

# Snake Harvest Working Group

## Final Report Executive Summary

Prepared by John M. Davis, January 4, 2016

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### **BACKGROUND**

Snake-themed events (often called roundups) are a long-standing tradition in many communities in Texas that provide cultural and economic benefits. Rattlesnakes are often collected for these events by introducing gasoline and / or the associated vapors into winter dens to drive snakes from the den to be harvested. This practice is commonly referred to as “gassing”. Gassing karst features and burrows has come under increasing scientific scrutiny as questions arise concerning negative ecological impacts to associated systems, populations, and non-target species. In response to increasing constituent concern regarding this means of take, Texas Parks and Wildlife Department (TPWD) staff began conducting a review in late 2009.

### **THREATS TO NON-TARGET POPULATIONS AND THE FEDERAL LISTING PROCESS**

In 2012-2013, USFWS listed exposure to petrochemicals as a threat to karst invertebrates in Critical Habitat documentation for several species. TPWD staff reviewed the analysis the USFWS conducts when considering species for listing and determined the practice of gassing karst features and burrows introduces listing vulnerability for rare karst invertebrate species in Texas.

### **THE PETITION AND PROPOSED RULE**

In March of 2013, TPWD received a petition to prohibit gassing. Given the concern that gassing creates, TPWD staff briefed the Texas Parks and Wildlife Commission (Commission) in August, 2013. The Commission directed TPWD staff to develop options for consideration. Options were presented to the Commission in November, 2013, and TPWD staff was directed to develop a proposed rule and open comment. Public hearings were held in 5 locations (Sweetwater, Granger, Fort Worth, Houston, San Antonio) in January, 2014. Much public input was received and the issue was tabled in May, 2014. At that time, TPWD was directed to create a working group of stakeholders to analyze the issue and provide recommendations to the Commission.

### **THE SNAKE HARVEST WORKING GROUP**

The Snake Harvest Working Group (SHWG) was assembled with 12 stakeholders representing diverse perspectives on gassing and the first meeting was held in December, 2014. Dr. Bill Eikenhorst was appointed chairman. The SHWG was given seven charges to address:

1. Evaluate snake harvest data, cultural impact and economic trends of snake festivals and roundups
2. Identify measures of success for snake festivals and roundups
3. Review scientific data related to take of snakes with noxious substances (e.g. gasoline fumes) and ecological/habitat impacts from such practices
4. Identify any systematic obstacles to alternative, ecologically sound capture methods

5. Review historic recommendations (previous TPWD/other position statements) regarding related regulations
6. Discuss potential implications to U.S. Fish and Wildlife Service endangered species listing process
7. Provide practical solutions and preferred recommendations in a written report to the Executive Director

The SHWG met 4 times and debated all aspects of the gassing practice and addressed the seven charges. Much research and information was gathered and presented to the group. Resulting discussions were often spirited with strongly held beliefs in opposition to one another. It became clear over the course of the meetings that universally accepted recommendations approved by the SHWG as a whole would not be possible. As a result, fourteen “points of consideration” were developed to encapsulate and record perspectives related to the key elements of the gassing issue.

### **POINTS OF CONSIDERATION**

The following Points of Consideration (POC) were developed by the SHWG to attempt to capture the diversity of perspective on various elements of snake gassing and represent the culmination of much discussion. The POC document was sent to all twelve SHWG members to register his/her response to the statements. Eleven of the twelve SHWG members submitted documentation. The results are summarized and graphed below:

*Point of Consideration #1 - Snake-themed events are a long-standing tradition in some communities and provide social and economic benefits.*

All eleven members agreed with this statement.

*Point of Consideration #2 - Snake themed events/festivals have declined in number across the nation. Events that remain reported that they are diversified and that they are stable or thriving.*  
Nine of eleven SHWG members agreed with this statement. Two disagreed.

*Point of Consideration #3 - Based on an analysis of reports from 21 out of 25 snake-themed events across the nation, there does not appear to be a direct correlation between snake numbers/weights at those events and reported festival attendance or revenue.*

Five of eleven SHWG members agreed with this statement. Three disagreed. Three were undecided.

*Point of Consideration #4 - In contrast, Sweetwater reports that there is an expectation of higher numbers of snakes based on historical take, which drives attendance and economic impact.*

Four of eleven members agreed with this statement. Five disagreed. Two were undecided.

*Point of Consideration #5 - 11 of 12 of the individuals/companies in the venom industry reported that a prohibition on the use of gasoline to collect rattlesnakes in Texas would have limited impact on the supply of western diamondback rattlesnake venom for the pet vaccine, antivenin, or medical research markets.*

Seven of eleven members agreed with this statement. Two disagreed. Two were undecided.

*Point of Consideration #6* - Introducing gasoline and/or its associated vapors into naturally occurring western diamondback rattlesnake dens poses potential threats to populations of non-target species that might occupy those dens alongside rattlesnakes.

Seven of eleven members agreed with this statement. Two disagreed. Two were undecided.

*Point of Consideration #7* - The potential threats to populations of non-target species may be sufficiently addressed by placing restrictions on volume of gasoline used per den when collecting western diamondback rattlesnakes.

Two of eleven members agreed with this statement. Six disagreed. Three were undecided.

*Point of Consideration #8* - The potential threats to populations of non-target species may be sufficiently addressed by establishing a defined season for gassing western diamondback rattlesnake dens.

Two of eleven members agreed with this statement. Six disagreed. Three were undecided.

*Point of Consideration #9* - The potential threats to populations of non-target species may be sufficiently addressed by limiting gassing of western diamondback rattlesnake dens to specific geographic areas.

Four of eleven members agreed with this statement. Four disagreed. Three were undecided.

*Point of Consideration #10* - The potential threats to populations of non-target species may be best addressed by a statewide prohibition on gassing western diamondback rattlesnake dens.

Six of eleven members agreed with this statement. Four disagreed. One was undecided.

*Point of Consideration #11* - Proactive efforts by the state and/or private landowners to reduce the potential threats to populations of non-target species are preferred to having the potential threats addressed through official policy implemented by the U.S. Fish and Wildlife Service.

Nine of eleven members agreed with this statement. Two disagreed.

*Point of Consideration #12* - Flexibility and/or streamlining should be considered in the nongame permit process as it pertains to western diamondback rattlesnakes.

All eleven members agreed with this statement.

*Point of Consideration #13* - If any regulatory action relative to gassing western diamondback rattlesnakes is considered, there should be no restrictions on methods of taking rattlesnakes near or around man-made structures or similar areas of human activity to ensure human safety.

Nine of eleven members agreed with this statement. Two disagreed.

*Point of Consideration #14* - Texas Parks and Wildlife Department and relevant partners will assist with potential future research and provide support for alternative methods of collection of western diamondback rattlesnakes.

Ten of eleven members agreed with this statement. One disagreed.

## Points of Consideration Responses (11 total)

Agree ■ Disagree ■ Undecided ■

	1	2	3	4	5	6	7	8	9	10	11
1. Snake-themed events are a long-standing tradition in some communities and provide social and economic benefits.											
2. Snake themed events/festivals have declined in number across the nation. Events that remain reported that they are diversified and that they are stable or thriving.											
3. Based on an analysis of reports from 21 out of 25 snake-themed events across the nation, there does not appear to be a direct correlation between snake numbers/weights at those events and reported festival attendance or revenue.											
4. In contrast, Sweetwater reports that there is an expectation of higher numbers of snakes based on historical take, which drives attendance and economic impact.											
5. 11 of 12 of the individuals/companies in the venom industry reported that a prohibition on the use of gasoline to collect rattlesnakes in Texas would have limited impact on the supply of western diamondback rattlesnake venom for the pet vaccine, antivenin, or medical research markets.											
6. Introducing gasoline and/or its associated vapors into naturally occurring western diamondback rattlesnake dens poses potential threats to populations of non-target species that might occupy those dens alongside rattlesnakes.											
7. The potential threats to populations of non-target species may be sufficiently addressed by placing restrictions on volume of gasoline used per den when collecting western diamondback rattlesnakes.											
8. The potential threats to populations of non-target species may be sufficiently addressed by establishing a defined season for gassing western diamondback rattlesnake dens.											
9. The potential threats to populations of non-target species may be sufficiently addressed by limiting gassing of western diamondback rattlesnake dens to specific geographic areas.											
10. The potential threats to populations of non-target species may be best addressed by a statewide prohibition on gassing western diamondback rattlesnake dens.											
11. Proactive efforts by the state and/or private landowners to reduce the potential threats to populations of non-target species are preferred to having the potential threats addressed through official policy implemented by the U.S. Fish and Wildlife Service.											
12. Flexibility and/or streamlining should be considered in the nongame permit process as it pertains to western diamondback rattlesnakes.											
13. If any regulatory action relative to gassing western diamondback rattlesnakes is considered, there should be no restrictions on methods of taking rattlesnakes near or around man-made structures or similar areas of human activity to ensure human safety.											
14. Texas Parks and Wildlife Department and relevant partners will assist with potential future research and provide support for alternative methods of collection of western diamondback rattlesnakes.											