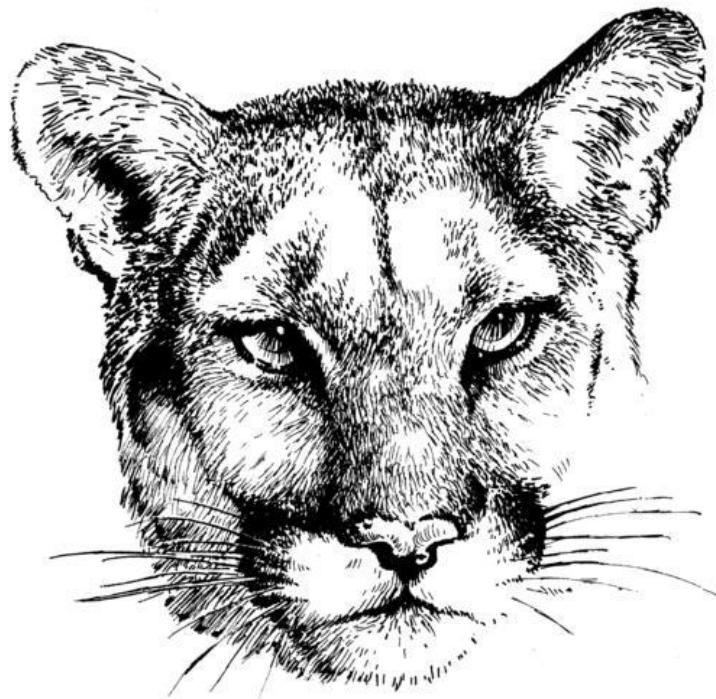


Mountain Lion Stakeholder Group

Final Report



January 2024

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Executive Summary

Texas Parks and Wildlife Department (TPWD) formed a Mountain Lion Stakeholder Group (MLSG) to advise the Texas Parks and Wildlife Commission (TPW Commission) on 6 charges related to how TPWD should manage mountain lions in Texas. Former TPW Commission Chairman Joseph Fitzsimons chaired the effort and led 5 meetings in 2023. MLSG members focused on “seeking to understand before seeking to be understood.” In this vein, the MLSG did not try to force consensus on the 6 charges. Instead, they focused on understanding the nuances of various positions related to different policy options and management approaches. On some issues, the MLSG expressed divergent opinions but found agreement on charges, management philosophies, and management preferences. All members expressing an opinion agreed that mountain lions are an important resource that should persist in Texas.

Several other common themes arose in the group’s discussion. First, any changes made to mountain lion rules and regulations lions should apply only to mountain lions, and not “spill over” into other wildlife species, and secondly, that the persistence and success of mountain lions in the future will continue to depend on effective stewardship of Texas’s private lands. Texas is unique among the western states in that the majority of mountain lion habitat in Texas is on private lands. The charges and outcomes for the stakeholder group were as follows:

Charge 1 (*Abundance, status, distribution, and persistence of mountain lions in Texas*): The group agreed that the Department lacks sufficient data on the abundance, status, distribution, and persistence of mountain lions in Texas and significantly lags behind other states in these areas.

Charge 2 (*Development of a mountain lion management plan*): The group agreed that TPWD should develop a mountain lion management plan for Texas.

Charge 3 (*Harvest reporting*): The group agreed that TPWD’s ability to monitor and manage mountain lion populations suffers from a lack of harvest data. They agreed that harvest reporting is important and that current levels of reporting are insufficient. Members agreed that the Department should modify their harvest reporting app to collect lion harvest reports; however, the group was split on whether harvest reporting should remain voluntary or changed to mandatory.

Charge 4 (*Trap/snare check standards*): Nearly all members expressed a personal ethic that emphasizes the importance of checking traps often. Many members also expressed a desire to protect trapping as a tool and a desire to protect the public perception of trapping. However, members did not reach agreement on whether to recommend trap check requirements for mountain lions.

Charge 5 (*Harvest/bag limits*): The group agreed that Texas lacks sufficient data to inform or justify new harvest limits but disagreed on how to manage the lion population in the absence of those data.

Charge 6 (“*Canned*” hunts): The group agreed that canned hunting should be prohibited in Texas.

Introduction

In Texas, all wildlife is held in the public trust, and TPWD has a statutory mandate to monitor and manage wildlife. Mountain lions are native to Texas and have always inhabited the state. Mountain lions (*Puma concolor*) are classified by the IUCN globally as a species of “least concern.” However, at the state level they are included in the list of Species of Greatest Conservation Need. Mountain lions are not classified as Threatened or Endangered.

Texas’s approach to mountain lion management has drawn attention several times in the past. In 1971, two bills were introduced to the Texas Legislature, one to designate mountain lions as a game animal, and the other to provide full protection. Neither bill passed.

In 1992, a petition was filed with the TPW Commission to provide greater protections for mountain lions in Texas. The request was ultimately denied as the Department believed at the time that the trend in voluntary sighting reports from the public indicated the species was expanding in numbers and range. However, the Department agreed to continue to track voluntarily submitted sighting reports but noted in their response letter that TPWD would review reports annually and may consider mandatory harvest reporting if voluntary reports were inadequate for evaluating the status of the mountain lion populations in Texas. TPWD also noted that they would create a Mountain Lion Management Policy. As years passed however, TPWD did not follow through on either item. The issue was not revisited, and a Management Policy was not developed.

In response to the 1992 petition, the Department initiated two research projects, one in South Texas, and one in the Trans-Pecos. These two research projects concluded in the late 1990s and indicated some potential population concerns. See Appendices I-II for details on the results of these and other past research projects.

Additional discussions regarding mountain lion management were organized by TPWD staff. In 2010, TPWD convened an “expert panel meeting” to discuss mountain lion management. In 2012, TPWD held an internal meeting of Wildlife Division field leadership and issued the following policy recommendations:

1. Develop and implement a program to monitor the population status of lions statewide.
2. If or when necessary, manage regional harvest to maintain healthy, viable populations.
3. Institute a 36-hour trap check requirement for lions, as currently exists for furbearing species.
4. Prohibit the possession of live mountain lions.

While that report did not go so far as to directly recommend the agency adopt mandatory harvest reporting, the authors agreed that it is likely the most economically feasible tool to monitor lions. Again, there was no follow-through on these recommendations.

In June 2022, the Commission received a petition for rulemaking by a group composed of landowners, hunters, biologists, livestock producers, and wildlife advocates to request that TPWD promulgate the following specific regulations:

1. a requirement for mandatory reporting of mountain lions intentionally taken for any reason and for the carcass to be presented to the Department within 48 hours of take,
2. a 36-hour trap check requirement,
3. a regional harvest limit of five mountain lions per year in south Texas, and
4. prohibition of "canned hunting" of mountain lions.

The petition also requested that TPWD:

1. initiate a statewide study to identify the abundance, status, and distribution of the mountain lion populations in Texas, and
2. form an ad hoc stakeholder advisory group composed of representatives from hunting organizations, livestock organizations, wildlife conservation organizations (non-hunting), outdoor recreation organizations (non-hunting), animal welfare organizations, independent mountain lion biologists, TPWD biologists, and TPWD policy managers to collaborate with TPWD to write a mountain lion management plan for Texas.

Agency staff reviewed the petition and recommended denial of the specific regulatory actions to allow time for adequate stakeholder engagement and input. On January 26, 2023, the TPWD Commission directed staff to form a Mountain Lion Stakeholder Group (MLSG) to provide feedback to the Commission on the following items:

1. Abundance, status, distribution, and persistence of mountain lions in Texas
2. Development of a mountain lion management plan for Texas
3. Harvest reporting
4. Trap/snare check standards
5. Harvest/Bag limits
6. "Canned" hunts

Members of the working group were selected by TPWD and included affected landowners, land managers, trappers, houndsmen, livestock producers, academic researchers, private wildlife biologists, and subject matter specialists.

The MLSG consisted of the following members:

Joseph Fitzsimons, MLSG Chair, and former TPW Commission Chair
TPW Commissioner Anna Galo
Bill Applegate
Janice Bezanson
Michael Bodenchuk
Don Draeger
Justin Dreibelbis
Jimmie Ruth Evans
Pam Harte
Dr. Patricia Harveson
Dr. David Hewitt
Dr. Rodney Kott
Ben Masters

Billy Pat McKinney
Albert Miller
James Oliver
Clay Richardson
Dr. Don Steinbach
Romey Swanson

Description of Process

The Mountain Lion Stakeholder Group (MLSG) held five meetings in 2023 in locations across the range of mountain lions in the state: Austin on March 2nd, Alpine on April 18th, Del Rio on May 12th, Laredo on June 10th, and a final meeting in Austin on October 3rd. In-person attendance was encouraged, but some MLSG members participated virtually in some meetings. Mr. Fitzsimons chaired all meetings.

Meetings were facilitated to share scientific facts, record different perspectives, facilitate discussion, and find areas of consensus. The initial meetings focused heavily on building constructive group dynamics and a foundation of knowledge regarding mountain lion status, behavior, management, and policy. In each meeting, presentations were provided on relevant topics by experts such as TPWD staff, biologists from other state and federal agencies (including USDA Wildlife Services and the Association of Fish and Wildlife Agencies), mountain lion researchers, land managers, a lion hunter, and a wildlife filmmaker/Texas landowner.

After presentations, members divided into small groups to share their perspectives and understand the perspectives of others. Representatives from each group summarized the viewpoints, perspectives, and opinions of their small group to the larger group. The viewpoints from the MLSG on each charge presented in this report are summaries from those small group discussions as preserved by audio recordings, from minutes developed during the meetings, from edits to earlier drafts of the document by each group member independently of each other, and discussions during a final meeting in October.

Charge 1: Abundance, status, distribution, and persistence of mountain lions in Texas

Outcome:

Consensus that Texas lacks sufficient data to know the status of various breeding populations. The group agreed that more research is needed and requested that TPWD staff develop a list of research priorities.

Background:

The MLSG received a briefing of mountain lion research efforts that included past projects and scientific publications of mountain lions in Texas, including projects initiated and funded by TPWD. Mountain lions are difficult to study because research projects have to contend with small sample sizes, difficult terrain, large territories, limited access to private land, high personnel costs, and expensive technology.

Areas of general agreement:

After receiving presentations on past research projects on Texas mountain lions, the MLSG overwhelmingly agreed that TPWD needs more data on mountain lion abundance, population status, distribution, genetic health, and population viability. They noted that in other states with mountain lion populations, agencies conduct considerably more mountain lion population monitoring and research than Texas and that such work by TPWD is lacking. Despite divergent opinions on the current population trends, health, and status, the members agreed that management of a species needs to be science-based and that conjecture based on sparse data and anecdotes is not a substitute for sound decisions based upon strong data and research.

MLSG members generally agreed not to get into the specifics of various research methods and priorities and recommend TPWD staff develop specific research needs. The group identified several important knowledge gaps for future research:

- Current population estimates
- Population trends
- Basic mortality information and trends, broken out by mortality sources
- Immigration/emigration to/from Mexico
- Genetic and habitat connectivity among Texas populations
- Viability of populations
- Human dimensions work related to human-carnivore coexistence

Additional Perspectives:

It was noted that not all data gaps necessarily have to be filled to assess the sustainability of the mountain lion population. Some members felt that mountain lions were expanding their range, while others thought they were decreasing.

Charge 2: Development of a mountain lion management plan for Texas

Outcome:

General agreement in support of TPWD developing a management plan for mountain lions and that such a plan should ensure landowners' ability to manage depredating lions.

Background:

Wildlife management plans written by TPWD identify the strategies the Department will take during a set timeframe to meet defined management goals and objectives. Management plans serve as a roadmap for the actions the Department will take, provide transparency for the public, and assist with communicating the reasons for those actions with the public. Some plans involve significant stakeholder input in the writing and/or review process of a new version of the plan.

Texas is experiencing significant changes in its landscape, including habitat loss, fragmentation in both south and west Texas, and an expansion of people into rural areas (See Appendix VI). TPWD does not currently have a management plan for mountain lions.

Parks and Wildlife Code Sec. 67.002 requires the development of “management programs” for nongame species. Some members held the view that a management program necessitates a management plan.

Sec. 67.002. MANAGEMENT OF NONGAME SPECIES.

(a) The department shall develop and administer management programs to insure [sic] the continued ability of nongame species of fish and wildlife to perpetuate themselves successfully.

(b) In managing nongame species of fish and wildlife, the department may:

- (1) disseminate information pertaining to nongame species conservation, management, and values;*
- (2) conduct scientific investigation and survey of nongame species for better protection and conservation;*
- (3) propagate, distribute, protect, and restore nongame species;*
- (4) research and manage nongame species;*
- (5) develop habitats for nongame species; and*
- (6) acquire habitats for nongame species.*

Areas of general agreement:

The MLSG agreed that TPWD should develop a mountain lion management plan. Nearly all members agreed that it is important that Texas has a sustainable population of mountain lions that will persist into the future. Members agreed that a management plan should adopt a regional approach rather than a single, statewide approach to account for differences in habitat, land use practices, cultural perspectives, and mountain lion populations. Many members consistently pointed out the importance of private landowners to mountain lion conservation and requested that the management plan recognizes the importance of private landowner contributions. The majority of mountain lions in Texas are presumed to inhabit private lands.

The MLSG recommended stakeholders be engaged in the development of this plan and that the plan has clearly defined goals and objectives that are specific, measurable, achievable, relevant, and time-bound. They also agreed that the plan should include a timeline for review and progress evaluation and prioritize an adaptive management approach (i.e., adjusting management when new information indicates a change is warranted). Nearly all members supported the development of a plan under the condition that it preserved the ability of landowners to manage mountain lions on their property. Also, the members felt it would be important to include a section on public education and outreach to affected landowners and trappers. They also emphasized that the plan should include monitoring of environmental changes that may affect mountain lion populations and management (e.g., potential impacts of increased habitat fragmentation).

Additional Perspectives:

Some members supported a management plan but were concerned it could lead to additional regulations. Others were concerned that without a plan, declines in the population could go unaddressed and result in more regulation if mountain lions become listed as threatened or endangered.

It was noted that a plan would increase transparency and could help to improve collaboration and trust among TPWD and the public. Also, members proposed that a mountain lion advisory committee be formed to help meet the need of accountability by TPWD, help foster the adaptive management approach, and to further build trust with the public.

Some members preferred that the management plan concentrate on ways to acquire more mountain lion data.

Some other states shared that they employ reimbursement programs to offset losses incurred by agricultural producers due to mountain lion predation. While there was interest by some group members in Texas exploring such a program, this matter was not explored at length.

Charge 3: Harvest reporting

Outcome:

Two primary viewpoints. The group was closely split between mandatory harvest reporting and voluntary harvest reporting.

Background:

TPWD biologists presented that the collection of basic population data is an important component of monitoring the health of wildlife populations. Birth rates, survival rates, mortality rates, and sources of mortality (natural or artificial) are often needed to assess the long-term viability of a wildlife population. For other species in Texas, and for mountain lions in other states, biologists use mortality (including harvest) data as a surrogate for other, more expensive monitoring protocols. Mandatory harvest data is often used in conjunction with other scientific data to form reliable population estimates.

In the 1990s, in response to a petition calling for greater protection of mountain lions, TPWD responded by saying:

[TPWD] will develop a Mountain Lion Management Policy for Texas. This project will include a significant effort to expand data and information collected by the public on a voluntary basis and verified by TPWD staff....The policy will call for an annual review of data collected and program status by the Regulations Committee. Mandatory reporting of harvested lions may be considered if voluntary data reporting is inadequate to evaluate the status of the mountain lion in Texas. Staff will make annual reports to the Regulations Committee on voluntary compliance.”

In the years following this response, no policy was developed, and efforts to gather data from the public declined. Academic researchers and TPWD staff reported that use of modern reporting tools may increase participation in voluntary reporting systems but do not overcome the issues of variability that preclude their use in more rigorous population and trend estimates.

MLSG members received briefings from officials in California, Colorado, Montana, New Mexico, Oregon, and Wyoming who described their methods of monitoring and managing their lion populations. MLSG members learned that all other U.S. states that allow mountain lion hunting require harvested mountain lions to be reported to the state wildlife agency and require carcass checks within a few days of harvest. While western states differ from Texas in the amount of public vs private land, the managers in each of these states considered mandatory harvest reporting vital for their science-based management.

MLSG members received a presentation outlining several situations in which harvest reporting is required for some species. MLSG members learned that the *My Texas Hunt Harvest* app can be configured to allow hunters to report harvested lions at only the county or region level, without identifying a specific location, tract, or ranch name. Because hunters are considered customers, hunter/trapper name and contact information are legally classified as confidential and are protected from disclosure under the Open Records Act. In this manner, should lion harvests be reported through the app or website, the specific location would never be collected, and identity of the hunter would be permanently confidential.

Members received a strawman presentation outlining several strategies for collecting harvest information on mountain lions. These options ranged from the current passive voluntary system to mandatory reporting carcass checks (Figure 1).

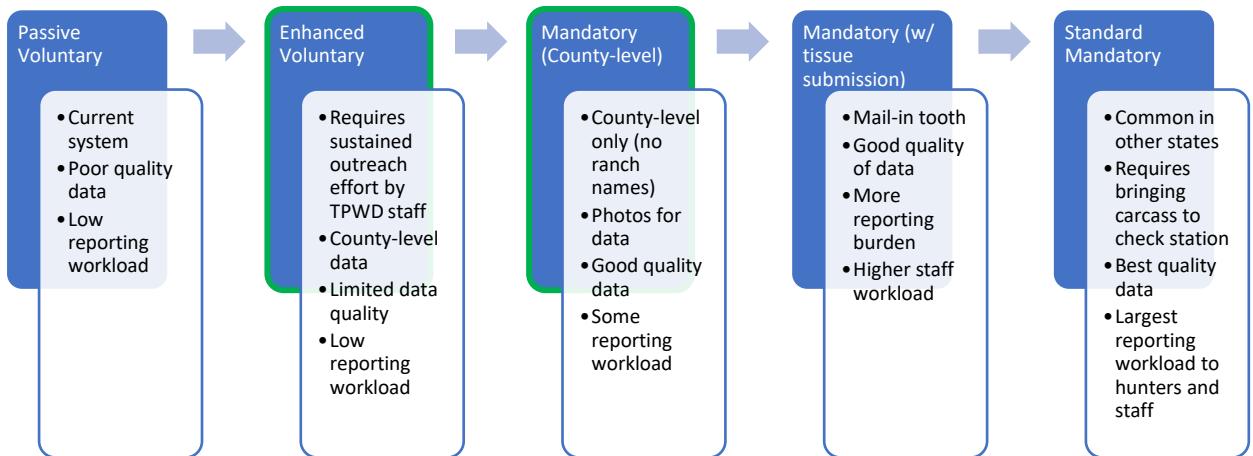


Figure 1. Potential options for generating harvest data reports of mountain lions in Texas.

Areas of general agreement:

MLSG members agreed that this charge was not about limiting harvest of mountain lions, but rather how to collect data on mountain lions that are harvested. MLSG members also agreed that harvest data are important to understand mountain lion populations, and that more communication by TPWD about mountain lion reporting is important. There was general agreement that the current system of passive voluntary reporting is inadequate and needs to be improved. The MLSG strongly recommended that any harvest reporting system does not identify specific properties. The group felt that any new reporting system adopted by the Department should be efficient, easy, and take advantage of the *My Texas Hunt Harvest* app. They also agreed that requiring in-person carcass checks would require additional effort by hunters and trappers and would be difficult in some instances.

Areas of disagreement:

Most MLSG members maintained strongly held positions and ultimately, the MLSG was closely split on whether harvest reporting should be required or voluntary. Members generally coalesced around two compromise options: “*Enhanced Voluntary Reporting*” and “*Mandatory County-level Reporting*.¹” There was also disagreement about whether it is possible for voluntary reports to be collected in a manner that provides useful information about mountain lion populations.

Those who preferred “**Enhanced Voluntary Reporting**” envisioned a system in which TPWD staff would work to increase the number of lion harvest reports. In this system, reporting lion harvest to TPWD would be voluntary and utilize the *My Texas Hunt Harvest* app. In this system, reports would be made without ranch names, landowner names, or exact locations.

Mandatory County-level Reporting is a system in which mountain lion harvest would be required to be reported to TPWD through the *My Texas Hunt Harvest* app. As with “Enhanced

Voluntary Reporting”, users would enter reports without ranch names, landowner names, and exact locations being collected. Instead, locations would be reported at the county level only. In this method, TPWD would not require tissue submissions or in-person carcass checks. Users of the app would enter the method of harvest (trap, rifle, etc.) and submit a few photographs of the lion carcass. In this system, hunter data are considered confidential information and not releasable, and the system is designed to work effectively in areas without cellular service.

- 1) **Arguments in favor of mandatory reporting:** Some members felt that mandatory, county-level reporting would alleviate most landowners’ concerns since it would be done by the hunter/trapper and the ranch identity and location would not be collected. Members in support of this approach pointed out mandatory reporting is the only way to obtain reliable harvest data and other state managers said it forms the foundation of their population data. Proponents of this system noted that according to experts and TPWD staff, voluntary data are largely unusable due to inherent inconsistencies and that efforts to increase voluntary reports do not provide consistency needed to use the data. They also noted that no statistical techniques currently exist to account for the inconsistencies in voluntary data that enable estimation of population sizes or trends.

Concerns were raised that an enhanced voluntary approach was tried in the 1990s when TPWD made commitments to consider mandatory reporting if the voluntary system was deemed unsuccessful. There were concerns that the same thing would happen again without an automatic threshold to initiate mandatory reporting if voluntary reporting proved unsuccessful. These members pointed out that reports dwindled within a few years and harvest reporting was never revisited by the TPW Commission.

- 2) **Arguments in favor of voluntary reporting:** Some group members felt that TPWD should avoid requiring mandatory reporting and stated that some hunters and trappers may share data voluntarily but would be resistant if the reporting were to be required. While the MLSG as a whole felt that hunters and trappers would be less opposed to and possibly supportive of mandatory reporting, more members felt that landowners would be strongly opposed to any form of new mandatory requirements. Some members felt that before considering required reporting, TPWD should try voluntary reporting methods using the *My Texas Hunt Harvest app* that was unavailable during the 1990s. Some members felt that trail camera photos from ranches are an untapped source of data, but others pointed out these images do not provide information on population trends or health. Several members expressed that they primarily opposed mandatory reporting due to concerns with how the data will be used by TPWD and the possibility that the data could be used to justify future regulations on mountain lion harvest, and several members expressed concern that any regulations applied to mountain lions could someday be applied to other predators.

Additional Perspectives:

The MLSG members discussed the possibility of using methods for incentivizing the public to submit harvest reports. However, a few members noted that any reporting incentives could inadvertently incentivize mountain lion harvest and be misinterpreted by some as a bounty.

Some also stated that requiring in-person carcass checks would require too much additional effort for some hunters, trappers and TPWD staff and voluntary tissue submission should suffice; while others stated that carcass checks were vital for collecting biological information and genetic samples as well as confirming reporting accuracy.

Several members felt that requiring mountain lion reporting as part of the voluntary Managed Lands Deer (MLD) program might be an incentive-based alternative for harvest reporting. Others expressed concerns about this approach and felt it would be inappropriate to use the MLD system this way. Several members agreed this option warranted further discussion.

TPWD staff expressed concerns that an outreach campaign to generate voluntary harvest reports would be difficult to sustain in the long term, and thus jeopardize the consistency that is needed to use harvest reporting to evaluate trend data.

Charge 4: Trap/snare check standards

Outcome:

The group was closely split between supporting and not supporting 36-hour trap check requirements.

Background:

Currently, Texas does not require traps set for mountain lions to be checked. Concerns have been raised that some mountain lions are being left to perish in traps, which many MLSG members considered to be inhumane and potentially damaging to the reputation of trapping and hunting. A presentation by the Association of Fish and Wildlife Agencies Program Manager of Trapping Policy and Human-Wildlife Conflicts indicated that trapping is a critical tool for managers and that nationally, public support for trapping is high provided they are told beforehand that it is well-regulated and that measures are taken to improve animal welfare.

A 2022 public opinion survey targeting rural residents, agricultural producers, landowners, and hunters in Texas asked respondents, “*If mountain lions are trapped, how frequently should the traps be checked?*” 76% of respondents said traps should be checked daily or every 36 hours. 1.1% said there should be no trap check interval.

Some lion trapping is conducted in areas with black bears, which are a state threatened species. Although it is illegal to trap black bears, they are sometimes inadvertently caught in traps set for lions. TPWD presented records of 10 known black bears caught in mountain lion traps from 2013-2023. When black bears are discovered in a trap early, data from TPWD indicated they can usually be successfully released. While they do not work in all situations, MLSG members discussed the potential utility of electronic trap monitors or cameras that communicate by cellular data or satellite networks and notify trappers via their cell phone when a trap is triggered.

Areas of consensus:

The MLSG largely agreed that checking traps regularly is an important and ethical practice. Members agreed that checking traps often is consistent with the ethics and values that they personally held. The MLSG also generally felt that targeted depredation trapping can be an important tool for managing mountain lion depredation on livestock, and so trapping should be preserved as a management tool. The MLSG largely agreed that electronic trap monitors should satisfy trap check requirements. Several members requested that any changes to mountain lion trap-check policy be carefully constructed as to not apply to other species.

Areas of disagreement:

Most MLSG members maintained strongly held positions and ultimately the group was closely split on whether TPWD should regulate trap check times for mountain lions.

1. **Arguments in favor:** Those in favor of creating minimum trap check time requirements for mountain lions expressed conformity in the reasons for their position, including: 1) welfare of mountain lions being left to die in traps, 2) welfare and release of non-target species captured in traps, especially black bears, and 3) concerns that leaving mountain lions in traps perpetuates a negative public image about hunting and trapping. Some

members in this category shared that they either “*support trap-check requirements*” or that they “*do not oppose trap check requirements*.”

2. **Arguments opposing:** Although most of the MLSG felt that regularly checking traps was important and consistent with their personal values, those who did not support regulation of a trap check time had varying reasons for this position, including: 1) any new regulations were a slippery slope to more regulations and thus should be avoided, 2) fear that such regulations would begin to impact regulations of other species, 3) many trappers are good at self-regulating and would be more likely to comply with a request rather than a regulation, or 4) requiring trap-check intervals would limit the ability of a trapper to cover enough ground, which would limit the numbers of lions that could be trapped, thereby limiting a landowner’s ability to remove lions before they impact livestock and wildlife operations.

Additional Perspectives:

Some members expressed concern that a lack of protections for black bears, a state threatened species, could result in restrictions placed on hunters and landowners by the federal government, so they recommended trap check requirements to limit black bear mortality.

Charge 5: Harvest/bag limits

Outcome:

TPWD has insufficient information to create data-based harvest limits or justify a recommendation for or against limits on mountain lion harvest.

Background:

Past peer-reviewed research has raised concerns that the South Texas mountain lion population has experienced a population decline and loss of genetic diversity. These results and results from other studies indicating potential loss of genetic connectivity among populations and low survival mainly due to human-caused mortality have caused some to believe harvest limits may be necessary to ensure the persistence and health of the South Texas population. However, the landscape of South Texas may have changed in the last few decades due to a focus on wildlife management; therefore, it is unknown if results from the past mountain lion studies can be extrapolated to today's conditions in South Texas. Members generally agreed that given the significant uncertainty regarding the population status of mountain lions in both South and West Texas, it is premature to consider making management recommendations on harvest limits. Therefore, the MLSG did not discuss this matter in detail.

In presentations to the MLSG from other states, regional harvest and bag limits were an important tool to ensure mountain lion harvest remains sustainable. Several western states allow hunters and landowners to remove depredating or conflict mountain lions outside of regional harvest and bag limits. In conversations throughout several meetings, MLSG members expressed general agreement that the ability to remove lions involved in human safety or livestock depredation should continue in Texas.

Additional Perspectives:

Some members expressed concern that in the absence of current population data, a more conservative approach that includes harvest limits is warranted. Others noted that nonaction in the absence of data could be interpreted as failure to manage. However, others still felt that harvest limits should only be enacted if absolutely necessary and supported by data, and that collecting these data should be a priority. Members disagreed on whether mountain lion populations are increasing or decreasing but agreed that more data are needed.

Charge 6: “Canned” hunts

Outcome:

Consensus to prohibit canned hunting of mountain lions.

Background:

Canned hunting (the capture and later release of a mountain lion for the purpose of hunting) is not currently prohibited in Texas. While members of the MLSG believe canned hunting is rare, some members were aware that it occurs in Texas.

The federal government passed the Big Cat Public Safety Act in December 2022. The bill prohibits most instances of possession of mountain lions. TPWD legal counsel presented to the MLSG that there are significant questions about how this law will be interpreted and who will enforce it. State game wardens cannot currently enforce this law. TPWD legal counsel informed the MLSG that they should not expect the federal law to outlaw canned hunting of mountain lions in Texas.

Areas of consensus:

The MLSG agreed that canned hunts should not be allowed. The strength of that agreement included various phrases such as “I would not oppose the banning of canned hunting” and “I support the banning of canned hunting.” Some members requested that the prohibition be carefully worded to ensure it does not inadvertently prohibit trapping.

Additional perspectives:

Many members felt that possession of mountain lions by the public should also be prohibited, and that despite the passage of the federal Big Cat Public Safety Act, the group supported banning possession at the state level.

Appendix I: History & Background of Mountain Lions in Texas

Mountain lions go by many names including, puma, cougar, and panther. This sometimes creates confusion, but they are all the same species: *Puma concolor*. They are the 4th largest wild cat species in the world behind African lions, tigers, and jaguars and they are the largest native wild cat that currently occurs in Texas. Adult mountain lions usually weigh between 65 & 140 pounds in Texas. They are generally tan in color and despite the folklore, there has never been a documented black mountain lion.

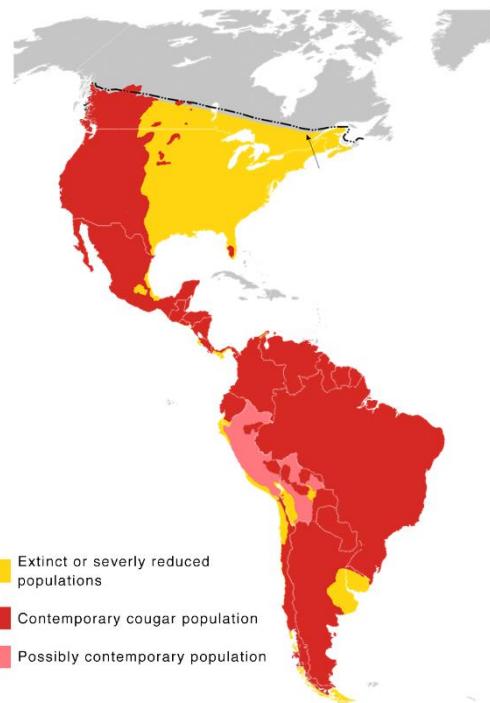
Their ranges can be up to 500 square miles (320,000 acres) and they are elusive and often solitary. Diet consists primarily of deer, elk, javelina, aoudad and feral hogs, but can also include smaller animals such as porcupines, raccoons, skunks, coyotes, etc. Mountain lions are considered a highly adaptable generalist and occur in a wide variety of habitats across North, Central, and South America. They have the largest distribution of any native land mammal in the Americas (shown in red in Figure 1) and, in the U.S., are primarily found in mountainous regions in the west.

They were mostly eliminated from the eastern portion of their historic range in North America by early settlers (shown in yellow in Figure 1). While absent from large parts of their historic range, they continue to inhabit many regions and their global conservation status is considered secure, but populations are declining in some portions of their range in South America according to the International Union for Conservation of Nature (IUCN).

In Texas, their conservation rank is vulnerable to imperiled, but to reduce uncertainty, more data are needed. Mountain lions in Texas are classified as a nongame species. While a hunting license is required for the take of nongame species, there are no closed seasons, bag limits or possession limits; and they may be hunted at any time by any lawful means or methods on private property. Additionally, there are no trap check or harvest reporting requirements.

While the classification of a species as game or nongame is assigned by the Texas legislature, Texas Parks and Wildlife Code establishes that the TPW Commission may establish regulations for nongame wildlife that they consider necessary to manage the species.

Mountain lion regulations in Texas are unique among U.S. states. Of the 16 states with mountain lion breeding populations, 13 classify them as a game species, 2 as fully protected, and 1, Texas, as nongame. In the states that allow hunting, there are typically limited harvest seasons, bag limits of 1-2 lions per year, regional harvest limits, protection for kittens and females with



By Kokosdieb - Own work, CC BY-SA 3.0,

Figure 2. Historic and current range of *Puma concolor*.

kittens, and restrictions on the use of foothold traps. It is worth noting that Texas has more private lands than other states with mountain lion populations.

Regulatory History

Texas's approach to mountain lion management has drawn attention several times in the past. In 1971, there were 2 bills introduced to the Texas Legislature, one to designate mountain lions as a game animal, and the other to provide full protection; neither of which passed.

In 1991, public concern was raised due to the killing of 3 mountain lions in east Texas after their absence in this part of the state since the turn of the century. This led to the filing of a petition requesting more protections for the species.

The request was ultimately denied as the Department at the time believed that the trend in voluntary sighting reports from the public indicated the species was expanding in numbers and range. However, the Department agreed to continue to track voluntarily submitted sighting reports and to initiate 2 research projects, one in South Texas, and one in the Trans-Pecos.

Texas Research and Current Knowledge

Over the past 30 years, there have been several research projects studying mountain lions in Texas (see Appendix II for a list of publications), two of which were funded by TPWD. However, compared to other states, there is limited research on mountain lions in Texas. Studies on elusive animals with large territories that range across multiple private lands can be difficult and costly compared to projects on most other non-game species. Also, competing priorities from more imperiled species within the non-game program limit the amount of available research funding. The two research projects funded by the department after the 1991 petition concluded in the late 1990s.

The South Texas project resulted in a 1997 dissertation through Texas A&M University Kingsville (TAMUK). The study took place on private ranches in the Nueces River watershed and investigated a variety of variables such as home ranges, habitat use, diet, survival rates, mortality factors, and subadult dispersal. During the 3-year study, 7 of the 18 lions collared were taken by people, mostly hunters. Some concerns were raised that high mortality and low productivity of females may limit population sizes and genetic diversity in South Texas.

The Trans-Pecos project was conducted by Department biologists on Big Bend Ranch State Park (BBRSP), and the report was published in 1999. This project was similar to the South Texas project, lions were collared and home ranges and causes of mortality were investigated. Genetic work during this study suggested that West and South Texas mountain lions were distinct populations. All 16 of the lions collared during the 4.5-year study in BBRSP were taken by people during or shortly after the project ended, 15 by trapping and 1 by firearms.

These two projects are the only major recent studies on mountain lions directly funded by the Department. However, there are additional studies funded and conducted by other groups. See Appendix II for a complete list of published scientific papers, thesis, reports on mountain lions in Texas from the last 30 years. Though all studies contribute to our knowledge of mountain lions in Texas, a few are noted below.

In 2002, a master's project at TAMUK examined public attitudes regarding mountain lions in Texas. The study targeted both urban residents in city centers and rural residents in counties where mountain lions occur (1,069 respondents; 357 responded they had hunted within the past 12 months, 229 responded they were involved or lived with family involved in livestock/agricultural production, 370 resided in an urban zip code, and 370 resided in a rural zip code; 335 respondents indicated they own or operate land for farming, ranching, or recreation). It was found that:

- 84% agreed that "Mountain lions are an essential part of nature."
- 74% said "Efforts should be made to ensure their survival in Texas."
- 35% thought there should be no hunting allowed, 49% wanted hunting only with a season
- 16% preferred the year-round open season currently in place. (11% urban and 20% rural)

In 2011, a PhD project at TAMUK compared historic (West Texas: sample size $n=27$ and $n=42$ for median year groups from 1938 and 1983, respectively; South Texas: $n = 34$ for median year group from 1937) and modern mountain lion genetics (West Texas: $n=168$ for median year group from 2006; South Texas: $n = 28$ for median year group 1996). The study found that:

- "Historical samples revealed a 10 to 20% decline in genetic diversity for southern Texas."
- The authors also state that the "effective size of the southern Texas population declined >50%, whereas effective size in western Texas remained large and stable over time."
- Their findings suggest that the South Texas population is relatively isolated, with little inflow of lions from other areas, and as a result is lacking in genetic diversity.
- Effective population size is a fairly complex population genetics term that can broadly be interpreted as: "the estimated number of individuals that participates in producing the next generation."

A 2012 paper from Borderlands Research Institute entitled, "Characteristics of two mountain lion populations in Texas," examined mountain lion population demographics including density, survival rates, and mortality factors in South and West Texas. The South Texas population had an average of 1.1 mountain lions per 100,000 acres and the West Texas population had an average of 1.7 mountain lions per 100,000 acres. These densities were considerably lower than those reported from populations in neighboring New Mexico, which ranged from 3-8.5 lions per 100,000 acres. Annual survival rates were 75% in South Texas and 70% in West Texas. These low survival rates were due to high human-caused mortality from trapping and hunting in both areas.

The most recent research on captured and collared mountain lions in Texas was conducted by Borderlands Research Institute in West Texas spanning the years 2011-2018. Researchers investigated mountain lion movements, habitat use, diet, survival rates and mortality factors. Habitat use and connectivity are ongoing aspects of this research, however, the findings concerning their diet, movements and range size, and survival rates and mortality causes are published or currently being reviewed by scientific journals (see Appendix II). Analysis of over 200 kill sites in the Davis Mountains found that diets consisted primarily of elk, deer, feral hog, and javelina. The annual survival rate for 21 subadult and adult GPS-collared mountain lions in

the Davis Mountains was 55%, which is among the lowest reported in the U.S. with almost all mortality due to trapping. Home range size and ranch use was also investigated and collared mountain lions each used an average of 18 ranches exposing them to a variety of different management practices; some ranches implemented predator control activities whereas others did not and livestock were only present on some of the ranches in the study area. The low survival rates and high human-caused mortality suggest that the Davis Mountains region was acting as a population sink (deaths > births) due to trapping on private ranches.

The Department continues to record mountain lion observations reported to the agency from the public. It is important to note that most reports submitted to the agency that include a photo, turn out to be other species misidentified as mountain lions.

For this reason, TPWD now maintains records of observations that staff are able to confirm with physical evidence, such as photos, road kills, or voluntary harvest reports. These reports are displayed at the county level for 10 years from 2012-2022 in Figure 2.

These data provide useful information on the distribution of mountain lions in the state but even though they are confirmed reports, they are not suitable for tracking population trends. This is because many factors influence how many reports that TPWD receives, such as an increasing number of people in the state, Covid lockdowns, agency outreach efforts, and mountain lion news events. Additionally, the same individual mountain lion may be sighted and reported more than once. Note that young mountain lions occasionally travel large distances which likely explains many of the counties with only 1-2 observations. The counties in West Texas (including the Val Verde County area) and South Texas with higher numbers of reports correspond to the primary breeding populations in the state.



Figure 3. Map of confirmed mountain lion reports from 2012-2022 from Texas Parks and Wildlife Department.

Past studies were necessarily restricted in geographic scope due to private land access and high costs associated with mountain lion research, limiting TPWD's ability to make regional inferences. In the absence of reliable population data, TPWD is relegated to making informed, though somewhat coarse, inferences about status of mountain lions in the state.

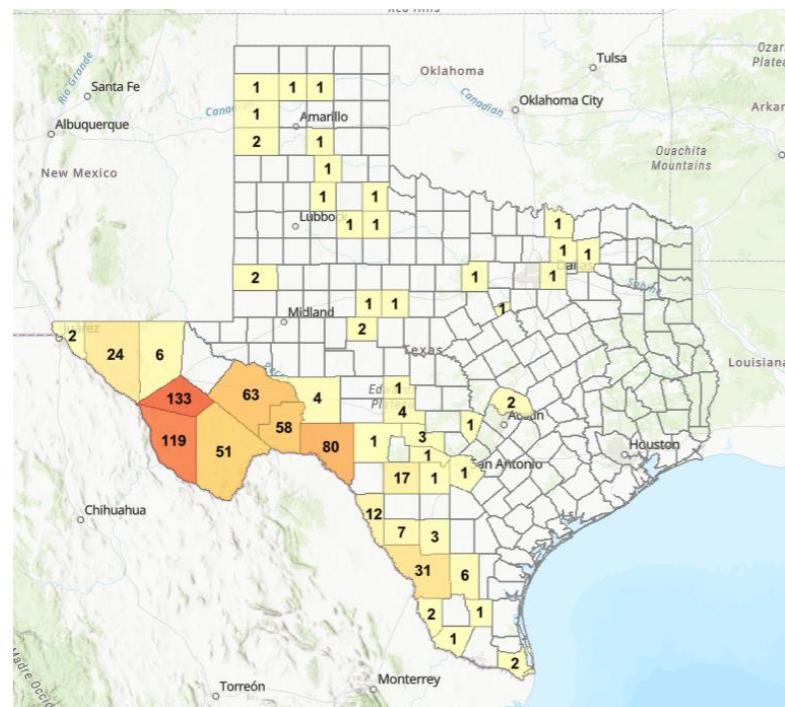


Figure 3. Map of confirmed mountain lion reports from 2012-2022 from Texas Parks and Wildlife Department.

The West Texas population appears to be persisting, with harvest rates varying by landowner. While research in BBRSP and the Davis Mountains reported heavy harvest and low annual rates of survival, the continued persistence of these populations suggests that immigration from neighboring source populations such as Big Bend National Park, Mexico, and New Mexico helps support the West Texas population. Due to the large territories of mountain lions, studies indicate it is unlikely that practices of individual landowners are sufficient to establish source populations, though breeding does occur and survival rates and/or fates of all kittens are unknown. Studies in the Trans-Pecos reported trapping was the primary means of take and mortality. However, with fewer livestock production operations in the region than decades ago, it is likely that there is less predator management occurring today than in the past.

Genetic data from 299 historic and contemporary mountain lion samples from across the state, indicate that there is some reason to be concerned about the health of the South Texas population. The low genetic diversity suggests a declining population with little immigration from other areas. Hunting was the primary method by which mountain lions were harvested in the South Texas study. If breeding populations occur in other parts of their historic range in the state, they are probably small and uncommon.

The population projections in Texas show that our human population is likely to increase from 30 million to 50 million Texans over the next few decades. Simultaneously, the landscapes in South Texas and West Texas are experiencing fragmentation. It is possible that several million acres of open landscapes conserved by working ranches will transition into small ranches, ranchettes, pavement, housing developments, and energy developments over the next few decades. This predicted habitat fragmentation and corresponding loss of landscape connectivity will likely negatively impact much of Texas's wildlife, including mountain lions.

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Appendix III: Meeting Agendas

AGENDA

Mountain Lion Stakeholder Working Group Meeting 1 – Austin, TX

March 2, 2023

10:00 AM – 4:00 PM

Meeting Chaired by: Joseph Fitzsimons

10:00 AM

Welcome

Why we're here/Ground rules | Joseph Fitzsimons
Roles and Responsibilities | Executive Office (TPWD)
Meeting & Facility Logistics | Richard Heilbrun
(TPWD)
Introduction Exercise | Joseph Fitzsimons

Presentation

Mountain Lion History and Policy in Texas | Jonah Evans (TPWD)

12:15 PM

Lunch (lunchdrop.com)

Assigned seating in TPWD Canteen

1:15 PM

Presentations

Overview of State Regulations | Dr. Dana Karelus
(TPWD)
Mountain Lion Research in Texas | Dr. Patricia
Harveson
TX USDA Mountain Lion Damage Management |
Mike Bodenchuk

Discussion

Charge from Commissioner Aplin:

Topics for consideration will include but not necessarily be limited to:

1. Abundance, status, distribution, and persistence of mountain lions in Texas
2. Development of a mountain lion management plan for Texas
3. Harvest reporting
4. Trap/snare check standards
5. Harvest/Bag limits
6. "Canned" hunts

AGENDA

Mountain Lion Stakeholder Working Group Meeting 2 – Alpine, TX

April 18, 2023

10:00 AM – 4:00 PM

Meeting Chaired by: Joseph Fitzsimons

9:30 AM – 10:00 AM **Arrive**

10:00 AM – 10:45 AM **Welcome**

10:00 Facilities and Logistics | Richard Heilbrun (TPWD)

10:05 Transparency and openness

10:15 Small Group Exercise -Groups of 4

10:45 AM – 12:00 PM **Presentation**

Ken Logan (45 min + Q/A) Effects of hunting on lions and the effects of lion depredation on mule deer and other wildlife populations

12:00 PM – 1:00 PM **Lunch**

Sul Ross Cafeteria

1:00 PM – 3:30 PM **Presentation**

1:00 An exploration of the ethics of lion hunting and trapping (20 min + Q/A) | Kelly Glenn

1:30 State Presentation from New Mexico- Nick Forman

2:00 State Presentation from Montana- Molly Park

2:30 State Panel Discussion/Q&A

3:30 PM – 4:00 PM **Discussion**

Charge from Commissioner Aplin:

Topics for consideration will include but not necessarily be limited to:

1. Abundance, status, distribution, and persistence of mountain lions in Texas
2. Development of a mountain lion management plan for Texas
3. Harvest reporting
4. Trap/snare check standards
5. Harvest/Bag limits
6. "Canned" hunts

AGENDA

**Mountain Lion Stakeholder Working Group
Meeting 3 – Del Rio, TX**

May 12, 2023

Meeting Chaired by: Joseph Fitzsimons

9:00 AM – 4:00 PM

9:00	Arrive ; Place Lunch Orders
9:30	Welcome Joseph Fitzsimons Facilities and Logistics Richard Heilbrun (TPWD)
9:45	Canned Hunting – Large Group Presentations and Large Group Discussion
10:15	Harvest Reporting Overview TPWD
10:30	Break
10:45	Harvest Reporting Overview, continued TPWD
11:30-12:30	LUNCH
12:30	Small group Discussions -Harvest Reporting
1:30	Finalize small group presentations
2:00	BREAK
2:15	Small Groups present to Large Group Large Group Discussion and Summarize Joseph Fitzsimons

Committee Charge: Topics for consideration will include but not necessarily be limited to:

1. Abundance, status, distribution, and persistence of mountain lions in Texas
2. Development of a mountain lion management plan for Texas
3. Harvest reporting
4. Trap/snare check standards
5. Harvest/Bag limits
6. "Canned" hunts

AGENDA

**Mountain Lion Stakeholder Working Group
Meeting 4 – Laredo, TX**

June 14, 2023

9:00 AM – 4:00 PM

Meeting Chaired by: Joseph Fitzsimons

- 9:00 Arrive; Place Lunch Orders**
- 9:30 Welcome | Joseph Fitzsimons**
Facilities and Logistics | Richard Heilbrun (TPWD)
- 9:45 Video Presentation by Ben Masters**
During the following 2 presentations, A/V recording will be paused to protect confidential or proprietary information on a ranch covered by a TPWD Wildlife Management Plan. Members attending online will be able to hear, but not see presentation
- 10:00 Observations from South Texas (Agency and Private) | Jimmy Rutledge**
- 10:20 Mountain Lions of Western South Texas | Don Draeger**
- 10:40 Management Plans Overview | TPWD**
- 11:05 Small group Discussions**
Each group will have a biologist assigned to it
- Prompts for groups:
- What does a management plan look like?
 - What are the critical components you want to see in a plan/program?
 - Discuss pros and cons of having zones vs statewide approach (15 min)
- 11:35 Presentations by small groups**
- 12:05 Lunch**

1:05 Trap Check TPWD Introduction | TPWD

Notes to Committee Members:

- It's acceptable to consider biology and/or ethical considerations.
- It's acceptable for the committee to limit this recommendations to lions only (for example, ensure no impact to coyote management practices)

1:25 National Standards, Public Perceptions, and Trapping Bans | Bryant White, AFWA (virtual)**1:45 Break****2:00 Trap Check Discussion in Small Groups-answer specific questions**

1. Should we require trap check requirements for lions? Why or why not?
2. If so, at what interval?

Some other prompts to help you answer 1-2:

- What are the problems with not having a trap check requirement?
- What are the problems with having a trap check requirement?
- Will trap check requirements significantly hamper the ability of private landowners to manage their property?

2:50 Small Group wrap up (10 min warning)

Make sure that the last 10 minutes is spent confirming what you're going to say, and that it accurately represents the viewpoints of each member of your group. Most importantly, we need to hear the reasons why you felt that way. We're trying to learn your opinions and perspectives.

3:00 Groups Summarize to Large Group | Joseph Fitzsimons**4:00 Adjourn****Charge from Commissioner Aplin:**

Topics for consideration will include but not necessarily be limited to:

1. Abundance, status, distribution, and persistence of mountain lions in Texas
2. Development of a mountain lion management plan for Texas
3. Harvest reporting
4. Trap/snare check standards
5. Harvest/Bag limits
6. "Canned" hunts

AGENDA

**Mountain Lion Stakeholder Working Group
Meeting 5 – Austin, TX**

October 3, 2023

10:00 AM – 4:00 PM

Meeting Chaired by: Joseph Fitzsimons

- Arrive; Place Lunch Orders**
- 9:30** via Lunchdrop.org (1340 Airport Commerce Dr – Recreation Parks Program)
- 10:00** **Welcome | Joseph Fitzsimons**
Facilities and Logistics | Richard Heilbrun (TPWD)
- 10:10** **Overview of Comments and Report**
- 10:30** **Charge 4: Trap/Snare check Standards**
Live Survey, then Small Group Discussion
“Go back into your small group and make a recommendation to the commission that your group can live with. This may involve compromise to try to find a recommendation. It's ok if you can't come to a recommendation.”
- 11:30** **Break**
- 11:40** **Large Group: Groups present**
- 12:15** **Lunch**
- 1:00** **TPWD response to suggestion for an enhanced campaign**
- 1:10** **Charge 3: Harvest Reporting**
Live Survey, then Small Group Discussion
- 2:10** **Break**
- 2:20** **Large Group Presentations by each small group**
- 3:20** **Flex Time**
- 3:45** **Next Steps**
- 4:00** **Adjourn**

Charge from Commissioner Aplin:

Topics for consideration will include but not necessarily be limited to:

1. Abundance, status, distribution, and persistence of mountain lions in Texas
2. Development of a mountain lion management plan for Texas
3. Harvest reporting
4. Trap/snare check standards
5. Harvest/Bag limits
6. "Canned" hunts

Appendix IV: Dissenting or supporting statements from Group Members

To the TPWD folks and Commissioners,

Thank you for your service to Texas wildlife and for taking the time to read this dissenting opinion. I've had the good fortune to observe mountain lions for hundreds of hours, have taken thousands of trail camera photos and videos, and have filmed them in TX, UT, NM, AZ, Mexico, and Chile. My family also raises cattle, I paid my way through college guiding deer and elk hunts, and I recognize that mountain lions don't eat veggies. Throughout this stakeholder process, I've developed a few insights and opinions that I believe are worthy of your time and consideration.

First, what we have here in Texas is unique to the entire world. Not only do we have the finest deer hunting and the best quail grasslands remaining, we might *possibly* have breeding mountain populations on private lands without seasons or quotas. What this would mean, if proven, is that private land stewardship can be so successful that it can result in healthy landscapes starting at the soil, supporting the forage that grows bountiful game, and ultimately up to the apex predator.

Proving that the Texas private stewardship method of conservation is so robust that it can support mountain lion conservation should be a massive source of pride for our state and a huge win for private lands! But sadly, we cannot make this claim, nor do we know if our lion populations are healthy or not. We can't make this claim because we don't have the information that mandatory harvest reporting would have provided for the past few decades, despite TPWD's promise in the early 90s to implement mandatory reporting if/when the voluntary reporting proved to be insufficient.

Harvest reporting is the backbone of information for understanding trends and distribution. It is the most important tool for other states' mountain lion management plans, and mandatory reporting is common throughout Texas for deer and turkeys and other species. It is confidential, easy to implement and cost effective. In my opinion, mandatory harvest reporting is the most important step that Texas can take to prove our private lands conservation model and to ensure lions a future in Texas.

Secondly, it is publicly unacceptable and against standard trapping conduct to legally leave trapped mountain lions with busted legs to melt in traps for days or weeks on end until they die from dehydration and exposure. This is the worst death imaginable and is completely unnecessary now that cell and satellite cameras can notify the user if/when the trap is triggered. If a 24 or 36 hour trap check isn't implemented (which is consistent with furbearers in Texas and widely supported by trapping organization's ethical standards nationwide) then this issue is going to get increasingly nasty in the years and decades to come. In my opinion, not having a 24 or 36-hour trap check will leave TPWD and the commission vulnerable to negative press, potential long term public perception issues, and a degradation of trust.

On a closing note, I would like to invite you to come with me and see a Texas mountain lion with your own eyes. I've figured out how to find them and am currently making two films featuring Texas mountain lions. We've filmed kittens playing, mama lions hunting coyotes, lions eating aoudads, and other really amazing scenes. These films will be in theaters across the state in 2026 and will garner a new wave of lion admirers. But seeing them on a big screen doesn't compare to seeing them with your own eyes. I'll fit my schedule to meet yours and promise a good time chasing lions in the desert!

Ben Masters

I am a Texas landowner who, with my husband, manages our central Texas land and west Texas ranch for the conservation of all Texas native wildlife. We thoughtfully and assiduously steward our property. Working in partnership with Texas Parks & Wildlife, Borderlands Research Institute, Caesar Kleberg Wildlife Research Institute, Texas Wildlife Association, Texas A&M University, American Bird Conservancy, the Texas Youth Hunt Program, The Nature Conservancy, Hill Country Alliance, and other organizations, we open our gates for research, data collection, collaboration, and fund-raising.

We are part of a private landowner constituency, which we share with colleagues, friends, and neighbors, who value the thoughtful regulations that TPWD enacts and enforces in order to manage our publicly-owned wildlife.

I believe that many Texas landowners would be proud to work with TPWD and their partners to participate in mandatory mountain lion harvest reporting as well as trap check regulations for mountain lions. Most land owners who I have talked to—once they understood that mandatory harvest reporting is not associated with social media or individual ranch records—agreed that mandatory reporting and trap checks would not be an intrusion of their privacy.

Sincerely,
Pamela Nelson Harte

The composition of the Mountain Lion Stakeholder Group made a split recommendation on key issues inevitable. Now it is up to the Commission to decide what actions to take.

The plight of mountain lions in Texas is garnering the attention of a broad range of Texas constituencies. In past decades, TPWD made repeated promises of attention to the issue, then repeatedly failed to follow through on them. That approach will not be adequate today, given the level of interest from the public as a whole. In a poll taken by TAMUK in counties where mountain lions reside, strong majorities supported a healthy mountain lion population and only 16% preferred the year-round open season currently in place.

There were strong points of agreement among the members of the Mountain Lion Stakeholder Group: that it is important for Texas to have a sustainable mountain lion population, that mountain lion management should be science-based, that there is insufficient data to accomplish science-based management, that harvest data is a crucial tool, that canned hunts should be banned. But those points merely illustrate that this issue is important. They don't inform what we should *do* to accomplish the goal of a healthy mountain lion population with minimal conflict between lions and human activities.

Harvest Reporting (Charge #3). According to Texas scientists, scientists from a number of other states, and also TPWD staff, voluntary reporting of harvest data is insufficient – some say “useless” – in determining the status of mountain lions in any area because of inherent inconsistencies and lack of reliability. The voluntary reporting in use for decades has failed to provide the data on birth rates, survival rates, mortality rates, and sources of mortality necessary to make science-based mountain lion management decisions. Researchers say there are no statistical techniques to allow them to use voluntary data to estimate population sizes or project population trends. In contrast, as TPWD staff indicated in its 2012 report, mandatory harvest data is an economical way to obtain information that otherwise requires more expensive monitoring protocols. While other research will be needed, mandatory harvest data is essential for data-driven management.

Requiring Trap Checks (Charge #4). The issue of requiring that mountain lion traps be checked daily or at least every 36 hours is more of an ethical consideration, but it is a consideration that has been acted on by TPWD regarding fur-bearing and other animals. There are other ethical considerations embedded in Texas' hunting regulations, such as regulations regarding wounded animals and waste of game.

Conclusion. People from all angles on the issue agree it is important to have a healthy, sustainable mountain lion population. If Texas is to accomplish that, the Commission must direct TPWD staff to develop a rule package that addresses the need for mandatory harvest reports. If the thousands of letters that Texas citizens have written and the results of repeated polls showing Texans' opinions about the ethics of wildlife management are to be honored, then that rule package must also require trap checks. It is always tempting for a Commission dealing with a complicated subject simply to require that TPWD staff develop a management plan, without taking regulatory action. But limiting the Commission's actions to directing there be a management plan will merely postpone the heart of the issue and generate future controversy. While a management plan is a good to have, to guide TPWD staff, it would not be adequate to accomplish a sustainable population of lions, nor would it obtain the data necessary to know whether the Texas population of mountain lions *is* sustainable.

Janice Bezanson

The undersigned wish to offer their observations regarding the imposition of a mandatory mortality check for mountain lions. While we all support the collection of data, including mortality data, for better management, we wish to note that the imposition of a mandatory check-in requirement for mountain lions isn't necessary at this time. Other western states have unit-specific management objectives, something Texas has not seen as necessary. Following their model will only impose additional administrative burden on the Department, an unnecessary requirement on hunters and trappers and may alienate landowners who do not wish to disclose some management practices on their properties.

We wish to note that the data collected from mountain lions killed in Texas cannot be compared to the same data collected in other states. We are concerned that models based on mortality data are not applicable here, as we do not have measurable units of effort spread across multiple landscapes. Rather, the sole, useful datapoint gathered from a mandatory check requirement would be a physical count of dead lions.

Even the benefit of knowing how many lions are killed may be compromised by the imposition of a mandatory check. TPWD depends on the cooperative relationships with private landowners to get meaningful conservation work done across the state. By forcing private landowners to report every harvested lion, the department risks eroding the trust they have built with the individuals that hold much of the lion habitat in the state. If these landowners suspect that their neighbors or others are being made aware of activities they have on their property, lion mortality reporting simply won't occur.

There are additional logistical issues associated with mandatory reporting. Not every lion taken by hound hunters or by trappers is removed from the scene. Requiring these people to bring out every lion will similarly drive reporting down.

The department has a sophisticated digital harvest reporting tool in the My Hunt Harvest App. Currently, mountain lions are not included on the list of reportable species in the app. By simply adding lions to the app and communicating to Texas hunters and trappers that the department is interested in voluntary mountain lion harvest data, TPWD would increase reports.

At best, a mandatory reporting requirement will provide data on mortality which will always be shadowed by the specter of under-reporting. At worst, it will alienate landowners and cause otherwise willing partners to close access to important sources of information. We favor voluntary reporting, utilizing electronic systems and caution the Commission as to the use of the data thus gathered. Until management units are created with harvest objectives, mandatory reporting is not necessary.

Respectfully submitted,

Michael Bodenchuk, Justin Dreibelbis, Rodney Kott, Billy Pat McKinney, Jr., James Oliver, Don Steinbach, Bill Applegate

The undersigned wish to present their observations regarding the enactment of a mandatory trap check interval for mountain lion trapping in Texas. We all support humane trapping and believe that trapping of lions is a necessary management tool for depredation management, whether that be for the protection of livestock or the protection of native wildlife. We believe a mandatory trap check requirement is unenforceable without extending the requirement to all traps set.

Trapping to address damage is different than fur trapping and is recognized as such in the Best Management Practices (BMP's) developed by the Association of Fish and Wildlife Agencies. Damage management equipment and techniques require adaptive management, best implemented by skilled trappers on the ground. Techniques necessary in hot conditions differ from those encountered in cooler weather and we believe the trapper is the best person to gauge the necessary frequency of trap checking.

To be enforceable, any regulation applied to lion trapping will by necessity be applied to any trap set in Texas. Indeed, TPWD staff informed the working group that the requirement would not be applied to a trap style, but rather it would be unlawful to hold a lion in a trap for more than 36 hours. If that standard is applied, a lion caught in a coyote trap, checked on a 48-hour schedule, would put the trapper in jeopardy of a violation. To comply, all traps set would need to be checked every 36 hours, which may run contrary to damage management trapping for other species.

Ninety-five percent of Texas is privately owned. Landowners, even under the best of circumstances, may not be able to check traps every day. While their intentions may be to check their traps, they frequently are called away to more urgent issues, such as livestock loose on a highway or water system failures. Placing landowners in a position of meeting an arbitrary trap check interval instead of attending to serious health or safety matters will only erode the trust the Department has worked hard to build with the private landowner community over the last 25 years. A mandatory trap check interval is contrary to the very critical relationship between TPWD and landowners.

Perhaps most critical, a mandatory trap check interval will reduce trapping efforts by private trappers which will increase human-lion conflicts. A paper presented at The Wildlife Society Wildlife Damage Conference documented increased human-lion conflict with increased protection (comparing agency lion take in Texas with AZ, UT and CA shows increased conflicts). The Cooperative Texas Wildlife Services program does not have the resources to respond to this predictable increase and landowners do not need additional levels of predation which is likely to occur.

As an alternative to a mandatory trap check interval, we suggest and offer to develop Mountain Lion BMP's, which would be available through the Texas Trappers and Fur Hunters Association website as well as through TPWD if the Department agrees. These BMPs could underscore the ethics of lion trapping, detail ways to avoid incidental captures of black bears and provide resources for trappers to increase their professionalism and efficiency.

Respectfully Submitted,

Michael Bodenchuk, Justin Dreibelbis, Billy Pat McKinney, Jr., Rodney Kott, James Oliver, Don Steinbach, Bill Applegate

Harvest reporting is foundational in understanding mountain lion population dynamics and trends. However, experts have repeatedly stated that these data must be reliable and consistent to be useful in making management decisions and that voluntary harvest reporting doesn't provide the necessary consistency and reliability. Mandatory harvest reporting assures sufficiently high rates of reporting by hunters and trappers and for reliability in data collected that is useful in the production of population estimates and trends. The Texas Parks and Wildlife Department previously attempted enhanced voluntary harvest reporting with only limited and short-lived success in increasing the volume of data provided. The data collected proved insufficient in addressing the ultimate problems of understanding and monitoring the state's mountain lion populations. As noted in the report, some stakeholders believe that a new campaign combined with stream-lined digital tools would provide adequate information. Their enthusiasm for a voluntary reporting approach ignores the council of mountain lion researchers and managers, including those within TPWD. The risk of this approach is that we will again arrive at this moment unresolved, and again clamor for more data.

The Mountain Lion Stakeholder Group formed a consensus around the need for and support of collecting relevant data to inform management and policy decisions. Voluntary reporting will not lead to this desired outcome. The primary reason given for continuing this failed approach is to avoid inciting concerns over private property rights and potentially burdening landowners with additional reporting requirements. Members in support of mandatory harvest reporting addressed these concerns by compromising from a gold standard of harvest reporting as it is standardly practiced (timely, site-specific harvest data paired with carcass inspection and genetic material collection) to a Texas model that still provides meaningful data but carefully protects hunters and private landowners from public scrutiny, places reporting requirements on trappers and hunters that take lions instead of landowners, and only requires reporting at a scale sufficiently coarse (county scale) as to protect the identify of a specific ranch. A continued voluntary approach simply maintains a failed status quo.

Romey Swanson

I am grateful to the Texas Parks and Wildlife Commission for forming a stakeholder group to address mountain lion management in Texas. While I think that the report is a fairly accurate reflection of the general agreements and disagreements about the 6 specific charges, there was much more information that the group heard and discussed which isn't in the report but that would be incredibly helpful to the commission as they consider these issues.

The first two stakeholder group meetings and an additional remote webinar meeting were devoted to learning the history of mountain lion management and research in Texas, and the past and current research and management of other states. Mountain lion biologists from New Mexico, Montana, California, Oregon, Wyoming, and Colorado presented their management plans, research priorities and discussed issues surrounding mountain lion management in their states. These and all other states with breeding populations of mountain lions regulate their management and most have over 50 years of experience and knowledge in addressing the complexities of managing this large carnivore. Each state has a comprehensive program for dealing with depredation and conflict issues while maintaining sustainable mountain lion populations. They emphasized the importance of science-based management and when asked about the importance of mandatory harvest reporting, **the expert panel unequivocally expressed the need for mandatory harvest reporting data and recommended that Texas begin collecting that data now.**

Additionally, Warren and Kelly Glenn prepared a statement read by Kelly on the ethics of lion hunting and trapping based on their family's 86 years of experience in managing mountain lions. Their statement offers insight into the overarching issues as well as some practical recommendations including the following: "*Trapping lions is a management tool, especially for the livestock industry, and yet, looking at the ethics of this type of harvesting, there always needs to be rules and regulations. Probably the number one requirement to consider would be: Mandate that traps be checked every 24 hours.*"

Our stakeholder group meetings were recorded, and I urge the commission to listen to these beginning meetings, most importantly the 2nd meeting that was held in Alpine. This meeting in particular offers a wealth of knowledge by experts in mountain lion ecology and management from outside of Texas including their experience dealing with this controversial topic. Ideas were shared such as efforts to resolve conflict through depredation reimbursement programs, and public outreach and education. Mountain lion management is complicated, but there are decades of experience and management programs that have been implemented successfully by many other states. There is much that can be learned from these other state agencies on how to navigate this issue. Opponents of state management place too much emphasis on the distinction of Texas as a private land state. Finding solutions that allow the state to regulate the management of mountain lions while listening to the concerns of landowners and the broader public is possible.

This issue has been ignored for decades and it's time to implement a science-based program that ensures the continued persistence of mountain lions in Texas and addresses the concerns of unregulated trapping, canned hunting, insufficient harvest data collection, and the lack of state research and monitoring of this ecologically important apex predator.

Patricia Moody Harveson

CHARGE 1: Other states manage mountain lions primarily for recreational hunting or endangered species protection, requiring a larger population base to provide sufficient trophy mountain lions to harvest. The Texas density is lower than those in other states and minimizes conflicts. New and innovative research and data collection techniques should be explored, particularly those that include the public. Such avenues may prove to be more economical and better address the needs and circumstances unique to Texas. Inclusion of the public in data collection may establish more confidence in a management plan.

CHARGE 2: A plan should consider the needs of landowners as well as the interests of other members of the general public. A formal management plan should be developed to the extent that the sustainability of mountain lions is addressed, providing the Department with a defense against further attacks by private interest groups. Any mandates placed on landowners prior to the development of an informed and credible plan will be premature and may prove to be overreaching. Minimal requests on landowners and others will be better received as excessive requirements will lead to failures to cooperate. Future research activities should be conducted by TPWD staff to minimize misleading and biased conclusions. One of the petitioners publicly stated that all of the states with mountain lions were polled on how they were able to establish some sort of protection for them and the overwhelming response was "Public Outcry".

CHARGE 3: Mandatory harvest reporting can't be enforced 100% and may drive management activities even further underground, eroding landowner cooperation in research activities of other wildlife species and with the Department. Tissue samples will provide sufficient data to reach a genetic diversity assessment and in turn, sustainability. A threshold to require mandatory reporting could be triggered due to relaxed efforts to collect data. Entire carcass presentation will be impossible in many cases and those animals will not be reported. The requirement of photos of harvested mountain lions will also contribute to non-reporting of harvest.

CHARGE 4: Various members of the MLSG lack the experience or knowledge to ensure their opinions with trap checks are credible. Personal ethics vary among individuals. No scientific data was presented to support the claims that trapping mountain lions or the methods used to dispatch them are cruel or inhumane. Contacts with national trapping, animal rights and veterinary organizations provided no scientific support of the claims. Conversely, scientific data, in human applications, relating to dispatch techniques was plentiful and supports current practices. Recommendation for a 36-hour trap check or the use of trap monitors was clearly a compromise by some MLSG members, who do not utilize traps or understand how to use them and have nothing at stake. Monitors do pose numerous problems, some of which are not remedied at all. Mountain lions differ significantly from furbearers in their habits, making 36-hour trap checks inappropriate and will limit legal harvest. Black bears are increasing in number and expanding their range despite the current level of mountain lion management activity. Means and methods are tailored to avoid black bear capture as this resource is useless to individuals. Bears are intelligent, powerful and are usually able to escape from most capture devices used by landowners. Educating landowners of the various equipment options and techniques to consider in tailoring a management program specific to their operation and objectives may be helpful. One of the petitioners publicly proclaimed "First we will get 36-hour trap checks, then we will do away with traps altogether."

CHARGE 6: Canned hunting prohibition language should be carefully phrased in order that houndsmen may continue to utilize live mountain lions in their dog training procedures. Restrictive language on canned hunts could affect game bird or other wildlife releases for hunting or training purposes. Recent federal law prohibits acquisition of live mountain lions to be held in captivity. Possession of existing live mountain lions is necessary in some hound training applications as well as in scent collection for capture purposes.

CONCLUSIONS: The common denominator in the petition filed is to reduce harvest, directly or indirectly. Reduction in harvest results in additional research opportunities as well as other commercial activities, at the expense of landowners and their established livestock and wildlife management programs. The general public is not qualified to drive any kind of wildlife management decisions; that is the responsibility of the Department. Conclusions of recent mountain lion studies released to the public are misleading, biased and fail to comply with ethics standards in other arenas. California based Mountain Lion Foundation has been a part of the overall campaign to influence mountain lion management in Texas. Unravelling successful management practices is a step backwards. Managing wildlife in a scientific and "landowner friendly" manner has made TPWD the most successful game department in the U.S.A. and our wildlife numbers prove it.

Bill Applegate

Appendix V: Group Member Biographies

Joseph Fitzsimons



Joseph Fitzsimons is a rancher, conservationist, and natural resource lawyer. His interest in conservation began as a young man working on his family's San Pedro Ranch. At the age of seventeen he joined Texas Parks and Wildlife as a wildlife intern at Black Gap Wildlife Management Area. Mr. Fitzsimons attended college in Oregon at Lewis and Clark, where he continued his outdoor interests. After working on ranches in the American West and South America, he returned to Texas for law school at the University of Texas, graduating in 1985. Joseph and his wife Blair have dedicated their professional and private lives to land and wildlife conservation. Blair and Joseph raised their three children on the family's San Pedro Ranch. Blair was the founding CEO of the Texas Agricultural Land Trust, now the largest land trust by acreage in Texas. Her work has conserved hundreds of thousands of acres of open space working lands that will be perpetually protected for agriculture and wildlife. In 2009 the Fitzsimons and Howard family families dedicated a perpetual conservation easement on the San Pedro Ranch to the Texas Agricultural Land Trust.

Joseph continued his wildlife conservation work as a Texas Parks and Wildlife Commissioner and later Chairman of the Commission. He is the co-founder of the Texas Coalition for State Parks which lobbied successfully for the constitutional dedication of sporting goods tax revenue to the support of the Texas State Parks. Fitzsimons is the co-founder of the law firm Uhl Fitzsimons, where he represents land and mineral owners in the areas of energy, water and conservation law.

Blair and Joseph and their family ranch have received the following conservation awards for their work over the past 25 years:

- NRCS Resident Conservation Landowner of the Year (San Pedro Ranch)
- NCBA Environmental Stewardship Award (San Pedro Ranch)
- Texas Outdoorsman of the Year (Joseph)
- Texas Section Society for Range Management Award for Outstanding Rangeland Stewardship (San Pedro Ranch)
- Texas Audubon Terry Hershey Women in Conservation Award (Blair)
- Texas Parks and Wildlife Lone Star Land Steward Award (San Pedro Ranch)
- Harvey Weil Sportsman Conservationist Award (Blair and Joseph)
- Texas Wildlife Association Friend of Wildlife Award (Joseph)

- Texas Chapter of the Sierra Club Evelyn Edens River Conservation Award (Joseph)
- Texas Leopold Conservation Award (San Pedro Ranch)

Blair currently serves on the nationwide Land Trust Alliance board of directors. Joseph currently serves on the Partnership of Rangeland Trusts board of directors and as chairman of the Texas Agricultural Land Trust Foundation. Blair and Joseph live on the San Pedro Ranch in Dimmit and Maverick Counties Texas. They have three grown children all involved in conservation, and four grandchildren who will be the fifth generation on the San Pedro.

Bill Applegate

I am from west Texas, and after being raised in the Trans Pecos, earned my BS in Ag Business from Sul Ross State University. -I spent 14 years working with the Farm Credit System and 10 years as president of the Western Federal Land Bank Association of Marfa. I managed over \$34 million in assets and received the Pinnacle Performance Award for new business development. I have been actively engaged in cattle ranching in both Hudspeth and Presidio Counties. For the last 48 years, I have worked in predator management, 30 of those working directly with mountain lions. I have cooperated with TPWD on a Big Bend Ranch State Park lion study, have for several years provided researchers at TPWD, Texas Department of Health, Universities, and others with mountain lion tissue samples for research projects and have provided TPWD mountain lion sighting and harvest data.

I have served as a Board member of the Texas Trappers and Fur Hunters Association for 26 years, 18 as President, and currently serve as their vice president. I have conducted trapping workshops for multiple groups at local, state, regional and national levels and drafted and implemented the first Nuisance Animal Control Program administered by the Texas Trappers and Fur Hunters Association to connect trappers with the public.

I received the 2023 Trapper of the Year award from the Texas Trappers and Fur Hunters Association. I am a member of The Wildlife Society, Texas Chapter of The Wildlife Society, Texas Bighorn Society, Rocky Mountain Elk Foundation, and numerous trappers' associations. I maintain the family ranch in Hudspeth County, am a past president of the Paisano Toastmasters, a past secretary of the Marfa Rotary Club, and a Dale Carnegie Course graduate.

Janice Bezanson



Janice Bezanson's 35-year career in wildlife conservation has focused on promoting creating and adequately funding parks, refuges, and other public lands; opposing unnecessary reservoir projects; encouraging management of public lands to benefit wildlife and natural ecosystems; and building coalitions of often non-traditional allies to address environmental problems. Currently the senior policy director for Texas Conservation Alliance, Janice's many years as executive director of TCA netted her experience in public relations, grassroots organizing, lobbying both in Congress and in the Texas Legislature, fundraising, organizational management, and developing media campaigns. Janice has successfully campaigned for more than 100,000 acres of state and federal wildlife areas that protect diverse habitats. Her input to state water planning has spanned several decades. Her opposition to ill-conceived reservoir projects has been coupled with promoting cost-effective alternatives such as municipal water recycling and more efficient use of existing water resources. For the past five years, Janice has led the Texas Alliance for America's Fish and Wildlife, a Texas coalition of 175 organizations urging federal funding for wildlife through the Recovering America's Wildlife Act.

Growing up in Brownwood, Texas, Janice's favorite place was her uncle's ranch 35 miles away on the Colorado River in San Saba County. Time spent there, and with other relatives on ranches near El Dorado and in the Panhandle, fostered a love of the outdoors, an appreciation for hunting, and a lifelong interest in wildlife. Throughout her career she has shared that love, mentoring young conservationists, helping fledgling wildlife organizations forge strong leadership, and recruiting volunteers, many of whom have gone on to enlist others in conservation.

Janice has served on a number of boards and advisory boards for nonprofit organizations and state and federal wildlife agencies. She has been honored by Chevron, the National Wildlife Federation, Audubon, the Big Thicket Association, and other colleague groups, and was featured in the *Women Shaping Texas in the 20th Century* exhibit at the Bob Bullock State History Museum.

Michael Bodenchuk

I began doing predation investigations in 1978 while in college working on a mule deer study for NM Game and Fish. I graduated from NM State University in 1979 with a B.S. in Wildlife Science and went to work in the Cooperative USFWS/NM Dept. of Agriculture wildlife damage program as a biologist. At the same time, I began post-graduate studies on mountain lions under Dr. Raul Valdez at NMSU. My project was to determine non-capture ways to index lion

populations. After 2 years of collecting data, we didn't have any clear scientific method developed and I discontinued my MS program.

I first moved to Coleman Texas in 1984, managing ranches in Coleman and Erath Counties and conducting wildlife consulting work in NM, West Texas and working with the Center for Desert Ecology in Hermosillo, Sonora, MX. Several of the projects I worked on as a consultant included mountain lion data analysis, predation impacts to livestock and impacts to wildlife. I worked in the private sector until 1990 when I returned to the federal wildlife damage management program, now run by USDA.

While working for USDA, I have conducted lion work in South Dakota, conducted the first lion predation investigations in western Nebraska and managed the predation management program in Utah, first as a District Supervisor in Southern Utah from 1993-1996 then as the State Director from 1996-2006. During my tenure in Utah, I participated in the development of their Cougar Management Plan, developed procedures for predation management for wildlife protection, drafted several Environmental Assessments to address impacts of management (including cougar removals) and implemented Wildlife Board/Animal Damage Management Prevention Board joint policy on responding to damage. I administered the verification procedures for the State-sponsored compensation program for livestock killed by lions and bears. I have instructed predation identification courses across the US and in Australia, Spain, Mexico, and South Africa. I wrote the Depredation Management Chapter in the 2011 WAFWA-sponsored book "Managing Cougars in North America." I have co-authored the same chapter in the 2nd edition of the same book (in press).

I have been the State Director for the cooperative Texas program since December, 2006. The program kept a full-time lion specialist in Ft. Stockton since 1990. That individual is now the District Supervisor for that District. I have overseen the lion work in West Texas since 2006, usually participating in field activities several days each year. I have addressed human health and safety concerns with mountain lions throughout my entire career.

I first acquired hounds for lion hunting in 1979 to support my lion research. I kept dogs for lion work until 2006, when I returned to Texas as the State Director. I have used hounds and foot snares to capture lions for research, including projects for NM Game and Fish, the National Park Service and USGS.

Donnie Draeger

Donnie Draeger has a Bachelors in Wildlife and Fisheries Science from Texas A&M University and Master of Science Degree in Range & Wildlife Management from Texas A&M-Kingsville. Donnie was a professional whitetail guide for several commercial hunting operations including the Faith Ranch in south Texas, and the Sanctuary and Legends Ranch in northern Michigan. He is a helicopter pilot, outdoor photographer, videographer and Final Cut Pro video editor as well an avid bowhunter. Donnie is active in areas of whitetail research and has been published in numerous scientific journals and outdoor magazines. In 2015 he co-founded Wildlife Information Systems (WIS), a wildlife-based technology company. He currently works for a family and oversees 130,000 acres on four Texas ranches.

Justin Dreibelbis

Justin serves as the Chief Executive Officer for the Texas Wildlife Association (TWA) and the Texas Wildlife Association Foundation (TWAF). Founded in 1985, TWA represents the

interests of private landowners and hunters and provides conservation education to youth and adults around the state.

Justin is an avid hunter and angler who fell in love with the outdoors at an early age hunting the brush country of south Texas with his family. Before joining TWA, Justin spent seven years with the Texas Parks and Wildlife Department where he served as the Private Lands and Public Hunting Program Director. He is a Certified Wildlife Biologist with Bachelors and Master's degrees from Texas A&M University.

He and his wife Rachael live in Austin, TX with their daughters June and Jill.

Jimmie Ruth Evans

Jimmie Ruth Evans received a BS from Texas Tech University in 1971. She has been actively involved in agriculture all her life, taking on leadership roles in many organizations. She currently serves as Commissioner of the Texas Animal Health Commission, Chairwoman of the Private Lands Committee of the Texas Parks & Wildlife Commission, Director of the National Cowgirls Museum in Fort Worth, and a life member and past president of the San Antonio Livestock Exposition.

She has served as president of the Texas Sheep & Goat Raisers Association (2017-2018), an advisory board member of Texas Tech's Department of Range, Wildlife and Fisheries Management (1998-2000), Advisory Committee Member for the Development of Agri-business Center for Palo Alto College (1994-1995) and member of the Agri-business Independent Committee for San Antonio Chamber of Commerce (Jobs for the 21st Century Task Force). (1994-1995).

Commissioner Anna B. Galo



Anna Galo was appointed to the TPWD Commission by Governor Greg Abbott on June 1, 2021 to a term that expires February of 2027. She has served on the Texas Parks and Wildlife Commission since November 17, 2015. Mrs. Galo is Vice President of ANB Cattle, Co, and is a Co-Trustee of her family's mineral trust. In addition, she serves as President and Co-Operations Manager of several companies dealing with oil and gas holdings, commercial real estate, and ranching and hunting industries. She is a member of the board of directors of the John G. and Marie Stella Kenedy Memorial Foundation and the City of Laredo City Manager's ad-hoc committee, board member of the Laredo Boy's and Girl's Clubs, and the Angel of Hope Foundation. She is the past president of the board of directors of the South Texas Food Bank and United Day School, and she continues to serve on both boards. She is a former board member of the Laredo Center for the Arts, Border Cultural Promotion Foundation, Webb County Children's

Advocacy Center and City of Laredo Historic Preservation Committee. Additionally, she is a founding member and first treasurer of the Laredo College Education Foundation, and she was a board member and local chair of AVANCE. Mrs. Galo received a Bachelor of Arts from St. Mary's University and is a former educator.

Pam Nelson Harte



Born in San Antonio and spending weekends and summers on family properties in Henderson, Dewitt, Bee and San Patricio County, as well as Devine, Houston, and Key Allegro—but mostly at my grandparent's place in Hunt TX—I learned how to respect and protect all flora and fauna from my maternal grandparents as well as my parents, who were science teachers. My grandfather is EM Buck Schiwetz, who in 1978 was designated the first TX State Artist. Through his artistic and architectural lens, he taught me to purposefully explore, observe, and appreciate art and all living things.

After graduating from TAMU with a major in biology and minor in biochemistry and accounting I worked in Dallas at The Baylor Research Foundation, then moved to France and graduated from a local university with a Masters in French literature and French history. After moving back to the US, I lived in New York City and was Managing Editor at Putnam Publishing and Scholastic Publishing. While working I attended and graduated from The Swedish Institute. Then while developing a Licensed Massage and Physical Therapy practice specializing in craniosacral therapy and brain and spinal cord injury rehabilitation, I ran marathons and cycled.

While volunteering for the Live Strong Foundation I commuted from NYC to Austin and for a short time lived with Andy and Nona Sansom, who were good friends of my family since the creation of The River Institute. I was introduced by Andy to Will Harte, who was serving on TWA, TALT and TPWF boards. In 2011 Will and I married, bought the Caldwell Ranch and moved full-time to the Davis Mountains. We live with dogs, cats, chickens and horses while raising Belted Galloways and Black Angus but mostly manage the ranch together with a desire to support and study all wildlife from grasses to native bees to mountain lions, so we open our gates to explorers, hunters, scientists and researchers. Consequently, that was our introduction to west Texas mountain lions in 2012 when mammalogists and graduate students lived with us for several years. Will and I donate hunts to TPWF and TWA to raise money for their respective organizations, offer youth hunts, and host various meetings for veterans, educators, and land and marine conservation organizations.

We received our TPWD large mammal rehab permit in 2012-2013 and I am a member of The Wildlife Society. Since 2014 I have served on the Texas A&M University Press Advancement Board and the TPWD Wildlife Diversity Advisory Committee. Will and I co-produced *The Lions*

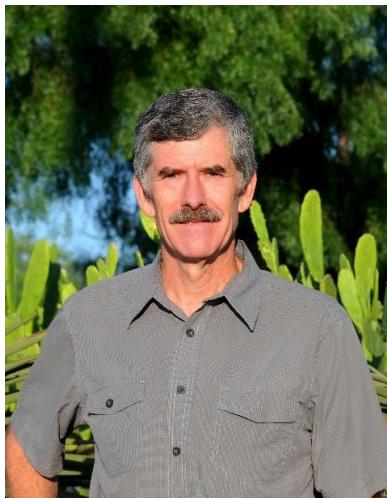
of West Texas, *The River and the Wall*, and *Deep in The Heart* with Ben Masters; and *Big Bend: The Wild Frontier of Texas* with Skip Hobie. In 2020 Will and I produced *Wildlife Killing Contests* with Filipe DeAndrade, which won Honorable Mention in the Jackson Wild Film Festival. Together we support The Harte Research Institute for Gulf Coast Studies, The Nature Conservancy, Texas Wildlife Association, Borderlands Research Institute, Texas Ag Land Trust, Audubon, Southwest Wildlife Conservation Center, CASETA (Center for the Advancement and Study of Early Texas Art), and the Belted Galloway Society.

Patricia Moody Harveson



Dr. Patricia Moody Harveson is a native Texan with roots in Pecos and Balmorhea spanning five generations. For the past 25 years, Patricia has lived in Alpine where she worked and raised a family. Patricia earned a Bachelor of Science in Biology from Tarleton State University, a Master of Science in Range and Wildlife Management from Texas A&M-Kingsville, and a PhD in Wildlife and Fisheries Sciences from Texas A&M University. Patricia has 30 years of experience as a wildlife biologist studying large and meso-carnivores including mountain lion, black bear, jaguar, kit fox, coyote, ocelot, and bobcat. For the past 15 years she was a research scientist and professor at Sul Ross State University where she served as the former Davidson Endowed Chair for Conservation Biology with the Borderlands Research Institute before she retired in 2022. During her time at Sul Ross, she led a comprehensive investigation of mountain lions in West Texas. Patricia has published dozens of scientific and popular articles on carnivores and other wildlife. Currently, her work focuses on the conservation of carnivores through research and education. She is a coalition member of Texans for Mountain Lions and co-authored a petition for the research and management of mountain lions to the Texas Parks and Wildlife Department. Patricia is also a member of The Wildlife Society, Texas Chapter of The Wildlife Society, and the Texas Wildlife Association.

David Hewitt



Dr. David Hewitt is a Research Scientist and Director of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville. He is a professional member of the Boone and Crockett Club, a Director for the Texas Wildlife Association, a member of the professional advisors group for the East Foundation, and a member of The Wildlife Society, the Texas Chapter of the Wildlife Society, and the Society for Range Management.

Rodney Kott

Rodney Kott was raised on a small diversified ranch in central Texas (Gillespie County) raising primarily sheep, goats and cattle. He attended Texas A&M University (received BS in 1974 and MS in 1976) and New Mexico State University (received PhD in 1980). Rodney had a 30+ year career in extension and research at Montana State University (was professor in the Animal and Range Sciences Dpt. and State Extension sheep specialist). Upon retirement in 2013, Rodney returned to the family ranch. In 2021, Rodney was elected to the leadership team of Texas Sheep and Goat Raisers and currently serves as first vice-president. In addition, Rodney is chairman of Gillespie County Farm Bureau, serves on the Texas Farm Bureau Sheep & Goat Commodity advisory committee and is chairman of Gillespie-Kendall-Blanco FSA board.

Ben Masters

Hello, my name is Ben Masters. I'm 34, married, and a father of two toddlers. I was raised in Amarillo in a wonderful family where I got to spend a lot of time working on different ranches, hunting, and playing outside. We moved to San Angelo during high school where I began guiding hunts, which led to studying wildlife management at Texas A&M University. During college, I only took spring semesters and paid my way through by leading pack trips in the mountains during the summer, guiding elk hunts in September and October, and managing hunts on a large ranch East of Laredo during deer season. In 2013, three friends and I adopted 16 wild mustangs from the BLM, trained them, and rode 3,000 miles from Mexico to Canada to promote wild horse adoptions. We filmed the journey, which turned into a documentary called *Unbranded*, that led to hundreds of horses getting adopted and my appointment to sit on the BLM's wild horse and burro advisory group where I represented the interests of native wildlife on 31.2M acres of public lands. The large impact from that film inspired me to become a

filmmaker specializing in wildlife, adventure, and conservation stories. During the last 10 years, our film company Fin and Fur Films has produced around 20 short films, three feature films, and a couple of 50-minute movies for broadcast. Some of the more prominent ones are Unbranded, Return of the Texas Bighorn, The River and The Wall, Pronghorn Revival, Horse Rich and Dirt Poor, and Water from Stone. We've won awards and have done work for Netflix, National Geographic, AppleTV, and other prominent platforms, but I'm most proud of the films we've made for organizations such as the Wild Sheep Foundation, the Peregrine Fund, and other conservation groups that are doing the hard boots-on-the ground work. I currently sit on the Texas Wildlife Association's Wildlife Conservation Committee and Texan by Nature's Advisory Council.

In June 2022 we released a film called "Deep in the Heart: A Texas Wildlife Story." It's a Planet Earth type movie that showcases some of the most beautiful landscapes and spectacular wildlife events in Texas. In the movie, we tried to film a mountain lion hunting sequence in the Davis Mountains but the cat we patterned got caught in a trap, ripped 3 of his toes off, and then presumably died in another trap a few months later. We also filmed a 3-legged bear that we presume to have chewed his leg off getting out of a trap. I made the decision to incorporate this footage into the film because it's the reality of what we captured. It shocked many people, was as welcome as a fart in church in some circles, and elevated the discussion on lions. While making the film, I was also asked to be on the Texans for Mountain Lions Coalition, which I accepted because I believe that it's decades past time for Texas to monitor our mountain lions and to have a management plan that respects landowners, producers, and the hunting industry while also ensuring a future for mountain lions in Texas. You can see my work at finandfurfilms.com and on social@bencmasters

Billy Pat McKinney Jr.



I grew up on a ranch in Brewster County, Texas, graduated from Marathon High School in 1970 and attended Sul Ross State University for two years. I was employed by TPWD for 25 years at the Black Gap WMA, and currently have been working as manager of Cemex Conservation areas for 22 years in both Texas and Mexico. I have conducted work on desert bighorn sheep, mountain lion, mule deer, elk and black bear, with special emphasis on lion control around

transplanted desert bighorns. I responded to a total of four mountain lion attacks in Big Bend National Park, resulting in successful captures and verified by forensics. I conducted live capture with trained dogs on 4 mountain lion research projects (Texas A&M Univ (1), Texas Tech University (2) & Big Bend Ranch State Park, TPWD (1). I am a certified capture specialist (Safe Capture International) and have conducted helicopter and ground surveys on desert bighorns and several other species. I have performed lion control, live removal, and have taught capture methods including leg-hold traps, leg-hold snares and designed a live trap. I captured lions for the National Park Service in Carlsbad, New Mexico and Cochise National Monument in Bowie Arizona, making a total of three states and two countries that I have worked on lion projects. I have performed lion control on depredation of livestock, including domestic sheep, goats, cattle and horse operations. I am a certified pilot and have flown many hours of aerial telemetry for research projects in Texas and Mexico (desert bighorn, mule deer and black bear). At the request of Special Agents with the USFWS, I assisted on a high-profile case in violation of the Lacey Act, a sting operation from Texas to Arizona on canned lion hunts that resulted in 6 arrests. I am affiliated with Texas Bighorn Society as a member, and Advisor to the Board of Directors, a member of the TPWD Advisory Board on Desert Bighorn Sheep, Member of The Wild Sheep Foundation Mexican Council Desert Bighorn Sheep and a Research Associate at Texas Tech University, Natural Science Research Laboratory

Albert Miller

Albert Miller grew up on the family ranch in Alpine Texas and received a Bachelor of Science in Range Management from Texas Tech University. For the next 9 years he worked as a USDA Soil Conservation Service Range Conservationist in San Marcos, Rocksprings, and Fort Stockton and then as a District Conservationist in Big Lake. Since 1980, he has been the manager of Miller Ranches in western Jeff Davis and Presidio Counties.

James Oliver



As a lifelong rancher with more than 15 years of production ag lending experience, James Oliver brings a unique understanding to discussions regarding land—and succession. He got his start in production agriculture on his family's South Texas cattle operation, and holds a B.S. in agricultural economics from Texas A&M University. He has managed production ag loans from La Pryor, Texas to Golva, North Dakota.

Mr. Oliver has a history of working with banking institutions and with Texas landowners through his work with Texas Agricultural Land Trust. He has been running a diversified commercial cattle, sheep and goat operation on his wife's family land in Crockett, Pecos, Val Verde and Kinney counties for the past decade.

Clay Richardson

I am the sixth generation of my family raised in Crockett County on our family sheep, goat, and cattle ranch. I graduated from Texas A&M University in 2005 and completed the TCU Ranch Management Program in 2006. Upon graduation I returned to run our family ranches in Crockett County, Edwards County and Creede Colorado. I also started my own ranching operation along the Devils River area in Val Verde County. I am a member of Texas Cattle Raisers, Texas Sheep and Goat Raisers, Texas Hereford Association and the Ozona United Methodist Church. When not ranching I help my family operate our DQ franchises throughout Texas.

Don Steinbach



Don Steinbach is the Executive Director of the Texas Chapter of The Wildlife Society, where he represents the statewide professional organization of natural resource professionals and advocates for policy decisions based on sound wildlife science. Dr. Steinbach is a Professor Emeritus for the Department of Wildlife and Fisheries Science at Texas A&M University, where he held several positions including Extension Fisheries Specialist and Associate Department Head of Extension. While with the Texas Cooperative Extension Program, he served on the Faculty Advisory Committee for the Center for Grazing Lands Management and the Environmental Affairs Committee for the College of Agriculture. He is a member of the TPWD White-tailed Deer Advisory Committee, TPWD Wildlife Diversity Advisory Committee, TPWD Chronic Wasting Disease Task Force, and an Executive Board Member of Texas Wildlife Association. He lives in Burton, Texas with his family.

Romey Swanson



Romey Swanson is the Executive Director of the Devil's River Conservancy and a private lands conservation ecologist. Throughout his career, he has worked with state, national, and international partners to identify and advance balanced conservation strategies for the benefit of wildlife, landscapes, and the communities that depend on them. Romey is a Certified Wildlife Biologist and a Past President of the Texas Chapter of The Wildlife Society. He serves as senior wildlife biologist for the 1,500-acre Hershey Ranch – the largest privately conserved ranch in Gillespie County. He is active within the Texas land trust community and was appointed to the Texas Farm and Ranch Lands Conservation Council by Governor Abbott in 2021. Romey serves on the Texas Parks and Wildlife Department's Wildlife Diversity Advisory Committee, the Wildlife Conservation Committee with Texas Wildlife Association, and as Vice President of the Texas Ornithological Society. He received a master's degree from Texas State University studying Wildlife Ecology in 2009. Romey enjoys spending time with his family hunting, camping, and photographing wildlife throughout Texas.

Appendix VI: Land Use Trends

