine holding facility every 45 to 60 days. In fiscal year 2005, field staff conducted 418 inspections of these holding facilities.

- ◆ While the Commission has taken steps to establish standards for these facilities, the lack of clear statutory authority regarding feral swine could limit the Commission's ability to take action against violations of its regulations related to feral swine holding facilities. Common violations include failing to register a facility, adequately maintain records, or properly maintain a holding facility.

While statute spells out penalties and remedies for other violations of law under the Commission's authority, it does not specifically address violations related to feral swine holding facilities. In addition, the Commission does not have clear authority to use its administrative penalty authority to enforce its rules regarding feral swine holding facilities.

- ◆ In contrast, statute clearly authorizes the Commission's Fowl Registration Program. The Commission has specific statutory and rulemaking authority to administer this mandatory program. The Commission's statutory authority over this program ensures it can take necessary action against individuals who violate registration requirements. First offenses are Class C misdemeanors,

while repeat offenses escalate to Class B misdemeanors. Penalty levels mirror those of other violations of the Commission's statute.

Recommendations

Change in Statute

3.1 Clarify that the Commission can regulate the movement of feral swine as a disease-control measure.

Under this recommendation, the Commission's existing authority to regulate the movement of animals would be clarified to include movement of feral swine for disease-control purposes. The Commission should adopt rules relating to the movement of feral swine, including disease-testing requirements prior to movement from one location to another. Regulating the movement of feral swine would aid the Commission's efforts to control the spread of disease to livestock by specifying conditions under which feral swine could be transported. This recommendation would not interfere with TPWD's authority to regulate the hunting or trapping of feral swine, as it would apply solely to movement of the animals.

To deter illegal movement of feral swine, the Commission should be given clear authority to take enforcement action for violations of statutory provisions or Commission rules or orders related to the movement of feral swine. For statutory violations, a first offense would be a Class C misdemeanor, while subsequent violations would be Class B misdemeanors. The Commission could also use its existing administrative penalty authority to enforce rules and orders related to the movement of feral swine.

3.2 Authorize the Commission to register feral swine holding facilities.

This recommendation would grant the Commission specific statutory authority to require the registration of feral swine holding facilities for disease-control purposes, ensuring the Commission's ability to better protect domestic swine and other livestock from diseases spread by feral swine. Individuals would be required to register with the Commission if they confine feral swine in pens for slaughter, retail, exhibition, hunter-kill purposes, or other purposes determined necessary by the Commission to prevent the spread of disease. The Commission should adopt rules regarding registration requirements, issuance, revocation and renewal; disease testing; inspections; record-keeping; construction standards; and location; as well as treatment in, and movement to and from, a feral swine holding facility.

As part of this recommendation, the Commission should also be given clear authority to take enforcement action against individuals who violate statutory provisions or Commission rules or orders related to feral swine holding facility registration. For statutory violations, a first offense would be a Class C misdemeanor, while subsequent violations would be Class B misdemeanors. The Commission could also use its existing administrative penalty authority to enforce rules and orders related to feral swine.

Because the Commission would only regulate feral swine from a disease-control perspective, the authority to register feral swine holding facilities would not authorize the Commission to interfere with any other agency's authority, such as TPWD's authority to regulate the hunting and trapping of feral swine. In such situations, the Commission would work with the other agency to ensure both agencies' missions are met.

Fiscal Implication

These recommendations would not have a fiscal impact to the State. The Commission currently performs activities to regulate feral swine movement and register feral swine holding facilities as part of its animal health responsibilities with current resources.



¹ USDA, National Agriculture Statistics Service (NASS), 2002 Census of Agriculture State Profile – Texas, www.nass.usda.gov/census/census02/profiles/tx/cp99048.PDF. Accessed: December 12, 2005.

² Texas Senate Bill 1, *General Appropriations Act*, 79th Legislature (2005).

³ Texas Cooperative Extension, *Feral Hogs in Texas*, by Mark E. Mapston (College Station, Texas, June 2004), p. 5.

⁴ *Ibid.*, p. 11.

⁵ *Ibid.*, p. 5.

⁶ Texas Agriculture Code, sec. 161.054.

⁷ *Ibid.*, sec. 161.001(a)(1).

⁸ Texas Administrative Code, Title 4, part 2, rule 55.9.

Lack of Clear Compliance Procedures Can Lead to an Inconsistent Approach to Enforcement Across the Commission's Eight Field Areas.

Summary

Key Recommendations

- ◆ Require the Commission to establish an agencywide compliance policy and internal operating procedures to guide compliance activities.
- ◆ Require the Commission to provide information regarding the process for accepting complaints on its website.
- ◆ The Commission should track categories of violations to identify common problems that could be addressed through targeted regulation or education efforts.
- ◆ The Commission should make its compliance database available to employees statewide to facilitate better sharing of information and consistency in staff's approach to compliance.

Key Findings

- ◆ Lack of written agencywide compliance policies and procedures can lead to an inconsistent response to violations statewide.
- ◆ The Commission has not made its complaint procedures easily accessible to the public.
- ◆ The Commission does not use its compliance system to track repeat offenders, analyze common violations and complaint dispositions, or keep field staff informed.

Conclusion

Ensuring compliance with state laws and agency rules is a critical part of protecting livestock and fowl from disease. Through its regulatory authority, the Texas Animal Health Commission has responsibility to identify and stop illegal activity that threatens animal health.

The Commission seeks voluntary compliance and, in most cases, achieves this. However, the Commission must sometimes take stronger action. Because most of the Commission's employees work in the field, they identify the majority of the violations. As such, the Commission needs a consistent, statewide approach to handling compliance issues. However, the Commission has not developed clear policies and procedures to adequately guide field staff or Austin-based staff who process compliance actions.

In addition, the Commission's complaint process is not readily accessible to the public. Also, because the Commission does not track violations or complaint dispositions that occur, it misses an opportunity to provide additional education and outreach opportunities to stop illegal behavior. Establishing a formal, consistent process, improving public access, and tracking certain compliance information would assist the Commission in its efforts to protect livestock and fowl in Texas from disease.

Support

The Commission is responsible for ensuring compliance with animal health statutes and rules established to protect livestock and fowl from disease.

- ◆ The Commission ensures compliance with state laws and agency rules regarding livestock and fowl that control entry into Texas, regulate movement within the state, ensure adequate vaccination and testing, and require maintenance of proper records. Although the Commission works cooperatively with the Texas Department of Agriculture, Texas Parks and Wildlife Department, U.S. Department of Agriculture, and other agencies on issues regarding animal disease in Texas, the Commission is the only state agency with authority for enforcement and compliance activities related to the health of livestock and fowl in Texas.
- ◆ Most complaints received by the Commission originate from inspectors in the Commission's eight area offices around the state. Field inspectors report violations of statutory or Commission requirements to their supervising inspector or area director, who is a licensed veterinarian. After getting approval from the area director, the field inspector submits a compliance action request – which includes a description of the alleged violation and a recommended action – to the Commission's Legal and Compliance Division in Austin. This division consists of three employees: the Commission's General Counsel, who provides legal support to the Commission and agency staff; a full-time investigator, who covers the entire state; and a part-time paralegal.
- ◆ The paralegal inputs information from compliance action requests received from field staff into a database. Information collected includes the name and contact information of the person who allegedly committed the violation; the location and a description of the incident; the field inspector submitting the request; additional comments by field staff; the field inspector's requested action; and actions taken to achieve compliance.
- ◆ After receiving a compliance action request from field employees, Legal and Compliance staff may pursue the case using one of three options. To achieve voluntary compliance, staff most often sends a warning letter to the violator, notifying the individual of the incident, citing the state law or Commission rules violated, and detailing the action needed to come into compliance. In fiscal year 2005, the Commission issued 170 warning letters.



Field staff submit most of the Commission's complaints.

For more serious violations of law, the Commission may also pursue cases through justice-of-the-peace courts. Most violations of the Commission's statute are Class C misdemeanors. Subsequent violations, in most instances, escalate to Class B misdemeanors, although the Commission has never had to increase a violation to this level. The textbox, *Examples of Statutory Violations*, lists some of the provisions in the Commission's statute that can be prosecuted as a Class C or Class B misdemeanor. In fiscal year 2005,

the Commission filed 78 cases as Class C misdemeanors with the courts. All but one of these cases resulted in a conviction and assessment of a fine or other penalty. The county where the case is prosecuted retains any fines collected; the Commission does not receive any of this money.

For violations of a Commission rule or order, the Commission may assess an administrative penalty of up to \$1,000 for each day the violation occurs. The Commission has handled four cases through administrative penalties since fiscal year 2000; three resulted in settlement agreements and one was dismissed. No administrative penalty cases occurred in fiscal year 2005.

Examples of Statutory Violations

- ◆ Veterinarian failure to report diseased animals
- ◆ Slaughter plant failure to collect and submit specimens for testing
- ◆ Improper disposal of a diseased carcass
- ◆ Entry of animals in exhibition without certificate
- ◆ Failure to maintain dealer records
- ◆ Transfer of equine ownership without equine infectious anemia test
- ◆ Refusal to permit entry to Commission representative
- ◆ Refusal to permit inspection of shipment
- ◆ Refusal to provide access to animal for examination, testing, identification, or other Commission purpose
- ◆ Movement in violation of quarantine
- ◆ Importation of animals into the state without meeting identification, testing, and other requirements
- ◆ Failure to disinfect quarantined premises

Lack of written agencywide compliance policies and procedures can lead to an inconsistent response to violations statewide.

- ◆ The Commission has not developed an agencywide policy or established written procedures for receiving complaints or responding to violations, allowing the Commission's process for achieving compliance to be informal and subject to change. For example, the Commission typically sends warning letters for first and second violations. However, this policy is not described in any agency or Legal and Compliance Division procedures. Without a written policy, the Commission cannot convey a consistent message regarding compliance activities to field staff.

In contrast, the Commission has developed other agency policies on a variety of topics and posted them on its Intranet, which employees statewide can access. For example, the Commission's agencywide policy for handling media inquiries and its procedures for inspecting Mexican-origin rodeo



Compliance protocol is not part of any written agency policy.

cattle are clearly described and listed for use by employees on the Intranet. As such, the Commission can ensure consistent awareness of these policies and can make any changes to these policies and procedures immediately available to staff statewide. Without formal rules or procedures to guide its employees on complaints and compliance actions, the Commission cannot ensure that these matters are handled consistently.

- ◆ The Commission’s process for handling complaints and compliance actions lacks a system of consistent checks and balances at the division level. After receiving a compliance action request from field staff, the paralegal evaluates the alleged violation and the field inspector’s requested action, then decides how to proceed with the case. Typically, the paralegal sends a warning letter, although if the inspector’s recommended action differs, the paralegal will try to accommodate the inspector’s request, if the paralegal believes it is an appropriate course of action. In some cases, the paralegal may determine that the seriousness of the alleged violation warrants more investigation and assigns the case to the staff investigator.

Although the paralegal confers with other Legal and Compliance staff on some complaints, the Commission has not established procedures to ensure that another employee, such as a supervisor, is involved in the process at the division level to ensure consistency as decisions regarding compliance are made. As a result, considerable authority, with minimal oversight, is delegated to one employee. In reviews of other regulatory agencies, the Sunset Commission has determined that having more than one person review final enforcement or compliance actions provides additional perspectives and ensures consistency.

- ◆ Compliance activities vary across the Commission’s eight area offices. Because the Commission has not established an agencywide policy, each area director determines the priority of compliance activity within the area. While some areas have the potential for violations that do not exist in other areas – such as interstate movement violations – differing area management philosophies may play a role in each area’s approach to compliance, as well. This may explain why the number of compliance action requests made by each of the Commission’s eight area offices varies significantly. For example, in fiscal year 2005, the number of compliance action requests ranged from 133 in one area to none in another area. The table, *Statewide Compliance Requests*, outlines the number of compliance action requests submitted by each area in fiscal year 2005.

**Statewide Compliance Requests
FY 2005**

Area Office	Cases
1. Amarillo	43
2. Crockett	11
3. Fort Worth	11
4. Mount Pleasant	133
5. Beeville	23
6. Lampasas	17
7. Rockdale	9
8. Hallettsville	0



The Commission cannot ensure that compliance actions are handled consistently.

The requested actions submitted by field staff also range greatly. For example, some field staff request an action that the Commission does not have authority to do, while others leave it up to Legal and Compliance staff's discretion. However, as previously discussed, if Legal and Compliance staff determine field staff's requested action is reasonable, division staff adopts the recommendation. While this allows each area office flexibility in addressing compliance issues within the area, it also can result in different actions taken for the same or similar violations depending on where the violation occurred.

The Commission has not made its complaint procedures easily accessible to the public.

- ◆ The public's access to the Commission's complaint procedures is limited, and the Commission currently receives very few complaints from the public. Although the Commission will accept and investigate complaints from the public, the Commission provides little public information on the agency's complaint process, such as what kind of complaints fall under the Commission's jurisdiction, or what information to include when submitting a complaint.

For example, the Commission's home page makes no reference to how to file a complaint. Instead, users must follow a link to the Commission's Compact With Texans to find contact information for submitting a complaint. Because the link to this complaint information is not apparent, the public may not be able to easily find information regarding the Commission's compliance process. As a result, the Commission may miss opportunities to identify and stop illegal activity. By not including more information about complaints on its website, the Commission also misses a chance to describe which animals and what activities fall under its jurisdiction, an area that Commission staff has indicated is often a source of confusion for the public.

- ◆ The Commission also does not consistently notify complainants about the status of their complaint. Because the Commission receives few complaints from the public, the Commission does not have a process for regularly updating a complainant about the investigation and disposition of a complaint. As a result, individuals who file a complaint with the Commission must contact agency staff to learn how the Commission acted on the complaint.

The Commission does not use its compliance system to track repeat offenders, analyze common violations and complaint dispositions, or keep field staff informed.

- ◆ The Commission cannot ensure that repeat offenders do not receive multiple warning letters for similar violations, potentially allowing illegal behavior to continue. The Commission typically relies on field and headquarters staff's memories to determine if an individual has previously been issued a warning letter. Because the Commission does not use the compliance database to



Little information on the complaint process is on the Commission's website.

track complaints, offenders may receive multiple warning letters before the Commission takes stronger action to stop the illegal activity.

- ◆ The Commission does not track categories of violations, limiting its ability to identify trends or areas of concern that the Commission should address, both in individual areas and statewide. For example, Commission staff indicated that the agency frequently receives cases regarding individuals selling a horse or other equine without the required test for equine infectious anemia. With such knowledge, Commission staff could target certain stakeholder groups or equine events to educate horse owners. Tracking which statutory provisions or Commission rules are violated also could assist the Commission in targeting its regulation or education efforts.

Similarly, the Commission does not analyze the outcomes of its compliance efforts. Because justice-of-the-peace courts handle violations of the Commission's statute, the Commission does not have control over the final disposition of a complaint. However, analyzing the results of cases handled by the courts would provide the Commission with valuable information to use when determining the level of action needed to achieve compliance, as well as to accurately report its compliance activities to the Legislature, stakeholders, and the public.

- ◆ Field staff – who file most of the Commission's complaints – cannot access the compliance database. In fact, only the part-time paralegal accesses the database. Although field employees have information regarding complaints they submit, this information is in hard copy. Thus, despite the information being available electronically in the Commission's compliance database, field staff cannot access it.

Having to rely on hard copies also limits field staff's ability to quickly and accurately check for previous violations and affects field staff's ability to request consistent actions by looking for similar violations when filling out the compliance action request form. Because field staff does not have access to the compliance database, field employees do not know if an individual has committed similar or other violations in any of the Commission's other areas.

Recommendations

Change in Statute

4.1 Require the Commission to establish an agencywide compliance policy and internal operating procedures to guide compliance activities.

This recommendation would ensure that the Commission adopts an agencywide policy regarding its philosophy on compliance and conveys this policy to staff statewide. For example, the Commission could establish that the primary goal of its compliance activities is to first rectify violations of or deviations from Commission requirements through educational efforts before escalating to more severe action. The policy could also address how to prioritize compliance activities with other agency operations, as well as how to prioritize the types of violations.

In addition, the Commission should develop clearly defined procedures regarding the Commission's approach to addressing compliance with state laws and Commission rules. The compliance procedures should address the Commission's process for receiving and consistently responding to complaints from the public and its own field staff; checking for previous violations when a complaint is filed; involving a supervisor in the approval of key compliance decisions; and regularly keeping complainants updated on the status of their complaint. The Commission should post these internal operating procedures on the agency's Intranet so that all Commission employees, including area office directors and field inspectors, have access to them.

The agencywide compliance policy and internal operating procedures are intended to provide guidance to Commission staff – particularly field employees – on the general approach to compliance and how to prioritize compliance activities. These policies and procedures should not be a cookbook; field staff should retain flexibility in addressing compliance concerns within their area.

4.2 Require the Commission to provide information regarding the process for accepting complaints on its website.

To provide the public with simple, easy-to-access information about the Commission's complaint procedures, the Commission would be required to post information regarding complaints on the home page of its website. These procedures should address how to file a complaint, what types of information to include in the complaint, and the general process to expect. The Commission should also explain what types of complaints fall under its jurisdiction, thus reducing the potential for any confusion on nonjurisdictional complaints – such as those dealing with companion animals or animal welfare issues – that the agency does not have authority to resolve. The Commission would not need to post its internal operating procedures on its website.

Management Action

4.3 The Commission should track categories of violations to identify common problems that could be addressed through targeted regulation or education efforts.

Tracking the types of complaints received and compliance action taken would provide the Commission with useful information to identify regulatory problem areas. Types of complaints could be categorized by section of statute or particular rule violated, or under broader categories, such as failure to properly vaccinate or test an animal. Armed with this information, the Commission could target its public information and education efforts on those areas identified as a concern. Tracking dispositions of complaints, including those handled by the courts, would keep the Commission abreast of the actions taken to achieve compliance, thus allowing the Commission to more accurately report its activities to the Legislature, stakeholders, and the public.

4.4 The Commission should make its compliance database available to its employees statewide to facilitate better sharing of information and consistency in staff's approach to compliance.

Allowing field employees to have electronic access to the Commission's database would reduce field staff's reliance on paper copies, thus making it easier for staff to check for previous violations by the same offender, search for similar situations and violations by other individuals within the area and in other areas, and determine the final disposition of complaints submitted by field staff. By taking advantage of this additional information, field staff could take more consistent and effective steps to ensure compliance with animal health laws and rules.

Fiscal Implication

These recommendations could have a fiscal impact to the State if establishing procedures to encourage more statewide consistency for compliance results in additional compliance activities and actions. However, the amount of additional compliance activity that may result across the Commission's eight field areas cannot be estimated for this report. Adding a reference to the Commission's complaint process on its website can be accomplished with existing resources. In addition, improving field staff access to compliance policies can be added to the Commission's existing Intranet.

Anticipated Changes in the Commission's Workforce Could Leave the Agency Vulnerable to a Significant Loss of Knowledge Critical to Its Operations.

Summary

Key Recommendations

- ◆ The Commission should develop and implement a succession plan to prepare for impending retirements and workforce changes.
- ◆ The Commission should formally document its duties in writing by updating its manuals and making them available to all employees electronically.
- ◆ The Commission should train and develop staff to move into at-risk positions.

Key Findings

- ◆ The Commission employs a highly technical and aging workforce.
- ◆ The Commission will likely experience a significant rise in staff turnover in the near future.
- ◆ The Commission is experiencing a shift in necessary job skills, as well as a decreasing pool of qualified applicants for some key positions.
- ◆ The Commission lacks a plan to deal with impending retirements and workforce changes.

Conclusion

Within the next five years, the Texas Animal Health Commission will likely experience a significant increase in its turnover rate, as many older and long-tenured employees become eligible for retirement. Coupled with normal attrition, this loss could leave the Commission vulnerable to a great void of institutional knowledge. At the same time, the pool of qualified applicants for some key positions is decreasing, as the skills needed by the Commission are changing.

The Sunset review found that the Commission recognizes the potential for problems, but is not well-positioned to deal with its impending workforce changes. By training and developing staff to move into key positions and revising outdated employee manuals, the Commission could capture its invaluable technical expertise before the departure of a large number of employees, including staff in critical positions. A formal succession plan, implemented prior to the exit of key staff, could prevent a significant loss of the Commission's institutional knowledge and allow the Commission to continue conducting its animal health management activities smoothly.

Support

The Commission employs a highly technical and aging workforce.

- ◆ In fiscal year 2005, the Commission employed a staff of 206. The Commission maintains a strong field presence, with about three-fourths, or 71 percent, of employees working in the Commission's eight field offices and four labs around the state. The Commission's field staff includes highly technical and scientific positions, such as microbiologists, epidemiologists, and veterinarians. Also, most field employees have an agricultural background.
- ◆ The majority of the Commission's workforce is long-tenured and nearing retirement. For example, 54 percent of Commission staff has been employed by the agency for 10 years or more. In comparison, only 30 percent of all state employees have an agency tenure of 10 years or more.¹ Similarly, the median age of Commission staff is 49.6 years old, compared to 42.8 years old for all state workers.² Seventy-six percent of Commission staff is over the age of 40.³



Thirty-nine percent of Commission staff can retire in the next four years.

The Commission will likely experience a significant rise in staff turnover in the near future.

- ◆ Impending retirements, compounded with normal turnover and attrition, will likely cause the Commission to experience a significant loss of experienced staff in a short time frame. In fiscal year 2005, 39 percent of the Commission's workforce was eligible for retirement within four years. Similarly, half of the Commission's executive staff and employees in management positions will become eligible for retirement within the next five years. In addition, some current Commission employees have already retired and been rehired, so they may not remain at the Commission for an extended period of time.
- ◆ While the Commission's overall turnover rate currently is slightly less than the average for state government – 18.7 percent compared to 20.1 percent in fiscal year 2003 – the Commission's turnover rate has increased in recent years.⁴ Staff, particularly veterinarians, cite low pay as the primary reason for leaving the Commission for another job. In fact, after retirements, employees cited “better pay and benefits” and “little or no career opportunities” as the most prevalent reasons for voluntary terminations.⁵ The Commission must compete with other state and federal agencies as well as private-sector employers to staff its technical positions. In addition, technical employees have few advancement opportunities at the Commission, as many management positions require a degree in veterinary medicine.
- ◆ The Commission also may face a reduction in staff if Texas attains federal brucellosis-free status. Over time, brucellosis-free status may result in a decrease in federal funds, which predominantly pay for field and laboratory

personnel. After attaining brucellosis-free status, other states – such as New Mexico and Arizona – have lost federal funding that helped pay for field staff and lab capacity, forcing these states to contract with other states, such as Texas, for lab services. Surveillance activities for animal diseases have also been reduced in these states, providing less opportunity to monitor disease prevalence. The Commission anticipates attaining brucellosis-free status within the next five years.

The Commission is experiencing a shift in necessary job skills, as well as a decreasing pool of qualified applicants for some key positions.

- ◆ As agricultural industries have become more technologically advanced, the skills needed to perform the Commission’s animal health management activities have changed. The Commission’s highly technical and scientific subject matter has always required employees with expertise in veterinary medicine, epidemiology, microbiology and laboratory skills, as well as expertise in the handling and evaluation of livestock. However, the Commission has an increasing need for staff with technological skills who can work with increasingly complex software, and sophisticated equipment.

These changing workforce needs reflect changes in the livestock and fowl industries. For example, the Commission currently tracks animal movement using paper copies of sale transactions or change-of-ownership records. However, under the National Animal Identification System, the U.S. Department of Agriculture (USDA) has proposed that animal movement eventually be tracked electronically. As a result, Commission staff will rely less on paper records, instead using electronic databases to conduct activities such as surveillance and epidemiological investigations. The Commission also expects an increased demand for people with skills in operating state-of-the-art laboratory equipment, use and maintenance of personal protective gear, and emergency management planning, as well as specialized veterinary expertise in certain diseases, such as foreign and emerging animal diseases.

- ◆ The Commission also is experiencing a shrinking pool of qualified applicants. For example, the number of available large-animal veterinarians is steadily decreasing because the majority of new veterinary graduates choose to go into small-animal practice, where they work more regular hours and generally receive higher pay. In fact, the American Veterinary Medical Association estimates that only 15 percent of all veterinarians deal with large animals, such as cattle and horses, in their practice, and only 4.3 percent work exclusively with large animals.⁶

This, compounded by competition with higher-paying state and federal agencies and the appeal of private practice, has made filling vacancies for veterinarians challenging for the Commission. The Legislature has recognized the critical need for the Commission to recruit and retain veterinarians, and during the 2005 legislative session appropriated additional funds for the



Only 15 percent of veterinarians work with large animals, such as cattle.

Commission to increase salaries for its staff veterinarians. In addition, the percentage of the population growing up with an agricultural background is shrinking as the agricultural industry becomes smaller and more vertically integrated. Thus, in the future, the Commission may have difficulty filling field staff positions with people knowledgeable about livestock and fowl.

The Commission lacks a plan to deal with impending retirements and workforce changes.

- ◆ Staff turnover will result in a significant loss of institutional knowledge at the agency, especially at the management level. Because the Commission performs such technical duties, the loss of experienced staff will cause the Commission to lose in-depth knowledge and valuable expertise regarding its animal health programs, leaving the Commission with a less experienced workforce. Although the Commission has recognized the impending loss of staff, it has not attempted or developed a formal plan to capture this institutional knowledge.
- ◆ The Commission also lacks a formal program to train and develop employees to move into management positions. Without such a development program, staff cannot receive the training and skills needed to successfully advance up the career ladder. As a result, the Commission may not be adequately preparing staff to move into positions vacated by retirements and other turnover.
- ◆ The manuals used by the Commission to explain job responsibilities are outdated and not available electronically. Also, most field employees work out of their vehicles with a laptop, so they do not carry multiple, large, updated manuals with them. Currently, the manuals reflect procedures used before the Internet was in widespread use. As a result, field employees – which serve as the front line of defense and interact most with the public – may not have the most up-to-date information as they perform their duties.



Staff turnover could lead to a significant loss of institutional knowledge.

Recommendations

Management Action

5.1 The Commission should develop and implement a succession plan to prepare for impending retirements and workforce changes.

The Commission should develop a plan to prepare for both anticipated and unanticipated departures of key staff, including identifying positions critical to the agency's operations. With the Commission's turnover rate expected to significantly rise, the Commission should implement this plan within two to four years, before anticipated retirement-eligibility dates of key staff. A succession plan would reposition the Commission to address future needs with current resources and ensure continuity of leadership.

5.2 The Commission should formally document its duties in writing by updating its manuals and making them available to all employees electronically.

This recommendation would ensure that the Commission captures institutional knowledge and uses this information to update its employee manuals to reflect current job duties and procedures. This would

allow the Commission to record valuable knowledge and expertise before key staff leaves, providing an effective method to document current practices as well as to train new staff. The Commission should make these manuals available to all staff electronically, such as through the Commission's Intranet, as a more effective means of information disbursement. This would allow the agency to more easily update information without printing new manuals every time information changes.

5.3 The Commission should train and develop staff to move into at-risk positions.

The Commission should identify positions at risk of becoming vacant in the near future and provide training and development opportunities to employees eligible to move into these positions. Training and development opportunities would give staff the skills and competencies needed to move into essential positions and enable the Commission to pass its institutional knowledge and expertise to new staff members. This recommendation would also allow the Commission to further develop its career ladder.

Fiscal Implication

These recommendations would not have a fiscal impact to the State. Preparing for future staff needs is an essential agency function and should be handled with existing resources. The Commission currently has an Intranet, which is used to provide information to agency employees statewide. Therefore, adding or updating employee manuals or procedures electronically would not require existing resources. Providing internal training – such as job shadowing, for example – for positions at risk of becoming vacant can be accomplished with the Commission's existing budget. Should the Commission opt to pursue training from an outside source, however, the Commission would need to seek approval for additional resources through the legislative appropriations process.

¹ State Auditor's Office, *Animal Health Commission Agency Workforce Summary* (Austin, Texas, 2004), p. 1.

² State Auditor's Office, *A Summary of the State of Texas Workforce for Fiscal Year 2004* (Austin, Texas, 2004), p. 4.

³ State Auditor's Office, Electronic Classification Analysis System, www.hr.state.tx.us/apps/eclass/. Accessed March 15, 2006.

⁴ Texas Animal Health Commission, *Agency Strategic Plan*, (Austin, Texas, 2004), p. 68.

⁵ *Ibid.*, p. 69.

⁶ American Veterinary Medical Association, Veterinary Market Statistics, www.avma.org/membshp/marketstats/usvets.asp. Accessed: February 6, 2006.

Texas Has A Continuing Need for the Texas Animal Health Commission.

Summary

Key Recommendation

- ◆ Continue the Texas Animal Health Commission for 12 years.

Key Findings

- ◆ Texas has a clear and continuing interest in preventing, controlling, and eradicating disease in the state's livestock and fowl.
- ◆ The Commission effectively accomplishes its mission to protect livestock and fowl from domestic, foreign, and emerging diseases.
- ◆ Review of the Commission and other related agencies did not reveal any significant beneficial alternatives for consolidation or transfer of functions.
- ◆ While organizational structures vary, all 50 states have established a system for protecting livestock and fowl from disease.

Conclusion

Texas recognized the need to protect livestock and fowl from disease more than a century ago when the Legislature established the Texas Livestock Sanitary Commission, later renamed the Texas Animal Health Commission. Since creating the Commission, the Legislature has strengthened its efforts to protect animals from disease by expanding the species under the Commission's jurisdiction, and by adding to the list of reportable animal diseases.

Maintaining healthy, disease-free livestock and fowl benefits not only animal health, but human health as well, as many diseases are transmissible from animals to humans. Protecting animals from disease also greatly benefits Texas' economy, as the livestock and poultry industries contribute significantly to the state's economic health.

The Sunset review evaluated the continuing need for an independent agency to protect livestock and fowl from disease. The review found that the Commission effectively accomplishes its mission to prevent, control, and eradicate animal disease and that no significant benefits would result from transferring the Commission's functions to another agency.

Support

The Texas Animal Health Commission protects Texas livestock and fowl from disease.

- ◆ In the mid-1800s, an epidemic of tick fever – a disease that killed 90 percent of infected animals within days – led to a federal quarantine of Texas cattle.

Texas Animal Health Commission's Mission

The Texas Animal Health Commission's mission is to:

- ◆ protect the animal industry from domestic, foreign, and emerging animal diseases;
- ◆ increase the marketability of Texas livestock commodities at the state, national, and international levels;
- ◆ promote and ensure animal health and productivity;
- ◆ protect human health from animal diseases and conditions that are transmissible to people;
- ◆ prepare for and respond to emergencies involving animals; and
- ◆ conduct agency business in a responsive, cooperative, and transparent manner.

This quarantine threatened to cripple the state's economy and directly contributed to the end of the Texas cattle-trailing industry that had flourished for more than 20 years.¹ In response, the Texas Legislature, in 1893, created the Texas Livestock Sanitary Commission – renamed the Texas Animal Health Commission in 1959 – to determine quarantine lines and make regulations to prevent the spread of any malignant, contagious disease. The Legislature has since expanded the Commission's responsibilities to include control and eradication of a number of domestic, foreign, and emerging diseases in animals beyond just cattle. In fact, the Commission's jurisdiction extends to all livestock, exotic livestock, domestic fowl, and exotic fowl. The Commission's mission is outlined in the accompanying textbox.

- ◆ The Commission accomplishes its mission by:
 - issuing entry and movement permits;
 - administering vaccinations;
 - examining animals at livestock markets, feedlots, and slaughter plants;
 - collecting blood, serum, tissue, and other samples;
 - conducting diagnostic testing;
 - responding to sick calls;
 - establishing quarantines and issuing hold orders;
 - conducting epidemiological tests and trace-back investigations;
 - developing herd and flock management plans; and
 - depopulating diseased herds and flocks.
- ◆ In fiscal year 2005, the Commission operated on a budget of \$13.4 million, including \$5.1 million in federal funds. A 13-member policy body comprising industry representatives and members representing the general public oversees the agency and its 206 employees. More than two-thirds of the Commission's employees work in eight area offices and four laboratories located around the state, giving the Commission a large field presence.

Texas has a clear and continuing interest in preventing, controlling, and eradicating disease in the state's livestock and fowl.

- ◆ Disease can have a debilitating effect on livestock and fowl. Some effects of animal diseases include arthritis, fever, hemorrhaging, weight loss, anemia, and listlessness. Animal diseases also can affect an animal's productivity and fertility. For example, in cattle, brucellosis can cause increased abortion rates, poor conception rates, reduced lactation, and birth of weak calves.² Some animal diseases, such as bovine spongiform encephalopathy (BSE) or exotic Newcastle disease, cause death in livestock or fowl.
- ◆ Animal diseases can affect human health as well, as many diseases found in animals can be passed to humans, either through contact with an animal or through the food chain. In recent years, the public has become more aware of the effect animal diseases can have on human health, as several high-profile disease outbreaks have occurred in the United States and around the world. Two recent examples of these zoonotic diseases – those diseases transmissible from animals to humans – are highlighted in the textbox, *Zoonotic Outbreaks*.³ Some of the zoonotic diseases the Commission works to prevent, control, and eradicate are outlined in the table, *Zoonotic Diseases*.

Zoonotic Outbreaks

Through direct contact or food products, animals can infect humans with disease. Over the years, zoonotic diseases have resulted in several disease outbreaks. For example, in the 1330s, an outbreak of bubonic plague spread from rats to humans, killing 25 million people. While not that widespread, two animal diseases recently caught the public's attention for their ability to spread to humans.

Bovine Spongiform Encephalopathy (Mad Cow Disease) – Bovine spongiform encephalopathy (BSE), or mad cow disease, is a neurodegenerative, fatal brain disease of cattle. First diagnosed in 1986 in the United Kingdom, BSE has caused hundreds of thousands of cattle deaths worldwide. BSE is not transmissible from animal to animal, but by feeding rendered bovine meat-and-bone meal to young calves. By April 2005, more than 184,000 cases of BSE had been confirmed in the UK alone. In the United States, three cases have been confirmed. The first occurred in Washington state in 2003 in a dairy cow imported from Canada. The second case occurred in 2005 in Texas in a native-born beef cow. In March 2006, the third case was diagnosed in a native-born red crossbred cow in Alabama. Research shows a probable link between BSE in animals and variant Creutzfeldt-Jakob Disease (vCJD) in humans who consumed beef products. Worldwide, 185 people have developed vCJD as of November 2005.

Avian Influenza – Avian influenza (AI), a disease found among a variety of birds, first appeared in Italy more than 100 years ago. AI viruses are classified into low or highly pathogenic forms based on the severity of the illness they cause in poultry. Excreted through infected birds' feces and secretions from the nose, mouth and eyes, the virus spreads by direct contact between birds and through indirect contact with contaminated equipment and materials.

Highly pathogenic AI has occurred three times in the United States, most recently in Texas in 2004. The current world outbreak, involving a high-pathogenic strain called H5N1, began in Southeast Asia in 2003 and has resulted in death or destruction of about 150 million birds. Some strains can spread from birds to people as a result of extensive direct contact with infected birds; 103 human deaths have resulted from H5N1 since 2003. The disease's rapid spread during the current outbreak is historically unprecedented and concerns health officials, who fear that the disease could mutate and become transmissible from human to human, resulting in a global pandemic.

- ◆ Maintaining disease-free livestock and fowl greatly benefits the Texas economy, as agriculture – including livestock, fowl, and their products – accounts for a large sector of the state's economy. Healthy animals result in increased productivity, marketability, and mobility of Texas livestock

and poultry products within the state and as exports to other states and countries. In 2002, livestock and poultry sales accounted for \$10 trillion, or 74 percent, of the market value of agricultural products sold in Texas.⁴ In 2004, exports of Texas livestock products were valued at \$67 million.⁵ And, Texas accounted for 9.8 percent of the U.S. market value of livestock, poultry, and their products in 2002.⁶

Zoonotic Diseases

Animal Disease	Animal Affected	Major Symptoms in Animals	Human Disease	Major Symptoms in Humans
Anthrax	Bovine	Staggering, trembling, fever, diarrhea, convulsions, bleeding from body openings, sudden death	Anthrax	Fever, flu-like symptoms, fatigue, headache, nausea, diarrhea, sores
Avian Influenza	Fowl	Lack of energy and appetite, decreased egg production, soft-shelled or misshapen eggs, nasal discharge, coughing, sneezing, diarrhea, sudden death	Avian Influenza	Flu-like symptoms, fever, muscle aches, conjunctivitis, pneumonia, acute respiratory distress, viral pneumonia, death
Bovine Spongiform Encephalopathy (BSE)	Bovine	Degeneration of central nervous system, temperament changes, lack of coordination, weight loss, difficulty rising, abnormal posture, death	Variant Creutzfeldt-Jakob Disease	Prominent psychiatric or sensory symptoms, neurological abnormalities, ataxia, dementia, myoclonus, death
Brucellosis	Bovine, Swine, Bison	Abortion, birth of weak calves, changes in lactation, flu-like symptoms, enlarged and arthritic joints	Undulant Fever, Malta Fever	Recurring fatigue and headaches, fever, chills, sweats, joint pain, backache, loss of weight and appetite
Chronic Wasting Disease (CWD)	Deer, Elk	Chronic weight loss, listlessness, repetitive walking in set patterns, tremors, abnormal head posture, death	Unknown ⁷	Unknown
Johne's	Bovine	Weight loss and diarrhea with a normal appetite, soft swelling under the jaw	Unknown ⁸	Abdominal pain and swelling, vomiting, diarrhea, weight loss, fever, anemia, joint pain, rashes, ulcers
Scrapie	Sheep, Goats	Temperament changes, tremors, rubbing against fixed objects, loss of coordination, weight loss, lip smacking, gait abnormalities, death	Unknown ⁹	Unknown
Tuberculosis	Bovine, Swine, Cervids	Respiratory effects, progressive weight loss, chronic cough, unexplained mortality	Tuberculosis	Weight loss, fever, night sweats, loss of appetite, cough, chest pain, bloody sputum
West Nile Virus	Equine	Central nervous system disorder, muscle twitches, fever, irregular gait, swaying, brain swelling, difficulty rising	West Nile Virus	Fever, headache, body ache, disorientation, nausea, convulsions

An animal disease outbreak could result in a ban or restriction on exports of Texas livestock and poultry, which in turn could result in a devastating effect on Texas' economy. For example, after an outbreak of exotic Newcastle disease in El Paso in April 2003, Japan, the European Union, Mexico,

Russia, and Cuba banned importation of Texas poultry. Poultry industry representatives estimated that the ban would have as high as a \$100 million effect on the state's poultry industry.¹⁰

- ◆ The threat of disease to Texas livestock and fowl poses an ongoing risk, even after a disease has been eradicated, as the Commission's history with tuberculosis and fever ticks illustrates. Texas achieved tuberculosis (TB) accredited-free status in 2000, prompting the Commission to scale back its surveillance of TB. Less than two years later, two TB-infected cattle herds were identified in the state and Texas lost its accredited-free status.

Similarly, the Commission eradicated fever ticks in the state by 1943, but cattle crossing into Texas from Mexico continue to reintroduce the ticks. As a result, the Commission and the U.S. Department of Agriculture (USDA) established a permanent tick eradication quarantine area along the Texas-Mexico border. More than half of the premises currently infected with fever ticks do not fall within the quarantine zone, however, emphasizing the ability of animal diseases and disease agents to spread, and thus the need for continued surveillance.

The Commission effectively accomplishes its mission to protect livestock and fowl from domestic, foreign, and emerging diseases.

- ◆ The Commission's activities and skilled workforce have contributed to keeping Texas' livestock and fowl healthy and preventing a widespread disease outbreak. Many Commission veterinarians are foreign animal disease diagnosticians, trained to recognize dangerous animal diseases. The Commission also employs microbiologists, epidemiologists, and staff with a background in agriculture.
- ◆ By monitoring entry points around the state, Commission staff works to prevent infected animals from coming into Texas. In fiscal year 2005, the Commission issued 1,529 entry permits. Commission inspectors also conduct surveillance activities, such as monitoring animals at livestock markets. In fiscal year 2005, the Commission examined 7.2 million animals at market. The Commission's laboratory staff identifies disease by running tests on samples submitted to the four labs jointly run by the Commission and USDA. Lab staff performed about 2.5 million tests in fiscal year 2005. When a disease is detected or an outbreak occurs, Commission staff moves quickly to conduct testing, identify infected and exposed animals, restrict movement, establish quarantines, and – if necessary – depopulate herds or flocks. The Commission also has fostered relationships with local, state, and federal agencies that play a role in animal health issues, establishing a multilayered approach to protecting Texas' animals from disease.
- ◆ The Commission also is heavily involved in emergency management operations, which include planning for animal disease outbreaks as well as other types of disasters involving animals. In 2001, the Governor appointed



The Commission has been successful at preventing a widespread animal disease outbreak.

the Commission to the 32-member Emergency Management Council, which requires staff to participate in all natural, man-made, and terrorism disasters and emergency responses, even those not involving animals. Examples of the Commission's roles in emergencies include identifying owners of lost animals; capturing, evacuating, and relocating animals; finding shelter for animals; and coordinating carcass disposal. Commission staff also assists local governments with emergency management planning related to animal issues.

Review of the Commission and other related agencies did not reveal any significant beneficial alternatives for consolidation or transfer of functions.

- ◆ Although other local, state, and federal agencies – listed in the textbox, *Animal Health Partners* – play a role in animal health and disease management, the Commission's current organizational structure offers a focused, efficient

Animal Health Partners

- ◆ Texas Department of Agriculture
- ◆ Texas Parks & Wildlife Department
- ◆ Texas Department of State Health Services
- ◆ Texas Veterinary Medical Diagnostic Laboratory
- ◆ U.S. Department of Agriculture
- ◆ Local governments

approach to prevent, control, and eradicate animal diseases statewide. Sunset staff examined organizational options for the State's efforts to protect and enhance the health of Texas animals, and to facilitate productivity and marketability while minimizing risks to human health. While other agencies could perform these functions, Sunset staff did not find sufficient benefit to the State to warrant the merger or transfer of any or all of these functions, as discussed below.

- ◆ The Texas Department of Agriculture (TDA) markets and promotes the state's agriculture, including the livestock and poultry industries. As the largest sector in Texas' agriculture industry, livestock plays an important part in TDA's marketing efforts. As such, TDA has an interest in ensuring that Texas' livestock and poultry industries remain disease-free. Thus, the Commission and TDA share information about disease prevention and control activities, which helps TDA market Texas' agricultural products across the state and nation, as well as around the world.

TDA also runs six livestock export facilities, where livestock is held while being sold to international buyers. The Commission does not have any responsibilities related to these livestock pens, as private veterinarians examine the animals prior to sale. TDA also operates six laboratories around the state. However, these labs currently do not have the equipment or expertise to handle animal disease diagnosis and testing. Instead, the labs provide seed germination and purity testing, calibration of weights and weighing devices, and testing for pesticide residue.

Because the Commission's and TDA's duties do not overlap, merging the two agencies and their responsibilities would require the same resources, other than some administrative savings. With an appropriate transfer of resources and staff, TDA could perform the Commission's functions under its regulatory structure, but Sunset staff did not find that consolidating

the Commission's functions at TDA would provide a significant benefit to the State. In fact, although the two agencies have an interest in the state's livestock and poultry industries, maintaining the regulatory activities performed by the Commission and the marketing functions performed by TDA at separate agencies reduces the opportunity for the appearance of conflict of interest and allows both agencies to focus on their primary missions.

- ◆ The Texas Parks and Wildlife Department (TPWD) has authority over the state's native wildlife, but this authority does not include responsibility for disease diagnosis, eradication, control, or management. Under its current structure and authority, TPWD – which does not employ any veterinarians – is not capable of administering statewide animal disease programs involving livestock and fowl. However, because commingling of wildlife and livestock and fowl occurs and because wildlife can spread disease to livestock and fowl – and vice versa – the two agencies work closely together to identify and control diseases, such as chronic wasting disease and tick-borne diseases.

TPWD maintains a visible presence statewide through staff such as game wardens, wildlife biologists, and park employees, who provide valuable assistance to the Commission in controlling the spread of animal disease. Commission employees help TPWD staff to identify sick animals, which could be infected with a disease that affects livestock or fowl. And, TPWD staff notifies the Commission when they detect the illegal movement of livestock or fowl.

The Commission and TPWD also coordinate on issues that affect species under each other's jurisdiction. For example, the two agencies worked with each other on regulations regarding movement of deer and elk. They also jointly developed the Texas Chronic Wasting Disease (CWD) Management Plan, which describes the surveillance strategy, the approach to reduce the threat of the disease, and the decision-making process should CWD be detected in Texas. While the Commission and TPWD both have responsibilities related to animals, Sunset staff found that these responsibilities complement, rather than conflict with, each other. This, plus the effective coordination between the two agencies, led Sunset staff to conclude that merging functions of the Commission and TPWD would not result in a significant benefit to the State.

- ◆ Through its Zoonosis Control Group, the Texas Department of State Health Services (DSHS) works to minimize the incidence of diseases transmissible from animals to humans. DSHS addresses these zoonotic diseases from the human perspective, while the Commission approaches zoonotic diseases from the animal perspective. Therefore, coordination between the two agencies is paramount. Veterinarians and others caring for an animal must notify both agencies when they detect a reportable disease. In addition, the two agencies notify each other when any disease is reported.



*TPWD field staff
provide valuable
assistance to the
Commission
in controlling
animal disease.*



Although an animal disease may not currently be zoonotic, veterinarians and other DSHS staff monitor animal diseases, as these diseases – such as avian influenza – may eventually become zoonotic or even transmissible from human to human. In fact, about 75 percent of new human diseases originated from animal diseases.¹¹ DSHS also is responsible for controlling rabies found in canines, including dogs and coyotes, while the Commission controls rabies in livestock.

DSHS operates a statewide system of laboratories, providing comprehensive services for human, animal, and environmental specimens. However, DSHS' labs are not equipped to run tests for livestock diseases. Although DSHS has some activities related to animal diseases, DSHS' responsibilities relate to human, not animal, health, and therefore in its current structure, DSHS is not capable of conducting statewide animal disease prevention, surveillance, diagnosis, control, and eradication.

- ◆ The Texas Veterinary Medical Diagnostic Laboratory, which falls under the oversight of the Board of Regents of the Texas A&M University System, performs diagnostic testing for animals, including livestock and fowl. As a service agency, TVMDL provides its diagnostic services directly to the public as well as supports the animal-health and disease-surveillance activities of other agencies, including the Commission. When TVMDL detects a reportable disease, staff notifies the Commission. However, while the Commission and TVMDL both operate laboratories, their responsibilities, capabilities, and approaches differ. For example, the Commission conducts mandatory tests for specific regulatory diseases, while TVMDL's tests are primarily voluntary and diagnostic. In addition, TVMDL's proximity to Texas A&M's School of Veterinary Medicine provides beneficial coordination of academic research and disease diagnostics.

TVMDL also administers the state's Pullorum Disease and Fowl Typhoid Control Program by voluntarily registering hatcheries and hatchery supply flocks, and performing on-site testing for pullorum disease and fowl typhoid at commercial poultry facilities and on backyard flocks. Positive tests are sent to TVMDL's labs in Gonzales and Center for confirmation. TVMDL reports positive tests to the Commission, which then works with the poultry industry and USDA to quarantine and depopulate infected birds and manage infected flocks to ensure they are free of disease. While the Commission has a structure in place to conduct disease surveillance activities, Sunset staff found that the coordination among the Commission, TVMDL, and the poultry industry provided an effective structure for protecting fowl from disease. Therefore, while combining some of the functions of the Commission and TVMDL could work, Sunset staff did not identify any problems with the current organizational structure to justify such a consolidation.

- ◆ At the federal level, USDA's Animal and Plant Health Inspection Service has responsibility for animal health and disease control when interstate movement of animals occurs or when a foreign animal disease is detected.

Also, through cooperative agreements awarded to the Commission, USDA provides funding for control and eradication of certain diseases. USDA maintains employees in offices around Texas, with many of these federal employees working side by side with Commission staff and even sharing office space in some instances.

While USDA employees perform similar duties to many Commission staff, USDA does not have the authority to engage in animal disease activities within a state; both federal and state laws would need to be changed to allow for this. Without a state agency to administer certain disease programs, the federal government, other states, and other countries would refuse to allow shipment or importation of Texas animals and animal products.

- ◆ Local governments also help protect livestock and fowl from disease. County Commissioners Courts are statutorily required to assist the Commission in protecting animals from communicable diseases, regardless of whether a particular disease exists in the county.¹² Under the Commission's guidance, 35 counties have established an animal issues committee to help solve animal-related emergency or disaster issues within a community. More than 100 additional counties either plan to start an animal issues committee or are already actively involved in emergency management planning for animals. Animal issue committees do not have any regulatory authority, however, such as authority to issue a quarantine or require testing, or the ability to address widespread or statewide animal-related situations.

While organizational structures vary, all 50 states have established a system for protecting livestock and fowl from disease.

- ◆ Among the states, a variety of organizational structures exists for preventing, controlling, and eradicating animal diseases. The majority of states – 37 – house their animal health responsibilities within the state Department of Agriculture, although the organization within that department varies.¹³ For example, some states maintain a separate policymaking body to handle animal health issues.
- ◆ Twelve states, including Texas, maintain animal health functions within an independent, stand-alone agency.¹⁴ Although Texas' structure is not the most common, the state has animal health issues that differ from those in other states. Therefore, Texas benefits from having an independent agency focused on prevention, control, and eradication of animal disease. For example, Texas shares a long border with Mexico, resulting in issues unique to Texas, such as the continuing threat for reintroducing diseases and parasites present in Mexico. Because the warm, moist climate along the Rio Grande Valley provides ideal conditions for the continual reintroduction of fever ticks, USDA maintains a significant presence in Texas, unlike in some other states, and works closely with the Commission.



*Texas' border
with Mexico
results in animal
disease issues
unique to Texas.*

Also, almost all sectors of Texas' diverse livestock industry play a major role in the U.S. economy, as illustrated by the table, *Texas Livestock & Fowl Summary*.¹⁵ For example, Texas leads the nation in the production of cattle and calves and sheep and goats. While other states have productive livestock industries, few states have the number of high-volume industries that Texas does.

Texas Livestock & Fowl Summary, 2002

Commodity	Value of Sale	U.S. Rank
Cattle and calves	\$8.1 billion	1
Sheep, goats, and their products	\$94 million	1
Horses, ponies, mules, burros, and donkeys	\$91 million	2
Poultry and eggs	\$1.3 billion	6
Milk and other dairy products	\$676 million	9
Hogs and pigs	\$128 million	16

Recommendation

Change in Statute

6.1 Continue the Texas Animal Health Commission for 12 years.

This recommendation would continue the Commission as an independent agency responsible for preventing, controlling, and eradicating animal diseases in livestock, exotic livestock, domestic fowl, and exotic fowl for the standard 12-year period, until 2019. The Commission would maintain its activities focused on protecting livestock and fowl from disease. Doing so would not only benefit animal health, but would also help protect humans from zoonotic diseases and help protect Texas' economy from the potentially devastating effects that could result from an animal disease outbreak.

Fiscal Implication

If continued by the Legislature, the Commission's annual appropriation of \$13.4 million – including \$8.3 million in General Revenue – would continue to be required.

¹ Texas State Historical Association and University of Texas at Austin General Libraries, Handbook of Texas Online, www.tsha.utexas.edu/handbook/online/articles/TT/awt1.html. Accessed: January 12, 2006.

² USDA, Facts About Brucellosis, www.aphis.usda.gov/vs/naahps/brucellosis/. Accessed: February 7, 2006.

³ U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), About BSE, www.cdc.gov/ncidod/dvrd/bse. Accessed: February 7, 2006; CDC, Probable variant Creutzfeldt-Jakob Disease in a U.K. Citizen Who Had Temporarily Resided in Texas, 2001-2005, www.cdc.gov/ncidod/dvrd/vcjd/other/probablevcjd_texas2001_2005_111805.htm. Accessed: February 8, 2006; World Health Organization (WHO), Avian Influenza – Fact Sheet, www.who.int/mediacentre/factsheets/avian_influenza/en/print.html. Accessed: February 7, 2006; USDA, Questions and Answers: Avian Influenza – Release no. 0458.05, www.usda.gov/wps/portal/!ut/p/_s.7_0_A/7_0_1RD?printable=true&contentidonly=true&contentid=2005/10/0458.xml. Accessed: February 7, 2006; WHO, Cumulative Number of Confirmed Human Cases of Avian Influenza A/(H5N1) Reported to WHO, www.who.int/csr/disease/avian_influenza/country/cases_table_2006_03_21/en/index.html. Accessed: March 23, 2006.

⁴ USDA, National Agriculture Statistics Service (NASS), 2002 Census of Agriculture State Profile – Texas, www.nass.usda.gov/census/census02/profiles/tx/cp99048.PDF. Accessed: December 12, 2005.

⁵ Office of the Governor, Economic Development and Tourism, Texas Industry Profile – Agriculture and Livestock, www.bidc.state.tx.us/industry%20profiles/profileagriculture.pdf. Accessed: December 12, 2005.

⁶ USDA, NASS, 2002 Census of Agriculture – Census Quick Stats, www.nass.usda.gov/Census_of_Agriculture/index.asp. Accessed: January 23, 2006.

⁷ Like BSE, CWD is a form of transmissible spongiform encephalopathy (TSE), a category of fatal, chronic, degenerative diseases of the central nervous system. Currently, only BSE is suspected to be related to variant Creutzfeldt-Jakob disease in humans, although research continues into links between other forms of TSEs and human diseases.

⁸ Some data suggests that Johne's may be related to Crohn's disease in humans. Health professionals are still debating this link.

⁹ Like BSE, scrapie is a form of transmissible spongiform encephalopathy. Currently, only BSE is suspected to be related to variant Creutzfeldt-Jakob disease in humans, although research continues into links between other forms of TSEs and human diseases.

¹⁰ Simon Romero, "Virus Takes a Toll on Texas Poultry Business," *The New York Times* (May 16, 2003), sec. C, p. 1.

¹¹ L. Taylor, S. Latham, & M. Woolhouse, "Risk Factors for Human Disease Emergence," *Philosophical Transactions of The Royal Society of London* 2001, 356 (1411): 983-989.

¹² Texas Agriculture Code, sec. 161.003.

¹³ States housing their animal health functions within the state Department of Agriculture include: Alabama, Arizona, California, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin. Alaska's animal health functions fall under the auspices of the state's environmental agency.

¹⁴ States that maintain an independent, stand-alone animal health agency include Texas, Arkansas, Indiana, Kansas, Minnesota, Mississippi, Montana, New Mexico, North Dakota, South Carolina, South Dakota, and Wyoming.

¹⁵ USDA, NASS, 2002 Census of Agriculture State Profile.

ACROSS-THE-BOARD RECOMMENDATIONS



Texas Animal Health Commission

Recommendations	Across-the-Board Provisions
Update	1. Require public membership on the agency’s policymaking body.
Update	2. Require provisions relating to conflicts of interest.
Already in Statute	3. Require unbiased appointments to the agency’s policymaking body.
Already in Statute	4. Provide that the Governor designate the presiding officer of the policymaking body.
Update	5. Specify grounds for removal of a member of the policymaking body.
Update	6. Require training for members of the policymaking body.
Already in Statute	7. Require separation of policymaking and agency staff functions.
Already in Statute	8. Provide for public testimony at meetings of the policymaking body.
Update	9. Require information to be maintained on complaints.
Apply	10. Require the agency to use technology to increase public access.
Apply	11. Develop and use appropriate alternative rulemaking and dispute resolution procedures.

Agency Information

Agency Information

Agency at a Glance

The Texas Animal Health Commission works to prevent, control, and eradicate disease in Texas livestock, exotic livestock, domestic fowl, and exotic fowl. The Legislature established the Texas Animal Health Commission – originally named the Texas Livestock Sanitary Commission – in 1893 to fight the tick fever epidemic, which resulted in a federal quarantine of Texas cattle and threatened to cripple the state’s economy. Since then, the Commission’s responsibilities have remained consistent, although the Legislature has expanded the animals under the Commission’s jurisdiction beyond cattle, and added to the list of diseases that the Commission works to control.

Today, the Commission’s mission includes:

- ◆ protecting livestock and fowl from domestic, foreign, and emerging animal diseases;
- ◆ increasing the marketability of Texas livestock commodities worldwide;
- ◆ promoting and ensuring animal health and productivity;
- ◆ protecting human health from animal diseases and conditions that are transmissible to people; and
- ◆ preparing for and responding to emergencies involving animals.

Key Facts

- ◆ **Funding.** In fiscal year 2005, the Commission operated on a budget of \$13.4 million, including \$5.1 million in federal funds.
- ◆ **Staffing.** The Commission employs a staff of 206, more than half of whom work in the Commission’s eight field areas. Employees also work in four laboratories, which the Commission jointly operates with the U.S. Department of Agriculture (USDA).
- ◆ **Surveillance.** In fiscal year 2005, the Commission examined 7.2 million animals at livestock markets. The Commission also monitored 2,806 livestock shipments.
- ◆ **Testing.** Employees in the Commission’s laboratory system processed about 2.5 million samples in fiscal year 2005. Tests conducted include those to detect bovine and swine brucellosis, swine pseudorabies, and bovine tuberculosis. Lab staff also identify disease-carrying parasites, such as fever ticks.



Information about preventing, controlling, and eradicating disease in livestock and fowl can be found on the Commission’s website, www.tahc.state.tx.us.

- ◆ **Emergency Management and Homeland Security.** In fiscal year 2005, Commission staff spent 6,834 hours planning for and responding to disease outbreaks and natural and man-made disasters. The Governor appointed the Commission as a member of the Texas Emergency Management Council in 2001, and the Homeland Security Council in 2005.

Major Events in Agency History

- 1892 The U.S. Secretary of Agriculture places a quarantine on parts of Texas because of tick fever, a disease that killed 90 percent of infected cattle. The federal quarantine, as well as restrictive legislation passed by several states, directly contributed to the end of the Texas cattle-trailing industry.
- 1893 The Texas Livestock Sanitary Commission is established to determine quarantine lines and regulate prevention of cattle fever ticks in Texas.
- 1917 Texas joins the national Tuberculosis Eradication Program, with approximately 400,000 head of cattle infected with tuberculosis in Texas.
- 1959 The Legislature renames the agency the Texas Animal Health Commission. Texas joins the Cooperative State Federal Brucellosis Eradication Program for cattle, with approximately 20,000 herds infected with brucellosis in Texas.
- 1990 Texas joins the national Swine Brucellosis and Pseudorabies Eradication programs, with approximately 267 herds infected with either swine brucellosis or pseudorabies, also known as Aujeszky's disease.
- 1994 Texas achieves Class A status in the national Cattle Brucellosis Eradication Program. Class A represents an infection rate of less than 0.25 percent in Texas cattle.
- 2000 Texas, with the exception of El Paso County and parts of Hudspeth County, gains tuberculosis-free status, easing restrictions on producers' ability to import and export cattle.
- 2001 Two tuberculosis-infected cattle herds are discovered, causing Texas to lose its tuberculosis-free status. Also, the Governor appoints the Commission to the Texas Emergency Management Council.
- 2004 USDA declares Texas free of pseudorabies in commercial swine herds. Highly pathogenic avian influenza is detected in Gonzales County. The Commission depopulates 6,600 chickens, confining the outbreak to one flock.
- 2005 Animal health officials discover the United States' first native-born case of bovine spongiform encephalopathy, or mad cow disease, in Texas, prompting at least one country to renew its ban on importation of American beef. Also, USDA launches the National Animal



The Commission was established in 1893 to regulate prevention of cattle fever ticks in Texas.

Identification System, which, when fully implemented, will allow animal health officials to trace animal movement within 48 hours, enhancing the ability to stop the spread of disease.



Thirteen Commission members represent various livestock industries and professions, as well as the general public.

Organization

Policy Body

The Texas Animal Health Commission consists of 13 members appointed by the Governor, with advice and consent of the Senate, to serve staggered six-year terms. Ten members represent various livestock industries and professions outlined in statute, while three members represent the general public. When making appointments, the Governor must, to the extent possible, give proportionate representation to all regions of the state. The Governor also selects the Commission's presiding officer. The table, *Texas Animal Health Commission Policy Body*, contains information on current Commission members, including which industry each member represents. As of March 2006, one public member position was vacant.

Texas Animal Health Commission Policy Body

Member	City	Qualification/Industry	Term Expiration
Richard Traylor, Presiding Officer	Carrizo Springs	Livestock Market	2003
Rita Baca	El Paso	General Public	2009
Ron Davenport	Friona	Feedlot	2005
Reta Dyess	Jacksonville	Dairy	2005
William Edmiston, Jr., DVM	Eldorado	Sheep & Goat	2007
Coleman Hudgins Locke	Wharton	Beef Cattle	2009
Rogelio Martinez	McAllen	General Public	2007
Romulo Rangel, Jr., DVM	Harlingen	Veterinary Medicine	2005
Charles E. Real	Marion	Swine	2007
Ralph Simmons	Center	Poultry	2009
Jerry P. Windham	College Station	Equine	2007
Jill Bryar Wood	Wimberley	Exotic Livestock & Fowl	2007

The Commission sets policies and adopts rules to carry out statutory provisions to protect animals from domestic, foreign, and emerging diseases. The Commission also selects the agency's Executive Director and Internal Auditor and approves the agency's strategic plan and legislative appropriations request. The Commission typically meets quarterly.

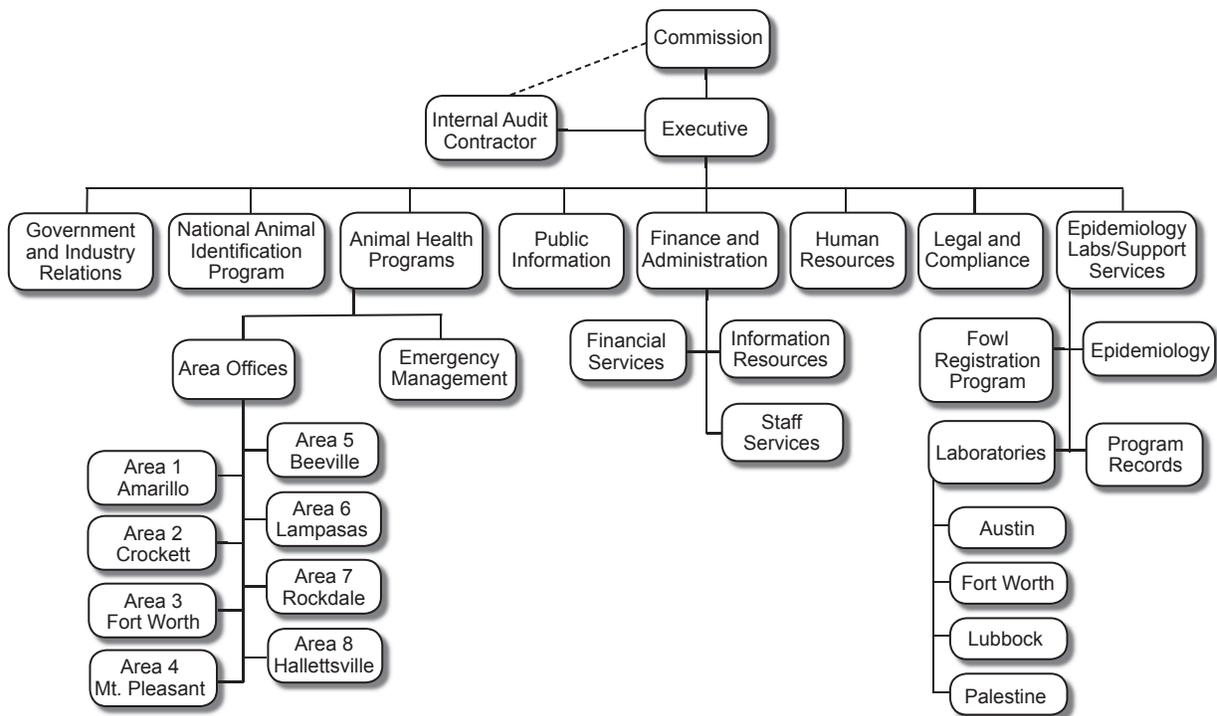
To assist with policymaking and oversight responsibilities, the Commission uses three standing committees: the Audit, Budget, and Human Resources subcommittees. In addition, the Commission uses working groups consisting of subject experts and stakeholders for assistance in developing rules and policies. For example, when preparing to implement an animal identification program consistent with USDA's National Animal Identification System,

the Commission convened a group of representatives from the affected industries to help develop proposed regulations, such as premise registration requirements, the time frame for implementation, and registration fees.

Staff

In fiscal year 2005, the Commission had a staff of 206. The *Texas Animal Health Commission Organizational Chart* depicts the structure of the agency. The Executive Director, who manages the day-to-day operations of the agency, must hold a degree in veterinary medicine and typically serves as the state veterinarian.

**Texas Animal Health Commission
Organizational Chart**

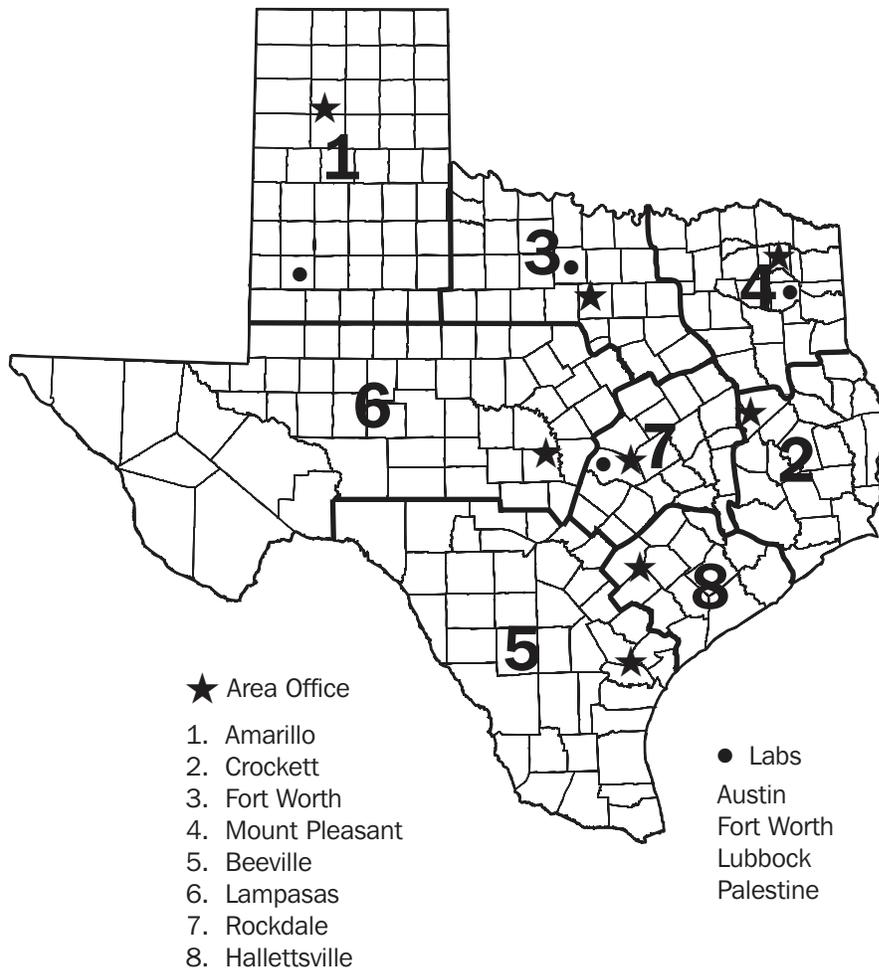


Although based in Austin, the Commission maintains a significant presence statewide, with the majority of employees working in eight field areas and four laboratories located around the state. These areas and labs are outlined in the graphic, *Area Office and Laboratory Locations*.

Each area is directed by a veterinarian and staffed with a supervising inspector, field inspectors, field veterinarians, and support personnel. All Commission veterinarians – including the Executive Director – must hold a license to practice veterinary medicine in Texas. Field staff conducts livestock shipping and entry inspections to enforce entry requirements, inspect livestock market activities, collect tissue samples at slaughter plants, and conduct on-the-farm and feedlot disease testing and surveillance. In addition, field veterinarians, epidemiologists, and animal health technicians employed by USDA collaborate

with Commission staff in animal disease surveillance and control, and frequently work side by side in the field and share office space with Commission staff.

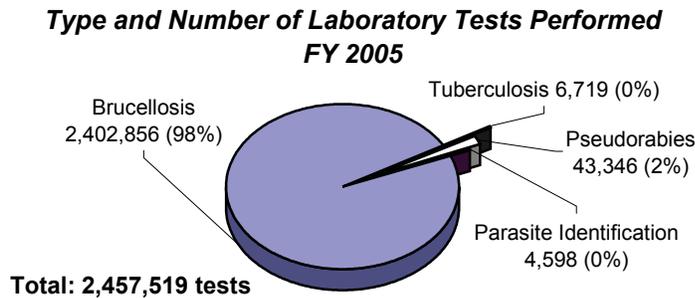
Area Office and Laboratory Locations



The Commission operates four laboratories jointly with USDA. Each lab is overseen by a Director and staffed by technicians and microbiologists who perform bacterial cultures and serological testing on blood, milk, serum, and tissue samples submitted by field staff or veterinarians for the brucellosis, pseudorabies, and tuberculosis eradication programs. Lab employees also identify disease-carrying parasites such as fever ticks, mites, and screwworms.

In addition to performing tests for Texas animals, staff in the Commission's main laboratory, located in Austin, regularly performs brucellosis bacteriological cultures for Arkansas and Louisiana, while employees in the Lubbock lab run brucellosis tests for Arizona and New Mexico, which do not maintain the lab capacity to conduct all of their tests. Lab staff runs tests for other states, as well.¹ USDA covers 100 percent of the costs of running samples for

other states. Of the 2.5 million tests performed by the four state-federal labs in fiscal year 2005, approximately 2.2 million were for Texas and 300,000 were for other states. The pie chart, *Type and Number of Laboratory Tests Performed*, details how many of each type of test employees in the Commission's state-federal labs perform.



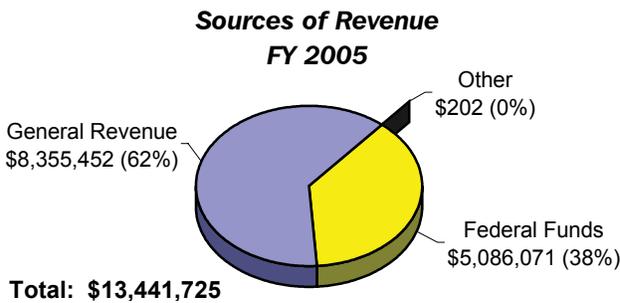
Appendix A compares the agency's workforce composition to the minority civilian workforce over the past three years. Generally, the Commission falls below the civilian workforce standards; however, the agency has a small number of employees in some job categories.

Appendix A compares the agency's workforce composition to the minority civilian workforce over the past three years. Generally, the Commission falls below the civilian workforce standards; however, the agency has a small number of employees in some job categories.

Funding

Revenues

The Commission receives funding from both state and federal sources, as illustrated in the pie chart, *Sources of Revenue*. In fiscal year 2005, the Commission operated on a budget of \$13.4 million. Of this amount, \$8.3 million came from the State's General Revenue Fund. The Commission also received \$5.1 million in federal funding, most of which came in cooperative agreements awarded by USDA.



These cooperative agreements, given for a specific disease or program, typically are granted for a one-year period. As such, to continue a program, Commission staff reapplies for most cooperative agreements annually. However, these grants do not always follow the State's

fiscal year; instead, USDA may issue them for a federal fiscal year, a calendar year, or a 12-month period from the date the agreement was signed. The table, *Examples of USDA Funding*, outlines the largest cooperative agreements received from USDA in fiscal year 2005.

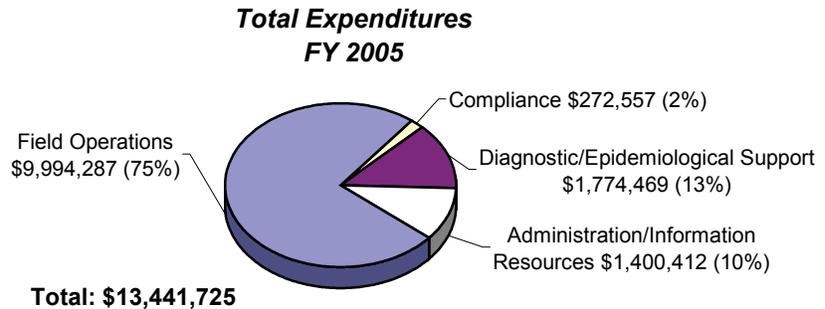
**Examples of USDA Funding
FY 2005**

Cooperative Agreement	Amount
Brucellosis	\$2,779,300
Tuberculosis	\$1,895,000
Swine Health	\$171,000
Scrapie	\$160,000
Johne's	\$232,652
Chronic Wasting Disease	\$81,842
Low-Path AI-Live Bird Markets	\$190,000

In addition to cooperative agreements related to specific animal health programs, the Commission also received federal funds for homeland security and emergency management activities in fiscal year 2005. USDA also provided the Commission with funding for five additional employees in the Tuberculosis Eradication Program, six employees in the Exotic Newcastle Disease Program, and seven laboratory employees. And, USDA covers 100 percent of the costs for the Commission's Lubbock laboratory. In fiscal year 2005, these lab costs totaled \$240,785. Although federal funding has been consistent over the past five years, the amount awarded in each cooperative agreement can vary from year to year.

Expenditures

In fiscal year 2005, the Commission spent \$13.4 million in four main areas: field operations, diagnostic/epidemiological support, compliance, and administration/information resources, as outlined in the pie chart, *Total Expenditures*. The largest portion of the Commission's budget went toward field operations, which includes the core animal health program functions of disease prevention, surveillance, diagnosis, control, and eradication. In fiscal year 2005, the Commission spent about one-third of its field operations expenditures on brucellosis activities.



Appendix B describes the Commission's use of Historically Underutilized Businesses (HUBs) in purchasing goods and services for fiscal years 2002 to 2005. The Commission makes purchases in four categories: special trade, professional services, commodities, and other services. The Commission exceeded some of the State's HUB purchasing goals, but had difficulty meeting other goals because the agency purchased items or contracts that were not available from HUB vendors in several categories.

Agency Operations

The Commission protects livestock, exotic livestock, domestic fowl, and exotic fowl from domestic, foreign, and emerging diseases. The textbox, *Animals Regulated by the Commission*, describes which animals fall under the Commission's jurisdiction. Statute directs the Commission to protect these species from specific communicable diseases. The Commission also participates in several federal programs, established by USDA, to control and eradicate specific diseases, called program diseases.

Also, the Commission may control or eradicate any disease – or agent of transmission for any disease – that affects regulated species, regardless of whether the disease is communicable. Veterinarians, veterinary diagnostic laboratories, and owners or caretakers of an animal must report the existence of certain diseases among regulated species to the Commission. A list of these diseases can be found in Appendix C, *Reportable Disease List*. While the Commission works to prevent, control, and eradicate a long list of diseases affecting many species, it devotes most of

Animals Regulated by the Commission

The Commission has authority to regulate livestock, exotic livestock, domestic fowl, and exotic fowl. These animals are defined below.

Livestock – Cattle, horses, mules, asses, sheep, goats, and hogs.

Domestic fowl – Chicken, turkeys, ducks, guineas, squabs, and other poultry, and game birds.

Exotic livestock – Grass- or plant-eating, single-hooved or cloven-hooved mammals that are not indigenous to Texas and are known as ungulates, including animals from the swine, horse, tapir, rhinoceros, elephant, deer, and antelope families. Examples include llamas, moose, reindeer, and elk.

Exotic fowl – Any avian species, including ratites, that is not indigenous to Texas. Examples include ostriches and emu.

Prominent Livestock and Fowl Diseases

Species	Disease	Zoonotic
Bovine	Brucellosis	Yes
	Tuberculosis	Yes
	Johne's	Unknown
	Anthrax	Yes
	Bovine Spongiform Encephalopathy (Mad Cow)	Yes
Swine	Brucellosis	Yes
	Pseudorabies (Aujeszky's Disease)	No
Equine	Equine Infectious Anemia	No
	West Nile Virus	Yes
Poultry	Avian Influenza	Yes
	Exotic Newcastle Disease	No
	Pullorum Disease ²	No
	Fowl Typhoid ³	No
	Laryngotracheitis	No
Sheep and Goats	Scrapie	Unknown ⁴
Deer and Elk	Chronic Wasting Disease	Unknown ⁵
Parasites	Texas Fever Ticks	No
	Mites	No
	Screwworms	No

its time and resources to the diseases listed in the table, *Prominent Livestock and Fowl Diseases*. As illustrated in the pie chart, *Hours Spent on Field Activities by Species*, bovine-related diseases make up about half of field staff's activities.

Animal Health Protection

To protect livestock and fowl in Texas from disease, the Commission uses five key functions: prevention, surveillance, diagnosis, control, and eradication, depicted in the graphic, *Disease Activities Cycle*. Activities in each of these key functions are described on the following page.

Prevention

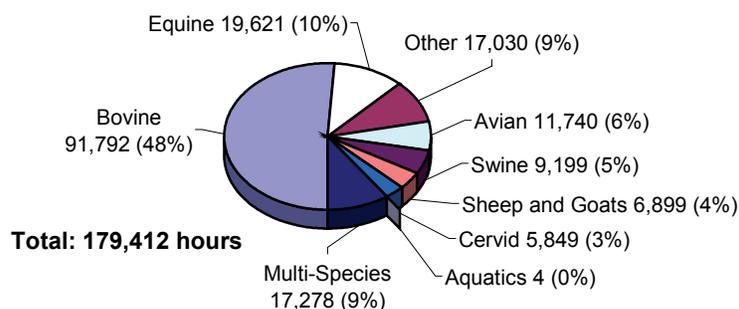
Keeping livestock and fowl in Texas disease-free starts with preventing infected animals from entering the state. Commission staff monitors entry points and roadways around the state to ensure that animals entering Texas have any needed entry permits, and a certificate of veterinary inspection certifying that a veterinarian examined the animal and found it free of any symptoms of communicable or infectious diseases. In fiscal year 2005, the Commission issued 1,529 entry permits.

Vaccinating animals provides an effective way to prevent disease. The Commission, acting in concert with USDA, accredits licensed veterinarians to perform certain functions in cooperative animal disease programs, including vaccinating calves and adult animals.

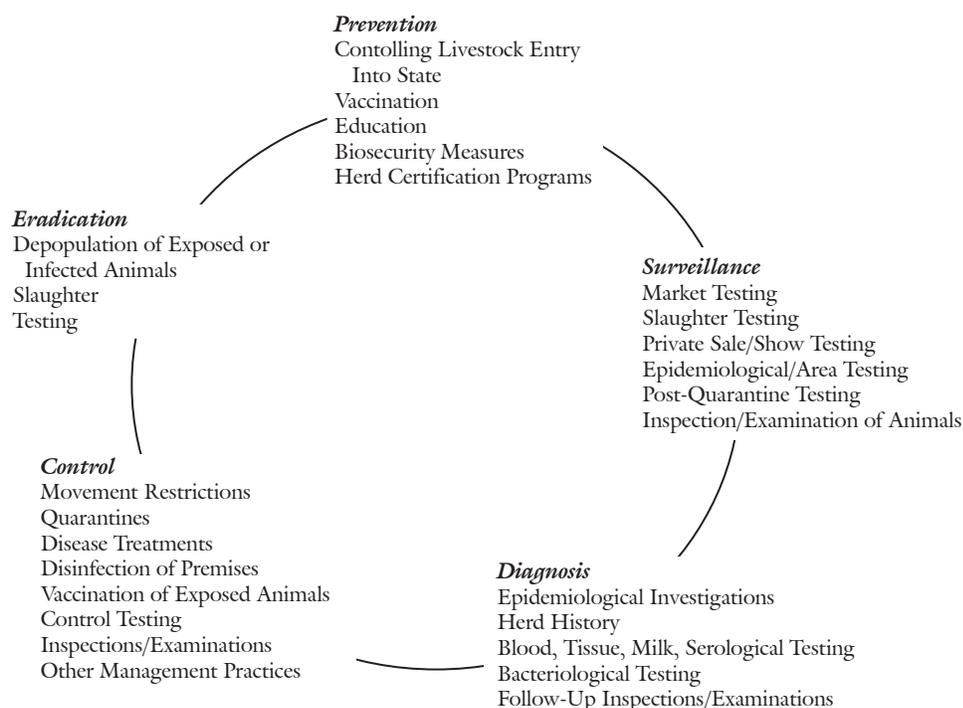
Commission staff also certifies herds and flocks as disease-free. Maintaining certified disease-free status allows animal owners to sell their animals more quickly, as the Commission does not require testing of certified herds and flocks before sale. Owners must have certified herds and flocks periodically

retested for disease to ensure that the animals have not been exposed to disease since the last certifying test. In fiscal year 2005, the Commission certified 881 herds and flocks as disease-free.

Hours Spent on Field Activities by Species – FY 2005



Disease Activities Cycle



The Commission works with livestock and fowl producers to raise awareness of animal health and disease prevention. Efforts include assisting producers to implement biosecurity measures and use preventative management practices. In fiscal year 2005, Commission staff spent 5,330 hours providing outreach activities.

Surveillance

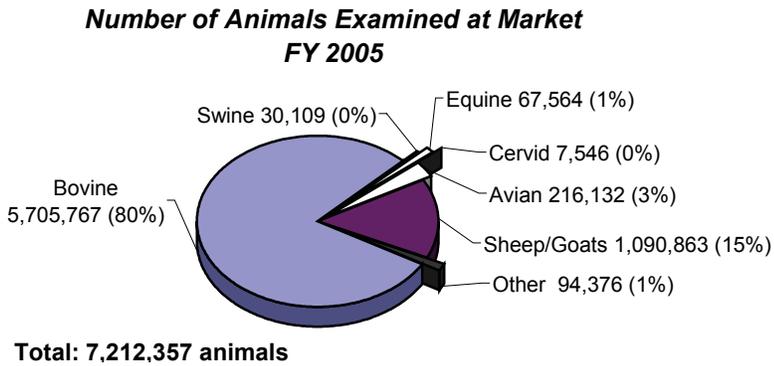
Commission staff continuously conducts surveillance activities to monitor for the presence of disease. In fact, surveillance activities – conducted by field staff throughout the state – account for the majority of field staff’s activities. The Commission’s broadest method of surveillance involves monitoring animals at livestock markets and feedlots. Because animals must satisfy testing requirements before they are sold, Commission inspectors attend sales at all livestock markets, where they assure compliance with state and federal regulations and monitor testing performed by market veterinarians to ensure compliance with Commission standards and policies. Commission inspectors conduct secondary testing if a test performed by a market veterinarian results in a positive, and collect culture specimens as necessary from suspect animals.

Inspectors also collect the primary blood samples for other diseases, including pseudorabies and swine brucellosis, at the markets. Routine collection of samples helps Commission staff identify and locate disease or infection. In addition to collecting samples, staff – who receive training on identifying symptoms for animal diseases – visually inspects all animals. In fiscal year 2005, the Commission inspected 7.2 million animals at market, as illustrated



*Monitoring
 animals at livestock
 markets and
 feedlots provides
 the Commission’s
 broadest method
 of surveillance.*

by the pie chart, *Number of Animals Examined at Market*. Bovine, or cattle, make up about 80 percent of animals that pass through livestock markets.



Sampling also serves as an effective surveillance tool. The Commission requires dairy plants to submit milk samples and slaughter plants to submit blood or tissue samples for testing to a Commission lab or other approved lab. Staff from the Commission, USDA, and other state agencies, as well as private veterinarians, also submit external parasite specimens collected from livestock in concentration points – such as livestock markets, feedlots, and slaughter plants – to the Commission’s Austin lab for analysis. In fiscal year 2005, the Commission received 5,504 milk samples, 910,279 samples from slaughter plants, and 4,598 parasite specimens.

Livestock and fowl that enter Texas also may be subject to post-entry testing, allowing Commission staff to monitor the ongoing disease threat posed by imported animals. For example, about 1 million cattle are imported from Mexico each year, dramatically increasing Texas’ risk for the spread of tuberculosis and fever ticks, which have historically been a problem with Mexican cattle.

Commission staff investigates all reports of domestic and foreign animal diseases by collecting samples from exposed and suspected animals. Staff visually inspects animals for signs of disease or pests in areas of high disease incidence. In fiscal year 2005, the Commission investigated 2,714 domestic and foreign animal disease reports.

Diagnosis

When an animal is suspected of being infected with or exposed to a disease, Commission staff begins diagnosis efforts. Staff carefully examines test results

from surveillance activities to detect the presence of disease. The Commission’s four state-federal labs perform diagnosis of program diseases, while the Texas Veterinary Medical Diagnostic Laboratory in College Station, and the National Veterinary Services laboratories in Ames, Iowa, and Plum Island, N.Y., perform testing for nonprogram and foreign animal diseases. The table, *Incidence Rates*, details the number and percentage of animals tested that were diagnosed with disease in fiscal year 2005.

Incidence Rates – FY 2005

Disease	Animals Tested	Incidence Rate
Bovine Brucellosis	2,296,437	0.0001
Tuberculosis	266,494	0.0
Swine Brucellosis	39,657	0.0277
Pseudorabies	65,891	0.0
Equine Infectious Anemia	239,036	0.0159

Because disease can spread rapidly, Commission staff must work quickly to identify and diagnose all infected and exposed animals. After confirming presence of a disease, staff conducts an extensive follow-up investigation involving an epidemiological trace of the herd or flock history to document the infected animal's movement over its lifetime and to pinpoint when and where the animal became exposed to the disease. The epidemiological trace also involves reviewing sale histories to find other animals exposed to the diseased animal. In fiscal year 2005, the Commission completed 187 epidemiological investigations, with staff spending 5,184 hours on these investigations.

Control

Once a disease has been diagnosed in an animal, Commission staff works to control the spread of the disease to other animals in the herd or flock. Staff discusses epidemiological results with the animal owner and assists owners in taking steps to prevent reintroduction of the disease. Staff also works with animal owners to outline a course of action for herd or flock management. In fiscal year 2005, the Commission developed 38 herd and flock plans.

Staff controls the spread of disease through the regulation of movement and exposure of diseased or exposed animals. The Commission issues quarantines or hold orders on diseased and exposed animals and on animals that have not had the required tests or vaccinations. If they suspect disease in an animal at market, Commission inspectors issue a restricted movement permit – or hold order – to limit movement of the infected animal either directly to slaughter or to return to the owner's premise. For example, if a cow tests positive for brucellosis at a livestock market, the owner can only sell the animal to go directly to slaughter, or else the owner must take the cow home and not move it until the Commission performs further tests. In fiscal year 2005, the Commission issued 1,895 restricted movement permits.

To minimize the spread of the disease, vaccinations may be given to exposed animals, and premises and equipment are disinfected, if necessary. Suspected animals, herds, and flocks within a specific radius of the infected animal are also tested post-quarantine to ensure that the disease has not spread.

Eradication

Sometimes, the only way to eradicate a disease or keep a disease from spreading involves depopulation or slaughter. In these situations, the Commission works with animal owners to remove the infected or exposed animals from the herd or flock and to ensure the proper disposal of carcasses. Animal owners can receive compensation, based on market value, for depopulated animals if the disease falls under a national eradication or control program, such as brucellosis.

Eradication of a disease from Texas livestock and fowl populations does not guarantee that the disease will never occur again. The opportunity for disease reintroduction remains continuously present from animals entering the state from other states and countries as well as from animals' exposure to wildlife and migratory birds, which can serve as reservoirs for certain diseases that are transmissible to livestock and fowl. Pockets of undetected disease may still exist, as well.



*The Commission
issues quarantines
or hold orders
on diseased and
exposed animals.*



Not all animal diseases can be eradicated.

Although the Commission strives to eradicate animal diseases, not all diseases can be eradicated. Some, such as anthrax, occur in the environment naturally. In these cases, Commission staff works to control the spread of the disease by minimizing exposure of a diseased animal to other animals. Other diseases – including zoonotic or highly communicable diseases, such as foot-and-mouth disease – have never occurred or have been eradicated in Texas, so Commission staff works to prevent introduction of these diseases into the state. For these reasons, the Commission’s five functions in protecting Texas livestock and fowl from disease remain a continuous cycle.

Emergency Management

An animal disease outbreak, natural or man-made disaster, or agroterrorism activity could have a devastating effect on livestock and fowl in Texas. Because Texas serves as a major exporter of livestock and poultry to other states and countries, the effects of an animal disease-related emergency in Texas could be felt worldwide. As such, the Commission plays a significant role in emergency management. In fiscal year 2005, Commission staff spent 2,237 hours on foreign animal disease response activities and 4,597 hours on disaster-related activities.

In 2001, Governor Rick Perry appointed the Commission to the State Emergency Management Council, which comprises state agencies and organized volunteer groups that prepare for and respond to disasters, including natural and man-made disasters. As a member of the Council, the Commission must respond to any emergency, regardless of whether the task relates to animal-health issues. In return, other member agencies on the Council assist the Commission during emergencies involving livestock and fowl.

Since 2003, the Commission has responded to four foreign animal disease outbreaks: exotic Newcastle disease and highly pathogenic avian influenza, both of which affect poultry; bovine spongiform encephalopathy (BSE), or mad cow disease, which affects cattle; and monkey pox, which affects rodents and other small animals, which then infect livestock. The Commission also has responded to two emerging or sporadic diseases: vesicular stomatitis, which affects cattle, horses, sheep, goats, and swine; and low pathogenic avian influenza, which affects poultry. In fiscal year 2005, Commission and USDA veterinarians jointly conducted 81 foreign animal disease investigations in Texas.

The Commission maintains the Foreign and Emerging Animal Disease Plan, an appendix to the State Emergency Management Plan, to ensure that the Commission can rapidly and effectively respond to disease outbreaks or agriterrorism threats. Commission staff also assists local officials in developing county and local emergency response plans involving livestock and fowl.

In recent years, the Commission’s responsibilities have increased the most in natural-disaster response activities. In fall of 2005, the Governor tapped the Commission as the lead agency for all animal-related matters during Hurricanes Katrina and Rita. In this role, Commission staff located sites to house animals – including dogs, cats, and other companion animals, in addition to livestock – evacuated from the areas hit by the hurricanes. For



The effects of an animal disease-related emergency in Texas could be felt worldwide.

example, during Hurricane Rita, the Commission helped evacuate more than 30,000 small and large animals – including more than 10,000 horses – from risk areas. Commission staff has developed a nondisease state animal emergency plan, and regularly conducts exercises to improve emergency response capabilities. In 2005, the Commission became a member of the Texas Homeland Security Council to provide guidance on issues involving critical infrastructure for livestock and agriculture purposes.

Registration Programs

The Commission has authority to operate several registration programs to assist in its disease-response activities. These programs are highlighted below.

Fowl Registration

The Legislature established the Fowl Registration Program to aid the Commission in locating live domestic and exotic fowl so that staff can conduct disease surveillance more effectively. All domestic and exotic fowl sellers, distributors, and transporters who do not participate in a disease-surveillance program recognized by the Commission must register annually in the Fowl Registration Program². Registration targets domestic fowl, such as chickens, turkeys, ducks, and game fowl raised for food, eggs, or agricultural exhibition. Dealers, distributors, or transporters of exotic or pet birds must register if they commingle or transport their birds with domestic fowl, or if they sell their birds at the same public venue as domestic fowl.

Commission staff examines animals at markets, slaughter facilities, shipment checkpoints, fowl events and assemblies, and other points of concentration of livestock and fowl. The annual registration fee varies from \$25 for individuals with a flock of 99 or fewer birds to \$500 for individuals with 2,500 or more birds or individuals who reside out of state. Sellers, distributors, and transporters pay a \$700 fee. Since the program began in May 2004, the Commission has registered 1,096 entities.

Waste-Food Feeder Permits

Spurred by the devastating effects of an outbreak of foot-and-mouth disease in the United Kingdom in 2001, the Texas Legislature banned the feeding of meat products to swine. Animal-health officials believe that the U.K. outbreak resulted from feeding improperly treated waste food to livestock. Under Texas' program, a person may feed unrestricted garbage to swine only after registering with and receiving a waste-food feeder permit from the Commission.³ Unrestricted garbage includes vegetable, fruit, dairy, or baked-good refuse matter, and vegetable waste and refuse accumulated from handling, preparing, cooking, or consuming food containing only vegetable matter. In fiscal year 2005, the Commission issued 42 new biennial waste-food feeder permits, bringing the total number of active permits to 381.

National Animal Identification System

In December 2003, after the United States' first case of bovine spongiform encephalopathy, or mad cow disease, was discovered in Washington state, the U.S. Secretary of Agriculture declared that the country must develop a



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verifiable national system of animal identification. When fully implemented, the resulting program, the National Animal Identification System (NAIS), will allow animal health officials nationwide to identify all animals that may have been exposed to a foreign animal disease within 48 hours after confirmation of the disease.

In 2005, the Texas Legislature authorized the Commission to implement an animal identification program consistent with NAIS. The Commission received funding through a cooperative agreement from USDA that allowed staff to begin voluntarily registering all premises in the state that hold, handle, or manage livestock and fowl. As of March 2006, the Commission had registered 7,263 premises voluntarily. Under rules proposed, but not adopted as of publication of this report, the Commission would begin mandatory premise registration – which includes a \$20 biennial fee – in July 2006.

Legal & Compliance

Ensuring compliance with Commission regulations is key to protecting animal health in Texas. The Commission receives and investigates complaints regarding alleged violations of the Commission's statute, rules, and policies. The majority of complaints originate through Commission field staff, who interact daily with animal owners and producers. The public also submits complaints to the Commission.

Commission staff typically handles first violations by sending the individual a warning letter. In fiscal year 2005, the Commission issued 170 warning letters. Statutory violations are Class B or Class C misdemeanors, and therefore county courts handle these cases. In fiscal year 2005, the Commission filed 78 complaints with county courts. All but one case resulted in fines.

For violations of Commission rules, staff may impose an administrative penalty, which may not exceed \$1,000 per day. Since 2000, the Commission has generated four cases involving administrative penalties. Three of these four cases resulted in settlement agreements and fines totaling \$3,500; the Commission dismissed the fourth case.

Support Functions

The remaining agency functions, discussed below, provide management and support for the Commission's animal-health activities.

Financial Services manages the cooperative-agreement process with the federal government, manages all payments and deposits, oversees payroll, and prepares financial reports.

Human Resources handles employment services, benefits, and resolution of employee conflicts, disputes, or grievances.

Information Resources oversees telecommunications and information security management, and maintains the Commission's website and Intranet.

Staff Services handles procurement and contracts, maintains the Commission's veterinarian database, and ensures the safety and security of agency staff.



Public Information serves as the first point of contact for the media, coordinates educational and community outreach efforts, and notifies stakeholders of state and federal animal health programs and initiatives.

Government Relations provides legislative assistance to the Commissioners, Executive Director, and other agency staff.

¹ Some data suggest that Johne's may be related to Crohn's disease in humans. Health professionals are still debating this link.

² The Texas Veterinary Medical Diagnostic Laboratory administers the Texas Pullorum-Typhoid Program and reports any outbreaks to the Commission.

³ Ibid.

⁴ Like bovine spongiform encephalopathy, scrapie is a form of transmissible spongiform encephalopathy. Currently, only BSE is suspected to be related to variant Creutzfeldt-Jakob disease in humans, although research continues into links between other forms of TSEs and human diseases.

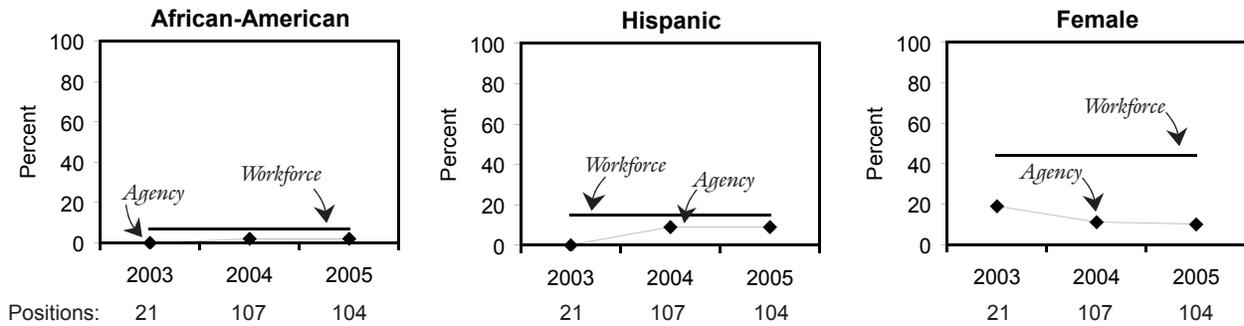
⁵ Like bovine spongiform encephalopathy, CWD is a form of transmissible spongiform encephalopathy (TSE), a category of fatal, chronic, degenerative diseases of the central nervous system. Currently, only BSE is suspected to be related to variant Creutzfeldt-Jakob disease in humans, although research continues into links between other forms of TSEs and human diseases.

APPENDICES

Equal Employment Opportunity Statistics 2003 to 2005

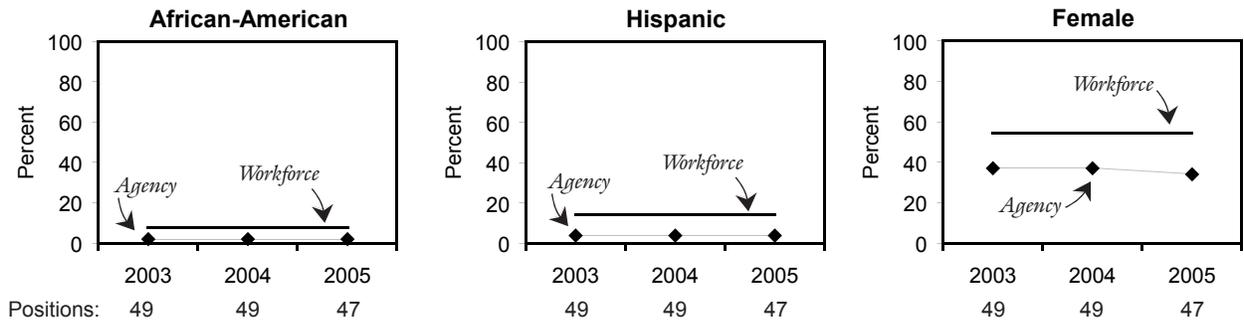
In accordance with the requirements of the Sunset Act, the following material shows trend information for the Texas Animal Health Commission's employment of minorities and females in all applicable categories.¹ The agency maintains and reports this information under guidelines established by the Texas Workforce Commission.² In the charts, the flat lines represent the percentages of the statewide civilian workforce for African-Americans, Hispanics, and females in each job category. These percentages provide a yardstick for measuring agencies' performance in employing persons in each of these groups. The diamond lines represent the agency's actual employment percentages in each job category from 2003 to 2005. The Commission generally did not meet the civilian workforce percentages in most job categories. However, the agency has a small number of employees in some categories.

Administration



The Commission did not meet the civilian workforce percentages for African-Americans, Hispanics, or females. The number of positions in the administration category greatly increased in fiscal year 2004, when the Commission recategorized its animal health inspector positions according to revisions made by the State Auditor's Office to the State's Classification Plan.

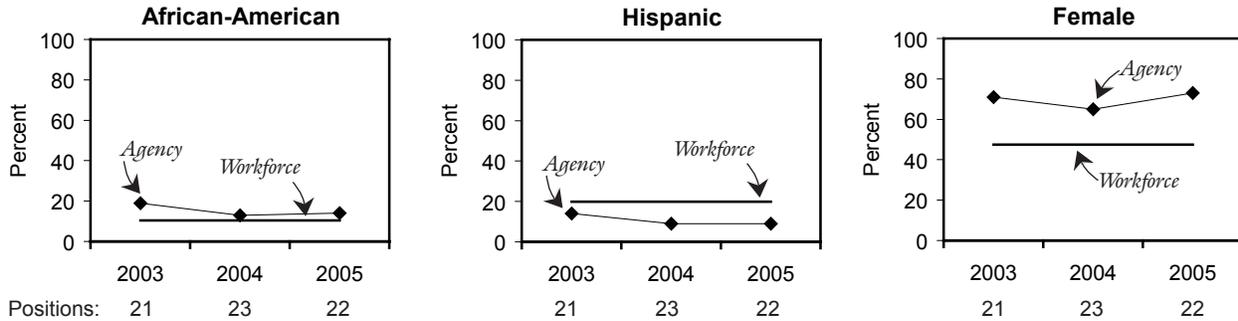
Professional



In the professional category, the Commission did not meet the civilian workforce percentages for African-Americans, Hispanics, or females.

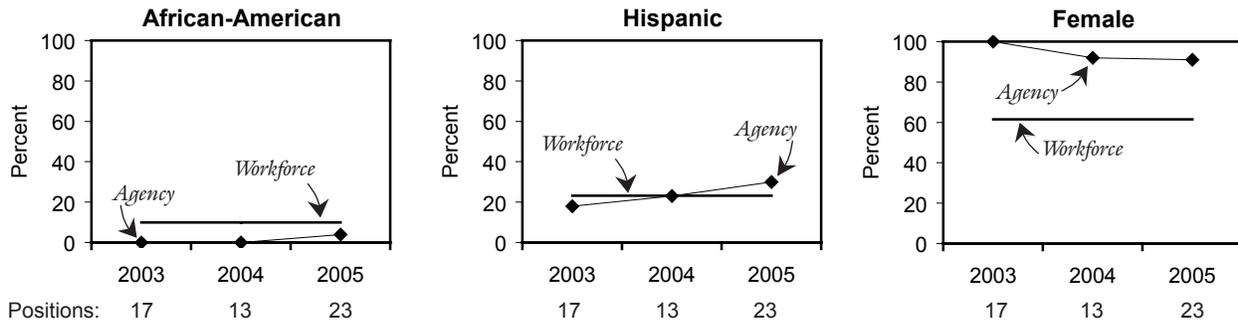
Appendix A

Technical



The Commission exceeded the civilian workforce percentages for African-Americans and females, but did not meet the percentages for Hispanics in the technical category.

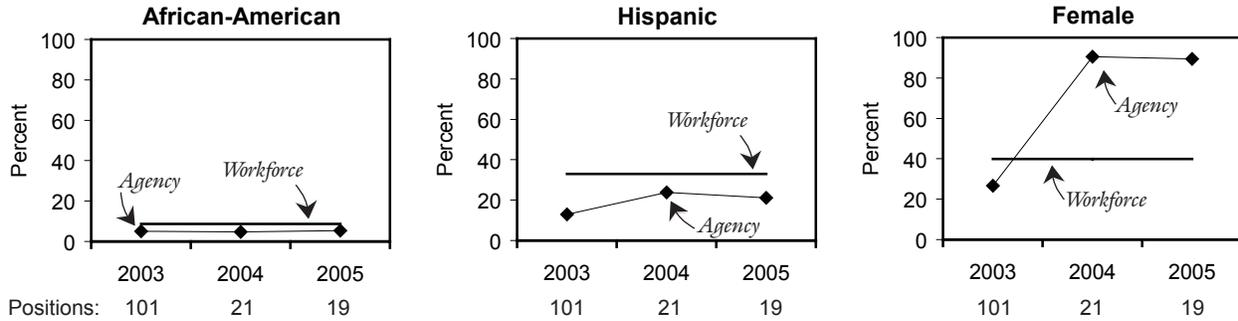
Administrative Support



In the administrative support category, the Commission greatly exceeded the civilian workforce percentages for females each year. The Commission also met or exceeded the percentages for Hispanics every year except fiscal year 2003. The Commission did not meet percentages for African-Americans.

Appendix A

Service/Maintenance



The Commission did not meet the civilian workforce percentages for African-Americans and Hispanics each year or females in fiscal year 2003. The Commission greatly exceeded the percentages for females in fiscal years 2004 and 2005.

¹ Texas Government Code, sec. 325.011(9)(A).

² Texas Labor Code, sec. 21.501.

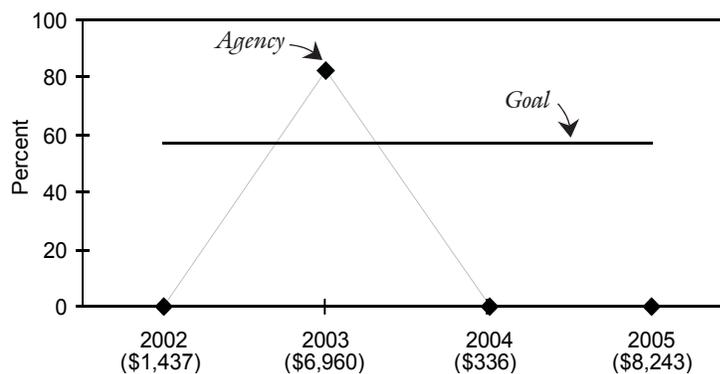
Historically Underutilized Businesses Statistics

2002 to 2005

The Legislature has encouraged state agencies to increase their use of Historically Underutilized Businesses (HUBs) to promote full and equal opportunities for all businesses in state procurement. The Legislature also requires the Sunset Commission to consider agencies' compliance with laws and rules regarding HUB use in its reviews.¹

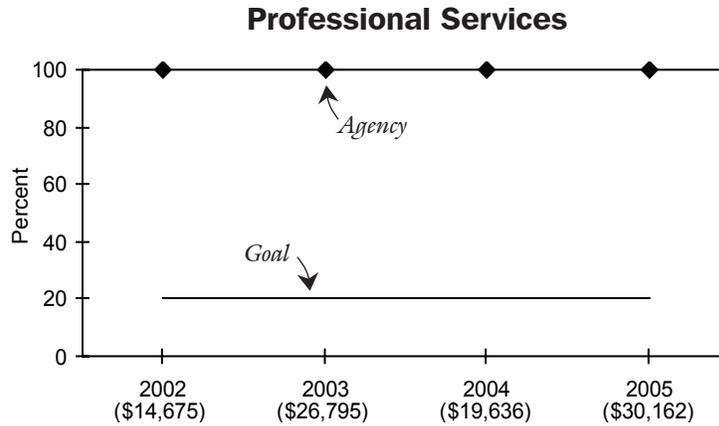
The following material shows trend information for the Texas Animal Health Commission's use of HUBs in purchasing goods and services. The agency maintains and reports this information under guidelines in the Texas Building and Procurement Commission's statute.² In the charts, the flat lines represent the goal for HUB purchasing in each category, as established by the Texas Building and Procurement Commission. The diamond lines represent the percentage of agency spending with HUBs in each purchasing category from 2002 to 2005. Finally, the number in parentheses under each year shows the total amount the agency spent in each purchasing category. The Commission exceeded some of the State's HUB purchasing goals, but had difficulty meeting other goals because the agency purchased items or contracts that were not available from HUB vendors in several categories. Requirements that the Commission make purchases through specific contracts by other entities, such as the Department of Information Resources, also affected the Commission's ability to meet the State's HUB goals. The Commission met other HUB-related requirements, such as appointing a HUB coordinator and requiring HUB subcontracting plans.

Special Trade

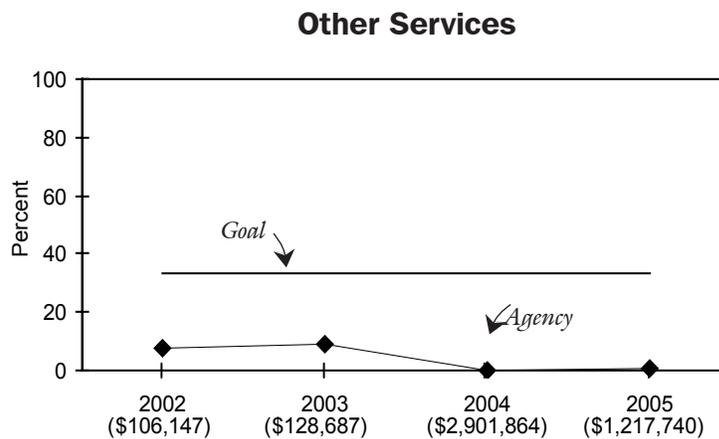


The Commission exceeded the State's goal for HUB spending for special trades in fiscal year 2003, but fell short in fiscal years 2002, 2004, and 2005, when the Commission did not spend any money on HUBs in this category. The Commission typically spends only a small amount for facility repair in this category.

Appendix B



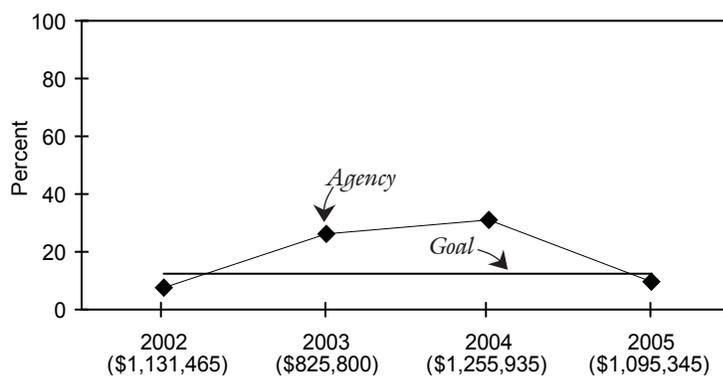
With 100 percent of the money spent for professional services going to HUBs, the Commission greatly exceeded the State's goal for HUB spending for this category each year. The Commission typically only has one contract – for internal audit functions – under this category.



The Commission fell short of the State's goal for spending for other services each year. The majority of the agency's expenditures in this category are for employee in-service training classes and seminars.

Appendix B

Commodities



In fiscal years 2003 and 2004, the Commission exceeded the State's goal for spending for commodities. However, in fiscal years 2002 and 2005, the Commission fell just short of the goal. Some of the items purchased for the Commission's laboratories require specialized equipment and supplies that are available only from sole-source providers.

¹ Texas Government Code, sec. 325.011(9)(B).

² Texas Government Code, ch. 2161.

Reportable Animal Diseases

Multiple Species Diseases

- African trypanosomosis (Nagana)
- Akabane
- Anthrax
- Aujeszky's disease
- Foot-and-mouth disease
- Heartwater
- Leishmaniasis
- Rift Valley fever
- Rinderpest
- Screwworm
- T. brucei
- Vesicular stomatitis

Cattle Diseases

- Bovine babesiosis
- Bovine brucellosis
- Bovine ephemeral fever
- Bovine spongiform encephalopathy
- Bovine tuberculosis
- Contagious bovine pleuropneumonia
- East coast fever (Theileriosis)
- Herpesvirus (AHV 1)
- Lumpy skin disease
- Malignant catarrhal fever (wildebeest associated)
- Scabies

Swine Diseases

- African swine fever
- Classical swine fever (hog cholera)
- Porcine brucellosis
- Pseudorabies
- Swine vesicular disease
- Vesicular exanthema

Equine Diseases

- African horse sickness
- Contagious equine metritis
- Dourine
- Epizootic lymphangitis
- Equine encephalomyelitis (Eastern and Western)
- Equine infectious anemia
- Equine morbillivirus pneumonia
- Equine piroplasmosis
- Glanders
- Japanese encephalitis
- Surra
- Venezuelan equine encephalomyelitis

Poultry Diseases

- Avian infectious laryngotracheitis
- Avian influenza
- Avian tuberculosis
- Duck virus enteritis
- Duck virus hepatitis
- Fowl typhoid
- Highly pathogenic avian influenza (fowl plague)
- Infectious encephalomyelitis
- Newcastle disease (VVND)
- Ornithosis (psitticosis)
- Paramyxovirus infections (other than Newcastle disease)
- Pullorum disease

Cervidae Diseases

- Brucellosis
- Chronic wasting disease
- Tuberculosis

Appendix C

Sheep and Goat Diseases

- Caprine and ovine brucellosis
- Contagious caprine pleuropneumonia
- Louping ill
- Nairobi sheep disease
- Peste des petits ruminants
- Scabies
- Scrapie
- Sheep pox and goat pox

Rabbit Diseases

- Myxomatosis
- Viral haemorrhagic disease of rabbits

Staff Review Activities

During the review of the Texas Animal Health Commission, Sunset staff engaged in the following activities that are standard to all Sunset reviews. Sunset staff worked extensively with agency personnel; attended Commission meetings and reviewed minutes from past meetings; met with Commission members; conducted interviews with and solicited written comments from stakeholder groups and the public; met with staff from legislative agencies; reviewed agency documents, reports, complaint files, data, state statutes and rules, legislative reports, previous legislation, and literature; researched the organization and functions of similar state agencies in other states; and performed background and comparative research using the Internet.

In addition, Sunset staff performed the following activities unique to this agency.

- ◆ Met with staff from the Governor's Division of Emergency Management, Texas Parks and Wildlife Department, Texas Department of Agriculture, Texas Department of State Health Services, Texas Veterinary Medical Diagnostic Laboratory, and U.S. Department of Agriculture (USDA).
- ◆ Observed agency field inspectors working at a livestock market.
- ◆ Toured the state-federal laboratories in Austin and Fort Worth, and observed the brucellosis, pseudorabies, and parasite testing process.
- ◆ Toured the Texas Veterinary Medical Diagnostic Laboratory in College Station.
- ◆ Visited a live-bird market.
- ◆ Accompanied agency field staff to an equine event to check for proper records and testing requirements.
- ◆ Observed agency field staff and USDA staff scratch and dip cattle for fever ticks.
- ◆ Visited a feral swine holding facility.
- ◆ Accompanied agency field staff conducting a chronic wasting disease inventory of exotic livestock.

SUNSET REVIEW OF THE
TEXAS ANIMAL HEALTH COMMISSION

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