

**Fox and Coyote Management in
North Carolina:
*Assessing the Situation
for Process Recommendations***

**Prepared for the
NC Wildlife Resources Commission
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FINAL

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Executive Summary

The NC Wildlife Resources Commission (WRC) manages North Carolina's wildlife and fisheries resources in trust for all North Carolina citizens and to ensure the conservation of those resources for generations to come. WRC regularly seeks to improve the effectiveness of regulatory programs to meet the evolving needs of wildlife in a changing landscape as well as the desires of the citizens of North Carolina.

In March 2018, WRC approved the **North Carolina Coyote Management Plan (Coyote Plan)**, which provides a comprehensive framework for addressing a wide array of issues and concerns about coyotes in the state and presents management recommendations. Approval of the Coyote Plan followed completion of the **Fox and Coyote Populations Study Final Report (Fox Report)**, released publicly in 2012. The Fox Report describes the status of these species and recommends methods for managing populations of foxes while monitoring for adverse effects to coyotes. Both reports recognize the possibility for regulatory changes that may increase the harvest of coyotes, while acknowledging that structured feedback from stakeholders is crucial for the success of some proposed changes.

As a result of the two reports, WRC requested assistance to determine how collaboration amongst stakeholders might best occur when discussing the results of the two reports and the recommended proposed changes. Although various levels of public involvement have been a part of the Coyote Plan and the Fox Report, WRC wanted assistance on how best to involve interested and disparate parties, ways in reach stakeholders might share information and generate mutually-agreeable, strategies that WRC could realistically implement, and in general, work as collaboratively as possible if a group was convened for a future stakeholder effort.

The aim of a situation assessment, in this case, is to assess the perceptions of a broadly represented group about the application of a collaborative approach in helping to respond to and/or develop recommendations about management of fox and coyote in North Carolina. The findings of the assessment can be used to guide decisions on how to structure and conduct future public involvement steps where it is important to examine and discuss challenges and opportunities for improving fox and coyote management in NC.

The situation assessment involved three major tasks: 1) gather and review data through phone interviews and secondary sources, 2) analyze the data based on responses from the participants, the collaborative problem-solving literature, and the professional experience and expertise of the project researchers, and 3) propose recommendations on how best to structure and conduct a public involvement process, assuming that the data supports this pathway as a next step, particularly if a process may be fraught with disagreement.

Interviews by telephone (or in person) were conducted over a three-week period between January 29 and February 18, 2019 and lasted between 45 and 120 minutes. Individuals or individuals who represented an organization participated in the interviews. In all, 51 people were contacted, or contact was attempted. Of those contacted, 41 people engaged with the interviewers: 38 people completed the interview process, and 3 people participated in responding to a few questions because they are tangentially involved with foxes and coyotes. Respondents are identified by a general affiliation to maintain confidentiality:

- Academia (2)
- Fox Hunter/Dogs (4)
- Mounted Fox Hunters (2)
- Fox Hunting Preserves/ Dogs (5)
- Trappers (3)
- Land Conservationist: (4)
- Livestock Producers (6)
- Municipalities (1)
- Public Health (1)
- Wildlife Conservationists (6)
- Wildlife Management (2)
- Wildlife Preservationists (3)
- Red Wolf Advocates (2)

In addition to data collected through interviews, information was reviewed and gathered through secondary sources: the two WRC reports and website, the rules for Controlled Fox Hunting Preserves, materials provided by some participants to help explain their role and/or views, local news articles about coyote sightings, and the literature on collaborative processes. The secondary sources aided in further defining the context of the situation and in partially understanding its complexities.

The structured phone interviews were guided by an interview protocol that often resulted in rich narrative. Key themes were identified, in part by the significance and meaning participants used to explain their responses specific to a question. Furthermore, the frequency of similar response whether across affiliations or within the same affiliation, suggested significance and meaning to those participants. Likewise, an outlier response, stated once or twice, represented a way of thinking specific to that individual. The frequency of similar responses are not intended to represent a majority opinion; rather the results aid conveners, the participants, and the project researchers in discovering ways people think about an issue while exploring a subject more in depth as it is reflected by the diversity of perspectives. Since an assessment seeks to represent all the ways the respondents replied to questions, the report itself provides details about stakeholder perceptions of fox and coyote management and whether it is feasible, to 1) bring a group together in order to provide recommendations focused on fox and coyote management, as well as suggestions for how to, 2) convene a separate and distinct process focused on updating regulations for Controlled Fox Hunting Preserves.

Significant Findings

1. The respondents, except for 4 individuals, shared the following values:
 - a. their love and enjoyment of the outdoors, North Carolina's diverse wildlife and terrain, and the importance for ensuring these experiences and connections are available to the them and their families into the future;
 - b. pride in their connection to the outdoors and outdoor activities; and their respective level of knowledge, expertise, and experience in being able to competently engage in the outdoors; and
 - c. the importance of ensuring viable public health, and the health of pets, livestock, and wildlife.

Regarding the four individuals who did not express these shared values since they did not fully participate in the interview process; and while the fourth person participated in a full interview, the views expressed were specific to the importance of ensuring viable public health and health of pets, livestock, and wildlife.

2. Collaborative efforts generally are inclusive, and people are convened with various interests and aspirations to encourage inclusivity. Nearly all of the respondents reported a willingness to engage in collaborative effort, and as appropriate, serve in a primary or alternate role if a stakeholder process was convened. A number of individuals expressed interest in learning about others' perspectives in a civil manner, perspectives they had never had the opportunity to hear and in learning about recommendations that could satisfy multiple interests, even if a comprehensive agreement might not be achievable.

Some of the respondents are skeptical, concerned that collaboration will not promote their interests, though they remain willing to take part in effort, offer recommendations, and potentially support changes as long as the proposed changes are supported by data-driven evidence. It was also suggested that the effects of any proposed changes are monitored and adjusted when future data became available. While a few respondents seek to protect their interests; others are focused on learning about the proposed changes and how this group can help advance evidence-based changes for North Carolina. Some see collaboration as a potential tool to address their interests; others are not clear how to go about it. A few respondents shared their preference for maintaining the status quo, believing changes may impact their joy and livelihood (example: regulatory changes to controlled fox hunting preserves).

A number of respondents specified preconditions for a collaborative effort. The preconditions are:

- a. acknowledging what the problem is/is not with respect to fox and coyote management, the proposed changes being considered, and identification of the public involvement timeline;
 - b. recognizing some stakeholders believe wildlife self-manages except at a specific sites or situationally based events such as fox predation on chickens;
 - c. that each participant is expected to participate with an open mind and the willingness to engage in a thoughtful "learning conversation;"
 - d. understanding the importance of a collaborative as an educational process which includes data-drive conversations about facts pertaining to populations, predations, and policies (for example) while learning about the respective perceptions and interests of others; and
 - e. the importance to some for maintaining the status quo or limiting changes.
3. Respondents understand that their role will be to provide recommendations when WRC convenes a group. Therefore, expectations are/appear to be realistic about potential stakeholder contributions. However, it is not clear to the respondents what the process timeline might be and therefore the expectations regarding their time commitment to a process.
4. A collaborative process, in this situation, requires the following elements:
- a. a clearly stated decision space.
 - b. a structured process that is fair, open, and encourages meaningful interaction.
 - c. information that is shared openly and readily such that everyone has access to the same information.
 - d. the "right" people are participating; they are committed to learning, and diligent in educating their constituents about the challenges and potential opportunities that result from the meeting discussions.
 - e. satisfaction of multiple interests is a possibility.
 - f. attainment of a higher goal is a possibility (example: better management of wildlife in general while serving to inform WRC about future issues and opportunities).
5. A number of respondents have voiced gratitude for the opportunity to collaborate on recommendations pertaining to fox and coyote management. Others have voiced specific concerns about the motives of other stakeholders including the motives of WRC in providing a stakeholder process. Some stakeholders believe WRC will specifically prohibit them from participating in their traditional ways of hunting. Assumptions about others can stifle effective communication and quickly lead to misunderstandings and adversarial tones when specific characterizations lead one's perceptions. Where mistrust exists, it will be helpful if those stakeholders can set aside their "judgements" to create a climate for collaboration while testing whether their theories of conspiracy are accurate.

Recommendations

1. Based on the interviews and qualitative data analysis, the project researchers recommend convening a stakeholder process that can result in recommendations to WRC regarding the management of fox and coyote in North Carolina. The process is expected to be efficient, transparent, and inclusive, with a clear decision-making process and decision space. Stakeholders, convened to participate, will be asked to commit to their roles, as well as clearly defined procedures that will govern the stakeholder process.
2. We recommend a four-part process:
 - a. A Single-Text approach to update regulations pertaining to Controlled Fox Hunting Preserves in North Carolina given the limited time available for other forums of discussion. Based on the development of a template of proposed recommendations by WRC, a facilitation team can manage the development of a single working document that reflects the issues, concerns, and mutually held interests shared by stakeholders, including the identification of topics with broader support. A straw or draft set of recommendations in edit-able form (e.g., Word) can be sent directly to the stakeholders with a deadline for the return of proposed and redline edits that will form the development of draft 2.

For proposed changes that appear non-controversial, and/or where there is full support of the same recommendation(s), the facilitation team can incorporate those edits into draft 2. For more substantive negotiations about controversial items, the facilitation team can include the items for discussions, and distribute for additional edits. The team will facilitate the same steps until there is agreement on the recommendations, or agreement about some of the recommendations which may result in the groups' best work. The latest version is expected to express the interests of the stakeholders in an acceptable manner, bringing some level of support or agreement (Shane, 2005). In addition to collaborating with the primary stakeholders on updating the regulations, events such as public open houses could be offered to inform the public about the status and/or results of updated regulations

- b. Convene a broader group of interested parties focused on fox and coyote management in North Carolina. The group would be tasked with reviewing the two WRC reports and proposed changes contained in the reports. The recommendations could be evaluated based on technical and scientific information, stakeholder expertise and experience, regulatory requirements that may need to be considered due to the specific recommendations, and any known budget and staffing constraints to produce a series of recommendations for WRC to consider. Some level of joint-fact finding may be employed in this process including public engagement process (public open houses for example) that invites additional feedback before final recommendations are submitted. The broader stakeholder process focused on fox and coyote management should be distinctly separate from the discussion about Controlled Fox Hunting Preserves which is expected to launch initially, during a much shorter timeline.
 - c. Support for the broader stakeholder group can be created by establishing an advisory or steering committee from amongst the members of the stakeholder group. The role of the advisory or steering committee is support to the facilitators and WRC in the development of a timeline and meeting agendas, and to assist in guiding the overall process. Further, the advisory or steering committee along with WRC staff can recommend technical experts to present important and useful information for consideration by the stakeholders. Those with technical knowledge can help review preliminary and current studies and provide comments and suggestions prior to distribution to the stakeholder group.

- d. Consider the value of convening community and professional leaders who support a long-term collaborative that can foster future recommendations in support of management decision-making. This group could serve as a mechanism for gathering feedback from stakeholders. A long-term public involvement approach could help various groups and WRC maintain ongoing communication and accountability about future wildlife resources issues in North Carolina. This model could include establishing work groups to explore topics, develop proposals, and resolve future differences. Such a group could be particularly valuable as the state's population grows and with it, the built environment, potentially resulting in habitat loss and fragmentation, which could affect wildlife interactions.

Fox and Coyote Management: Assessing the Situation for Process Recommendations

Introduction

Background

The NC Wildlife Resources Commission (WRC) manages North Carolina's wildlife and fisheries resources in trust for all North Carolina citizens and to ensure the conservation of those resources for generations to come. WRC regularly seeks to improve the effectiveness of regulatory programs to meet the evolving needs of wildlife in a changing landscape as well as the desires of the citizens of North Carolina.

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As a result of the two reports, WRC requested assistance to determine how collaboration amongst stakeholders might best occur when discussing the results of the two reports and the recommended proposed changes. Although various levels of public involvement have been a part of the Coyote Plan and the Fox Report, WRC wanted assistance on how best to involve interested and disparate parties, ways in which stakeholders might share information and generate mutually-agreeable strategies that WRC could realistically implement, and in general, work as collaboratively as possible when a group was convened for a future stakeholder effort.

Purpose of the Situation Assessment

An aim of a situation assessment is to assess the perceptions of a broadly represented group about the application of a collaborative approach in helping to respond to and/or develop recommendations about management of fox and coyote in North Carolina. The findings of the assessment can be used to guide decisions on how to structure and conduct future public involvement steps where it is important to examine and discuss challenges and opportunities for improving fox and coyote management in NC.

Finding effective options to address a public resource issue or opportunity requires an understanding of the situation, including its dynamic mix of procedures, relationships, and substance (Carpenter & Kennedy, 2001). Although public disputes may share common characteristics such as numerous parties with different levels of expertise, interests, and decision-making approaches, each conflict is unique. A situation assessment is an integral part of a decision-making process centered on a contentious issue. By developing a thorough

understanding of the situation and the specific components of the conflict, the parties involved may have a better chance to establish an effective strategy for managing conflict and making decisions.

A situation assessment principally involves gathering information from a cross-section of organizations and individuals and may include data from secondary sources. An assessment is a means to gain insight and understanding of the issues, the diverse perspectives of stakeholders, the sources of conflict, and the willingness of those involved to improve the situation. The assessment culminates in recommended strategies for addressing the situation, including collaborative solutions based on the respondents' recommendations.

A situation assessment can be beneficial to all involved. It can: 1) serve as a reflective tool to clarify respective interests, positions, and issues; 2) educate those involved about the various aspects of the situation while building a shared body of information and knowledge; 3) provide starting points for bridging interests and working relationships; 4) ensure that the right parties are engaged in the problem-solving effort (Carpenter & Kennedy, 2001); and, 5) offer insights on how to proceed in a contentious situation. The framework of the situation assessment is based on the literature of conflict analysis, environmental decision-making, public involvement, and collaborative problem-solving (Bingham, 1986; Carpenter & Kennedy, 2001; Creighton, 2005; & Wondolleck & Yaffee, 2000). Hence, the major components of the assessment are based on principles of practice and research.

This assessment is not an extensive study of the many individuals and organizations involved. Instead, the assessment captures a range of perspectives and ideas, shedding light on the subtleties of the issues driving this particular situation. Although this report makes recommendations on how to work through some of the issues and concerns, those interviewed as well as those who did not participate or were not contacted will have an opportunity to provide additional comments during the established public comment period, if and when regulatory changes are proposed.

Methodology

The situation assessment involved three major tasks: 1) gather and review data through phone interviews and secondary sources, 2) analyze the data based on responses from the participants, the collaborative problem-solving literature, and the professional experience and expertise of the project researchers, and 3) propose recommendations on how best to structure and conduct a public involvement process, assuming that the data supports this pathway as a next step, particularly if a process may be fraught with disagreement.

Data Collection

The project researchers developed an interview protocol, or questionnaire, in consultation with WRC staff. The protocol consisted of a series of open-ended questions designed to help respondents think about collaborative processes and reflect on how such processes might be applied in this situation. Open-ended questions are useful for gathering qualitative information and enabled the project researcher to clarify and test the meaning and nuance of initial responses. Subsequent questions may have been asked to clarify or test for understanding about a response. For instance if a respondent said, *"Seek population control not elimination,"* an example of a question of clarification could be, *"Please tell me what "population control" means to you."*, with which the respondent might state: *"Human and wildlife populations interact hence it's important to control populations of species that cause damage to property or pose health and safety risks to humans or domestic animals while conserving protected species."*

The interview protocol (Appendix B), followed these main lines of inquiry:

1. Ability and willingness of the parties to participate in a collaborative process;
2. Ability and willingness of the affected stakeholders to work with other stakeholders, even during times of disagreement;
3. Determination of the issues that could/should be resolved collaboratively;
4. Structural constraints such as time, distance, and availability that could affect process design;
5. How the results of the data collection can best be shared and applied;
6. Actions that should be taken by WRC and others for management decisions to be seen as legitimate;
7. Views about how a collaborative process should be conducted; and
8. Determination of the obstacles that may hamper success and ideas for how to overcome those obstacles.

Personal interviews provide a rich source of information. The elements that contribute to a robust situation assessment are the willingness of people to engage in the interview process, the openness of the participants in responding to the interview questions, and the critical thought participants offered in responding to the assessment questions. Those who participated in the interviews conducted from January 29 through February 18, 2019, were responsive to the timeline, generous with their time, and thoughtful in their responses.

The process for identifying groups or individuals to interview was incremental. It began with an initial list of interviewees provided by WRC. This initial list contained contact information for people who had contributed to the former reports; it was neither prescriptive nor preferential in nature. The initial list was divided into 14 main groups or affiliations, and then reduced to 13 affiliations to prevent a group from being readily identifiable. Several respondents offered names of individuals they believed could present different information either along a similar or dissimilar perspective. Twice, potential stakeholders reaching out to the project researchers resulted in additional interviews.

Interviews by telephone (or in person) were conducted over a three-week period between January 29 and February 18, 2019 and lasted between 45 and 120 minutes. Individuals or individuals who represented an organization participated in the interviews. In all, 51 people were contacted, or contact was attempted. Of those contacted, 41 people engaged with the interviewers: 38 people completed the interview process, and 3 people participated in responding to a few questions because they are tangentially involved, currently, with foxes and coyotes. Respondents are identified by a general affiliation to maintain confidentiality:

- Academia (2)
- Fox Hunter/Dogs (4)
- Mounted Fox Hunters (2)
- Fox Hunting Preserves (Dogs) (5)
- Trappers (3)
- Land Conservationist: (4)
- Livestock Producers (6)
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In addition to data collected through interviews, information was reviewed and gathered through secondary sources: the two WRC reports and website, the rules for Controlled Fox Hunting Preserves, materials provided by some participants to help explain their role and/or views, local news articles about coyote sightings, and the literature on collaborative processes. The secondary sources aided in further defining the context of the situation and in partially understanding its complexities.

Data Analysis

Interview results were compiled and organized into key themes based on each question from the interview protocol. The assessment does not focus on "majority views" but rather identifies central ideas captured from a cross section of individuals. Individual responses were clustered according to categories or themes and presented without direct attribution. In identifying themes, the assessment considered issues or perspectives across the pool of people interviewed and within the context of each interview. Themes are a means to present findings and are formed around specific issues, topics, and perceptions about issues, events, or other users. Topics, issues, and perceptions that appeared frequently were considered "key" or "significant" and became the basis for a theme. A topic, issue, or perception that is shared by few respondents or unique to a single respondent could also be considered significant and form the basis of a theme if it clearly defined a particular stance or view that has *explanatory power* regarding the issue under study. For example, a perspective held by one person that describes a motive or rationale for a particular set of beliefs – say, private property rights – may be presented by only one respondent but may become the basis for a theme.

Using the thematic grouping of responses, the researchers named essential elements that should be considered in the approach to and design of a collaborative decision process for future stakeholder engagement. These elements included citizen perceptions and expectations about collaboration, substantive issues that should be discussed and resolved through collaboration, interpersonal or inter-group dynamics that may affect group interaction, and processes and techniques that respondents considered important or necessary. How issues are raised, and solutions pursued are as important as the substantive nature of those issues. Hence, it was important to understand the history of the central issues and concerns, the level of trust among the parties, the openness of the communication, and their willingness to work together.

The analysis also sought to identify the possibilities for collaboration. That is, interview responses were analyzed to determine whether there existed sufficient common interest among those interviewed to seek a mutually satisfactory solution. It must be noted however, that it was beyond the scope of this study to identify and evaluate the potential for a negotiated outcome among stakeholders. In other words, the study did not attempt to define the conditions (e.g., days, time of year) under which still hunters might avoid hunters with dogs in order to minimize conflict.

Basis for Recommendations

Based on an analysis of the participants' responses, "key" or "significant" viewpoints resulted with *explanatory power* and recommendations for next steps. The following criteria form the basis of the analysis by indicating next steps toward process design considerations and public involvement:

1. Parties understand the limits to their authority in the process and have realistic expectations about their contributions.
2. Parties agree on goals for the collaborative problem-solving effort (options may vary for an agreement on a course of action, identification of new options, joint fact finding on the impacts of various options, joint projects, and shared learning about one another's interests and concerns, etc).
3. Parties agree on a manageable number of interdependent or related issues. There is a sufficiently well-developed factual base to permit meaningful discussion and resolution of the issues.

4. Participants interested in or affected by the outcome of the collaborative-problem solving effort can be identified, and the number of anticipated participants can be managed within the process as designed.
5. The collaborative problem-solving effort is inclusive – all parties relevant to the issue and its resolution are able to participate. Moreover, all parties have an equal opportunity to participate in designing the process. The process must be explainable and designed to meet the circumstances and needs of the situation.
6. The collaborative problem-solving effort is structured to allow for continuous dialogue over many weeks/months – meetings are scheduled in advance and parties are able to attend meetings. Dialogue is continued from one meeting to the next and participants are able to move the discussion along from meeting to meeting, i.e., discussions do not have to be repeated because participation changes from meeting to meeting.
7. Parties are interested in participating in good faith. They are likely, if not more likely, to achieve their overall goals using collaboration than they would through alternatives.
8. Parties can obtain adequate resources to participate, including technical support; all parties have equal access to relevant information and the opportunity to participate effectively throughout the process. Flexibility can be designed into the process to accommodate changing issues, data needs, political environment, and programmatic constraints such as time and meeting arrangements.
9. Collaborative problem-solving effort will not cause unreasonable delay.
10. Parties are accountable to the processes that they have agreed to establish.
11. Mechanisms exist to consider the feedback of interested parties.

Analysis and Results

The response data, and consequently this section of the report, are divided into seven major topical sections:

1. respondents' perceptions about themselves;
2. respondents' perceptions about WRC's purpose statement;
3. respondents' perceptions about the issues;
4. respondents' perceptions about geographic and cultural issues;
5. respondents' perceptions about collaboration;
6. respondents' perceptions about process design; and
7. respondents' perceptions about the use of and access to information.

Each section is introduced with an explanatory summary, and then themed as appropriate based on what the data revealed. Examples of explanatory comments made by the respondents are included to under each theme to reveal the diversity of comments that supported that theme. Because the interviewees' responses to the questions hold significant explanatory power, direct quotes and/or paraphrased statements contribute to a major portion of explaining the report. Specific comments are attributed by a respondent's affiliation in the first five major sections: Respondent's Perceptions About Themselves, Respondent's Perceptions About WRC's Purpose Statement; Respondents' Perceptions About the Issues, Respondent's Perceptions About Geographic and Culture Issues, and Respondent's Perceptions About Collaboration. Please note that similar attribution is not necessary on comments about Respondents' Perceptions about Process Design and Respondents' Perceptions about the Use of and Access to Information though will be noted explanatory power is considered significant.

Respondents Perceptions About Themselves

A number of organizations across North Carolina are connected to fox and coyote management. In some examples surrounding fox and coyote management, there are as many different perspectives within an organization as there are differences amongst groups with similar affiliations. This section contains brief snapshots of those who were interviewed, including how they see themselves engaged in the discussion about fox and coyote management, and what is important to them with respect to management of these species. The brief descriptions for each category represent more than 1 organization and are presented here collectively.

Academia Perspectives: professionals involved in academic outreach are connected to local communities, in front of monitoring emerging issues, and can quickly connect to communities and local associations about issues faced with coyote and fox management. For example, in February, two outdoorsmen spoke to the Sampson board of county commissioners about allowing a fox trapping season in the county where it is currently not permitted. Local leadership has lobbied the NC General Assembly to enact legislation that will allow predatory animals to be taken (Berendt, 2019). From a research perspective, the study of canid genetics and addressing the origin of the red fox in America (whether it is American or the Eurasian red fox) is ongoing research. In 1972, the red fox was not in Eastern Carolina; by the 80's, sightings were reported.

Management Connection: local outreach capacity--monitors emerging issues and connects to communities as needed. Research being conducted is often shared with WRC.

Municipal Perspectives: foxes and coyotes are not currently an issue for municipalities; associations representing municipalities are willing to directly reach out and inquire with the membership as needed.

Management Connection: are responsive to concerns voiced by their constituents about foxes and coyotes. Some municipalities have developed their own management plan for handling conflicts with these species.

Public Health Perspective: consider themselves ancillary players in the discussion of coyote and fox management

Management Connection: defer to experts (biologists and others) on how to manage these species. Work with WRC to share site specific health expertise but are not directly involved with coyote and fox management. They believe it is important to involve and learn from the state team of Agricultural Vets about potential diseases and parasites that pets and livestock can contract from wildlife. They promote that proactive management involves vaccination of pets and livestock to minimize health concerns

Land Conservationist: Perspectives: manage very large land holdings with comprehensive land management strategies. Often these stakeholders see management as a site-specific strategy vs a species management strategy, and thus may offer concerns similar to others and ask, "what is the problem that requires management?"

Management Connection: some serve on non-game wildlife committee that reports to WRC or works with WRC on a close basis. Several work on geographic control (not population control) to address site specific issues with predators. These professionals are working to support changes in trapping methods while encouraging changes in fox trapping seasons within specific counties. For example, a management concern in natural areas is red fox preadaptation on nesting sea turtles or shorebirds nesting areas (there is also concern for other species like coyote, coons, and feral cats). Hence the effort is geographic control not population control. Though some Land Conservationist: efforts do not allow hunting given

their mission, others do and see the benefit of it for various reasons including population control. In addition, Land Conservationist: managers are aware of conflicts between wildlife in natural areas and human populations including motor vehicle collisions and interactions with people, pets, and livestock. They offer a number of strategies, including hazing, to avoid interactions with wildlife.

Trapper Perspectives: this group is active in the outdoors with hunting, fishing, trapping for consumption or setting traps to deal with nuisance issues. In a community, the trappers are neighbors helping neighbors, landowners to landowners. The connection to fox and coyote is the love of outdoors. Some trappers do not support live markets (defined as selling live foxes and coyotes to controlled fox hunting preserves) while others do; some trappers are more interested in the science and innovation of trapping, while others trap for fur and meat, for both home use and the fur market. Trappers are responsive to concerns about their practice such as trappers decimate the resource population, inadvertently trap and harm other species, including hunting or sporting dogs, and pets. Some trappers work as wildlife damage control agents and respond to nuisance species that are causing damage near homes.

Management Connection: trappers are interested in promoting responsible trapping and will work with the WRC to promote conservation and management of furbearer species. They have been involved in learning about fox laws across the state. Foxes are treated as game animals rather than furbearers and are not permitted to be trap when county laws dictate. Laws related to hunting and trapping of foxes vary county by county. Even if the trapping season is under way for foxes in NC, WRC may not allow foxes to be taken in counties that do not allow it. It is believed that where fox trapping is allowed, incidental take of coyote may occur helping, helping to manage the population. Last year, trappers were encouraged when 10 additional counties agreed to allow fox hunting. Currently, there is the perception that a strong hunting/sporting dogs' presence appears to be resistance to trapping fox, thus limiting the sharing of the public resource. The impact of lawful trapping is evident when one county, which does not allow trapping of foxes, is overrun with them. Some trappers perceive their contribution to management of coyote and fox is selling to live market, a topic discussed much more often than trapping for fur market.

Fox Hunter/Dogs Perspectives: love to hunt, love to hunt with their dogs, and the hunting is not limited to foxes. Most of the Fox Hunter/Dogs s, have been hunting with dogs since they were young. Several houndsmen groups started in North Carolina to represent this sport of hunting and in some cases, for the preservation of gray foxes. They want to be able to hunt and to hunt with hounds. Some fox hunters/dogs perceive that the fox populations have been lower in the last few years, noting that the populations go in cycles, increasing, then decreasing, then increasing again. Several fox hunters/dogs discussed their views on the fox preserves. Some fox hunters use the services of "puppy pens" to train their dogs, and though some may support fox preserves in general, several are not in support of commercial operations that allow 100 to 200 dogs on 100 acres. Further, some believe it would be better if the preserves used coyotes, not only because coyotes are a better investment, but also because they would last longer than gray foxes. They have had meetings with preserve operators to make suggestions about putting outside coyotes into preserves and limiting the number of foxes inside preserves. Field trials are in Jan, Feb, and March so they get 30-35 foxes and put them in the preserve.

Management Connection: work closely with WRC to maintain working relationships which were not always the most productive in the past. With houndsmen associations, an important goal is to work steadily to ensure ethical standards with respect to care for their dogs, in working with private landowners, and in working with other organizations through educational outreach. Some fox hunters work within their community to limit conflict with respect to hunting dogs' issues. Example: owner needs to get dogs to the vet for health reasons, and rather than wait for animal welfare to

tend to matter, follow up directly. They educate and ensure medical action is taken. Value of community working relationships goes up and changes behavior, according to some trappers, when working together for the benefit of their county.

Mounted Fox Hunter Perspectives: there are two kinds of Mounted Fox Hunters: those who ride to hunt and those who hunt to ride. Mounted Fox Hunters (sometimes referred to as the Red Coats) often believe there is nothing like being outside, on your horse and with your dogs, seeing the dogs work. They express great pride in the fox hounds they have raises, trained, and groomed for hunting. Some hunt 3 to 4 days a week (gray fox, red fox, bobcats, and coyote). Mounted Fox Hunters are highly invested in their sport, given the expense involved, and live close to or in the country where large tracts of lands are available to hunt.

Management Connection: mounted Fox Hunters, like Land Conservationist: Managers, asked the question, “**what is the problem that requires management?**” They note that increases in coyote populations can be seen as horrific by some people, but they emphasize that that may be a naturally occurring event. In part, their perspective may come from interacting with wildlife in a large landscape where issues of wildlife interactions may not be frequent. In the past, this group has installed artificial feeders for foxes to enable a stronger red fox population to survive.

Fox Hunting Preserves Perspectives: fox hunting preserves may be small puppy pens (mostly used for training of hunting dogs) or large commercial preserves, that offer competition events. The largest preserve in North Carolina according to one person interviewed is 1200 acres. Sometimes the skills to develop and manage a fox preserve have been instilled at a young age; several exclaimed how they had been hunting with dogs for most of their lives, hunting deer, fox, and coyote. Owners pay significant dollars and contribute large amounts of time toward the training and health of their dogs.

Fox preserve owners may be more than a preserve owner; they may also serve as a trapper, farmer, hunter, and community member, while enjoying the pleasure of running their dogs, hearing them in the forest, or training them. They can be avid hound hunters of deer and outside fox, and some trap coyotes and fox. Fox preserves may also be connected with an association focused on education, breeding, and support of dogs for hunting (deer, rabbit, squirrel, coon), show, and competitions. Certain traits, depending on the use of the dog (records, contests, speed, scent, bark) make some dogs more suited to some activities than others. Some note that the idea behind the preserves is competition, not the kill. The preserves are seen by some to bring tourism dollars to counties (fees to enter and participate; the competitions are a family affair). In addition to the competitions, there are field trials, dog races, and training in the daylight. Preserves vary in whether they enclose both fox and coyote or mostly coyotes with some believing that coyotes run better in the daylight.

Management Connection: foxes and coyotes in preserves are vaccinated, fed, and dewormed. The enclosures make it safer for dogs to run (and hunt). Trappers can legally trap foxes (depending on county ordinance) and coyotes, to sell to the preserves. Trapping is seen as the best way to control the coyote population from a planning standpoint. In the past, there has been tension between hound hunters and still hunters. Rebuilding relationships has been important for good will, and to discuss and share strategies for hunting and trapping so that future generations can enjoy the same opportunities. Others work to protect hunting preserves and sporting dogs (the dog that runs the distance and loves to compete) and have been successful in protecting preserve operators to operate and sporting dog events for those who enjoy them.

Livestock Producer Perspectives: are varied in their connections to fox and coyote management. Some are producers of commodities, managers of herds (or flocks), and/or veterinarians who work specifically with

farmers to treat large animals such as cattle, sheep and goats. Coyotes, seen in rural areas and heard at night, are sometimes blamed for predation of smaller livestock while foxes are blamed for predation on chickens. Some losses attributed to coyotes may be by feral dogs (wild dogs), domestic dogs, or black vultures. Domestic dogs allowed to run loose may tear up a young animal for the pleasure as opposed to coyotes who kill for food source. Livestock Producers are also concerned about health issues that might impact their livestock.

Management Connection: farmers are highly proactive and generally consider themselves successful in managing livestock for interactions with predator species. For example, livestock producers will manage a flock of sheep (or chickens) with the use of guard dogs or those with cattle, may choose donkeys and llamas as useful protection from predators. In addition to electric fencing to minimize livestock loss, cows and calves in pastures are closely monitored since calves, like chicks, lambs and other young livestock, are susceptible to predation. Neighbor to neighbor education occurs: the consequences of habituating wildlife are discussed (example: neighbors feeding racoons) or the importance of keeping dogs home. Dogs allowed to run loose may form a pack and exhibit destructive behavior for the pleasure of it. Associations connected with livestock producers work with WRC and other partners to ensure that livestock producers have access to top notch educational resources that help them manage predator and health situations. They work with WRC to plan educational sessions for members such as public comment focus groups or how members can be involved in the rulemaking process. They will invite WRC biologists to provide educational programs on county and statewide management strategies for protecting livestock, recognizing that there is more than one way to manage a predator. Gaining practical knowledge, taking part in listening sessions, and staying informed are critical strategies for managing and learning about predators. Livestock Producers value open season on coyotes when there is an aggressive predator. Having a plentiful supply of small game nearby as a food source for coyotes and foxes helps protect livestock and poultry.

Wildlife Conservation Perspectives: a group with varied interests with respect to management of coyote and fox. For example, deer and bird hunters may be more interested in coyote management because coyotes are considered a contributing factor to the decline of deer (fawns), quail, woodcock, and grouse populations. Biologists in this group are more focused on predation of specific bird nesting sites and keeping the ecosystem intact. Another organization promotes statewide conservation of wildlife and fish, amongst sportsmen and nature lovers that create broad and diverse membership across all political views. They implement outdoor-projects and nature based- promoted conservation. These advocates, for the most part, promote using the best science available to determine policies related to the proper management of resources and the publics who utilize these resources. Deer hunters wrestle with the issues of predation of fawn and are concerned that deer populations have decreased.

Management Connection: bird diversity is important in some areas. Red foxes and coyotes are monitored near nesting sites. When necessary, a work plan has been developed to remove either fox or coyote. Some members of this group believe the Coyote Management Plan (CMP) is a comprehensive and accurate tool for addressing the current status of coyotes in NC and the increase in public concern. One noted that strong feelings and tensions about wildlife abound and are found in a number of groups, not simply those with "welfare" interests. Most believe that best available science is the most worthwhile way to manage wildlife in North Carolina.

Wildlife Management Perspectives: both wildlife managers contribute to collaborative efforts for species and predator management. There is integration of coyote management and red wolf management on Albemarle-Pamlico Peninsula.

Management Connection: mitigate damage resulting from wildlife in particular situations, such as at airports; collaborate with WRC annually, specifically on management of the coyote population since 2008 in the introduction area of the red wolf. Manage for impacts of threatened and endangered species.

Wildlife Preservation Perspectives: offer perspectives on how to reduce conflict between wildlife and people through education. Additionally, some particular efforts have focused on unsporting methods that exist in some hunting traditions.

Management Connection: belief that wildlife is self-managing and it is people need to think about how to manage their interactions with wildlife. Education is the way to reduce conflict for humans, pets, livestock.

Red Wolf Advocates Perspectives: more concerned about coyotes than foxes as people seldom complain about foxes. Organizations focused on red wolf recovery in NC and SC in the coastal area. Have concerns about gunshot mortality due to mistaken identity (red wolves and coyotes look similar from 100 yards away) and hybridization resulting from interbreeding between red wolves and coyotes.

Management Connection: important to develop social tolerance for wild canids and live alongside them as they are here to stay. A yearling coyote and red wolf pups may be difficult to tell apart: average red wolf (60-70lbs), and average coyote (30-40lbs). Have contributed to the coyote management plan about gunshot mortality rates given mistaken identify between other wild canids and the red wolf.

Affiliations to include in the future: the Council of Governments (COGs) were not contacted during the assessment process. COGs may have a perspective on fox and coyote management in various regions of the state and thus it may be prudent to reach out to the North Carolina GOGs, perhaps especially in the eastern part of the state initially, to determine if they have any feedback to contribute to the process.

Respondent's Perceptions About WRC Purpose Statement

The NC Wildlife Resources Commission stated purpose of this effort is to gather recommendations from stakeholders about evidence-supported methods that will provide effective and efficient management of foxes and coyotes throughout North Carolina, while:

1. allowing equitable access to these species for all users,
2. maintaining sustainable populations of foxes,
3. continuing to provide tools for reducing depredations by these species, and
4. optimizing wildlife welfare considerations.

Respondents in general, supported the purpose statement. Clarifying questions and concerns were developed by some respondents particularly regarding the meaning of "welfare considerations." Some made recommendations for improving the purpose statement. Four themes resulted: 1) respondents generally support the purpose statement; 2) clarifying questions about the purpose statement; 3) concerns about the purpose statement, and 4) recommendations about the purpose statement.

Respondents Generally Support Purpose Statement:

- **Trapper:** agree with stated purpose and had hoped for this kind of process to start sooner; been waiting a long time for it. Not clear on the public hearing and involvement timeline and how it will connect with a stakeholder involvement process and hope WRC will provide this information.
- **Academia:** happy to see this purpose statement. We need to consider the nature photographer as well as the hunter. Like evaluation-driven projects.
- **Fox Hunter/Dog:** clear statement and hitting everything important.
- **Fox Hunter/Dog:** good with statement. History of eastern NC hunters and WRC was not very good for a long time. My predecessors opposed everything WRC did because of the agency's treatment of the public 40 years ago. I have been working to change those relations.
- **Fox Hunter/Dog:** well stated; purpose focused on NC Citizens (not special interests), allowing stakeholders to contribute to the idea of how to manage coyote and fox with landowner assistance.
- **Livestock Producer:** hear them and leave them alone; unclear what the issues are.
- **Mounted Fox Hunter:** love evidence-supported methods in this purpose statement. Clouded in mystique and evil, I hope the process will educate others about the coyote.
- **Wildlife Preservationist:** well-stated. Evidence-based is the place to start, with measurable objectives AND transparency.
- **Land Conservation:** no concerns with purpose statement - would like to see equitable and appropriate management across the state.
- **Fox Hunters/Dog Preserve:** ok with purpose statement. On #3, the way to reduce depredation is not to kill the animal inadvertently trapped. One bad apple created this situation. Control coyote populations by opening the season on the front end. Avoid catching animals that are going to breed, give birth, or raise young in Feb. on the back end of the season. Allow young to mature. Permit to sell to preserves.
- **Fox Hunters/Dog Preserve:** encompasses a full circle purpose: control of populations, allows hunters, trappers, the amendment of seasons, and resolves multiple accounts.
- **Fox Hunters/Dog Preserve:** no questions currently. Trapping for live markets is increasing. Some counties allow dog hunting; about 40 counties do not allow. Commercial deer hunting seems to be increasing.

Clarifying Questions About Purpose Statement

Questions about the meaning and application of "welfare":

- **Mounted Fox Hunter:** ok in general though not clear what "optimizing wildlife welfare considerations" means. Some may read this as the intent to ensure non-hunting processes with dogs similar to what occurred in England with its long-standing tradition of hunting foxes.
- **Livestock Producer:** ok in general. Consider that the word "welfare" can raise questions; people may not be willing to converse or may believe this notion will go too far.
- **Wildlife Conservationist:** WRC's purpose is around the public trust. Unclear what #4, *optimizing wildlife welfare considerations*, is intended to address.
- **Fox Hunter Preserve/ Dogs:** seems ok. Not clear what #4 means. Is "welfare" a term limited to animal rights perspectives or does this statement mean something else?
- **Wildlife Preservationist:** want to hear more about the optimizing animal welfare considerations.

Other clarifying questions:

- **Land Conservation:** how will this purpose statement impact lands with restrictions to hunt?
- **Wildlife Preservationist:** unclear what #1 means, *allowing equitable access to these species for all users?* Does this mean hunting access?

General Concerns About the Purpose Statement

- **Land Conservation:** vague purpose; WRC's first responsibility is to wildlife and this statement appears to presuppose an issue with human interaction. Can result in conflicting goals.
- **Academia:** item #3, *continuing to provide tools for reducing depredations by these species*, is awfully close to the bent that predators are bad and thus decisions will not be made with science. Need options to decrease depredations rather than eliminating the predator. Predation is bad if predators are eating your goats.
- **Trapper:** support the purpose statement. However, the 2012 Fox Study provided recommendations that WRC does not follow now (though the NC Legislature has limited access to this resource). Field staff is doing an excellent job of assessing the resource and making recommendations; would like to see administration support science-based recommendations.
- **Fox Hunter/Dog:** my only concern is WRC is limiting access now in some areas. I can hunt fox year-round; dogs need to hunt; they can't sit for 3 months. I'm opposed to any season on fox hunting.
- **Livestock Producer:** hear them; leave them alone. Not sure what the problem is.

Recommendations to Improve Purpose Statement:

- **Livestock Producer:** suggest #4 is revised to state: optimizing wildlife &livestock welfare considerations.
- **Wildlife Management:** ok with purpose statement. Do not want to add red wolf to the mix but think continued and sustained input, education across generations would be helpful moving forward.
- **Wildlife Management:** pretty clear. Might include federal standpoint such as completing a detailed Environmental assessment every 5 years.
- **Red Wolf Advocate:** Great to include evidence -based. Frustrating not to mention red wolves; include consideration for the Endangered Species Act.

Perceptions About Issues Framing the Collaboration

Respondents were asked to describe the key issues they believe need to be discussed for a collaborative effort to be successful. Early in the interview, the respondents had an opportunity to provide substantive comments on issues that he or she considered important. The question asked:

***Question #3:** What do you believe are the desires of stakeholders with respect to management of foxes and coyotes? What strategies could be used to address those desires? And what management strategies could be used to effectively and responsibly manage both foxes and coyotes at the same time?*

Responses included a wide range of topics, but most centered around four themes:

- 1) Equal Access to Public Resources,
- 2) Coyotes as Self-Managing Species,
- 3) Perceptions About Hunting and Trapping seasons, and
- 4) Perceptions about Controlled Fox Hunting Preserves. Responses to question #14, specific to Controlled Fox Hunting Preserves, were included in this section.

Ensure Equal Access to Public Resources

Create a process that ensures equal access to the resource.

- **Wildlife Management:** equal access. Some people think that some stakeholders have more access than others to what is a public resource.
- **Fox Hunter/Dog:** several people believe that illegal trapping is a big issue and needs to be stopped. There is no enforcement; people are trapping out of season and buying out of season.
- **Fox Hunter/Dog:** preserve or increase fox populations, especially gray foxes.
- **Livestock Producer:** change the economy of trapping. Make coyote more valuable and fox less valuable.
- **Trapper:** education is based on science and cooperative discussion from the user groups. With an increased urban environment, there may be increased conflict with users and user groups. In rural areas where regulations are paramount, hear/learn from respective voices so that cooperative agreements may be easier to achieve for a number of us and not us for some. Ensure that WRC Administration supports the work of staff/biologists and the recommendations that they provide. Example: had attempted to change fox laws awhile back but support from WRC Administration did not appear to be presence.
- **Wildlife Conservationist:** the problem is controlled hunting preserves for coyotes; trappers trap them and sell them even though it is illegal; the pens are a consistent cycle; people trap the coyote, sell to pens, then they get out. We need major consequences for illegal trapping of coyote—they are trapping to sell the animal, not the fur.

Perceptions About Coyote – A Nuisance? A Natural Expansion? An Invasive Species?

Do coyotes need managing? Several stakeholders question the need for management of foxes and coyotes.

Perceptions About Coyotes

- **Red Wolf Advocate:** favor holistic, non-lethal approaches; those get to the best natural state and self-regulation. Coyotes are seen as an invasive species; it's time to use science to manage these populations.
- **Mounted Fox Hunter:** smaller game hunters may not like foxes as they consider them predators of rabbit and quail. Coyotes get a bad rap, particularly among deer hunters concerned with the decrease in the deer population in North Carolina. Coyotes are here to stay in spite of the open season on them.
- **Livestock Producer:** livestock owners do not want to lose animals. Some people want to be able to hunt coyotes; others want them not interfered with at all. Some are concerned about potential for spreading diseases (public health concerns and for pets).
- **Wildlife Management:** perceived impact that coyotes eat all the deer; similar perception that foxes are eating all the rabbits.
- **Livestock Producers and Wildlife Conservationists:** generally, accept that coyotes are here and here to stay. Some want to see their numbers controlled and their predations on livestock, other game, and pets limited. "What I see is not that people are opposed to wild animals like fox and coyote, but they're opposed to their killing domestic livestock. In addition, people are concerned about diseases, especially rabies. "Sometimes it is difficult to tell what has attacked. A pack of dogs, even domestic dogs may cause destruction by tearing up an animal they encounter for pure delight or sport whereas a coyote attacks to eat its prey."
- **Wildlife Conservationist:** our interest is coyote management as it relates to deer. We are concerned for our deer population. Others indicated that other species may be responsible for predations such as the black vultures. Black Vultures are mentioned several times.
- **Wildlife Preservationist:** from our perspective, addressing continuation of wildlife killing contests.

Do coyotes need managing? Several stakeholders question the need for management of coyotes and foxes.

- **Fox Hunter/Dog:** what is driving the need for management?
- **Fox Hunting/Dog Preserves:** I do not see a great problem with fox and coyote – why the need for management?
- **Wildlife Conservationist, Red Wolf Advocate, Land Conservationist:(paraphrasing)** – why is management needed for coyotes who manage themselves? We need an educational campaign to manage the types of interactions that are occurring in rural or urban areas.
- **Land Conservationist:** coyotes are considered a nuisance animal by some, while others believe they contribute to biodiversity. Coyote have experienced a natural expansion given their roaming behavior and hybridization. Need to identify what is the problem.
- **Fox Hunt/Dog Preserve:** identify the problems based on the data. Too many in the population? Not enough? What is the right amount?

Strategies to Reduce Harm; Identify What is Actually Increasing Harm:

Individuals from various affiliations emphasized the importance of identifying the problem in order to develop strategies.

- **Trapper:** if we knew coyote and fox numbers in the state, there would be a means for management (trapping, bounty) to reduce the populations of coyotes. We do not want to destroy, just reduce.
- **Wildlife Conservationist:** want coyote population managed.
- **Wildlife Conservationist:** trapping is the #1 best option.
- **Wildlife Preservationist:** [Use] hazing strategies.
- **Wildlife Preservationist:** lethal to non-lethal; I favor non-lethal approaches; these approaches get to the best natural state and self-regulation. Make interventions site and context specific.
- **Wildlife Preservationist:** our interests are that foxes and coyotes be managed in the most humane manner and in the way informed by the best science. The coyote management plan is very good; it points out non-lethal methods to mitigate and points out that widespread killing of coyote is ineffective.
- **Red Wolf Advocate:** go to the populace and talk to people about ways to curb them. We have to adjust the way we live; WRC are the people to do that.
- **Trapper:** education based on science and cooperative discussion from the user groups. With an increased urban environment, there may be increased conflict with users and user groups. In rural areas where regulations are paramount, hear/learn from respective voices so that cooperative agreements may be easier to achieve for a number of us and not for some.
- **Livestock Producer:** share strategies like our neighborhood does: example what is the best kind of guard dog for what kind of livestock. One may want a more aggressive guard dog the further they live from an urban area and the acreage size they have (500 acres+); if they live to an urban area, may want less spirited guard dog. All dogs can leave their home and thus the closer one is to a population center, the less one may want to own an aggressive dog that could get out and challenge a neighbor's dog or the neighborhood.
- **Wildlife Preservationist:** understand the principles of each stakeholder and appreciate finding common ground.
- **Academia:** education. If people really understood coyote, they would be less inclined to kill them.
- **Livestock Producer:** educate on the indicators of what is attacking livestock, pets, and what and how to mitigate or prevent these attacks.

Strategies to Limit Wildlife Interactions shared by Livestock Producer:

may not solve the problem).

- **Livestock Producer:** Strategies for improvement can come through education. When there are concerns, WRC is available to provide materials to membership, onsite publications, fact sheets. USDA also works with us to help lessen losses from predators (foxes, feral hogs, geese, bears, ...). Landowners can benefit for practical and useful tools.
- **Fox Hunting/Dog Preserve:** request that trapping depredation permits be allowed for selling live animal.
- **Wildlife Management:** sterilization program may be a consideration for North Carolina.
- **Fox Hunter/Dogs:** Nature reduces over-population with disease like distemper.
- **Wildlife Management:** The historical data that WRC has is important. Some inaccurate information is out there. The historical data needs to be publicly known.

Trapping and Hunting Seasons

Several people mentioned issues about the trapping season:

- **Fox Hunter/Dogs:** in the east, the trapping season starts 12/1; most deer clubs want to trap until first of year. WRC has a proposal for several counties in the east to start trapping season on 11/1 (WRC wants it statewide); trappers are opposed because fur is not at prime; dog hunters don't like because dogs might get trapped.
- **Fox Hunting/Dog Preserve:** give time for young to mature, be independent before trapping. Fox Hunters blame the trappers though they are hunting now (February), and again in June on game land when the babies are nursing.
- **Wildlife Management:** a statewide fox hunting season would benefit foxhunters.

Controlled Fox Hunting Preserves (includes responses to Question #14)

Regulatory Discussion About Controlled Fox Hunting Preserves

Information from the Executive Summary distributed to all interviewees: Controlled Fox Hunting Preserves are legally established in NC statute, though the responsibility to regulate these preserves falls to WRC (G.S. 113-273). Unless NC statute is changed, fox hunting preserves will continue to exist and be managed by WRC.

Question #14 from the Interview Protocol: *WRC is tasked with updating the regulations pertaining to controlled fox hunting preserves in NC and needs stakeholder input by March 31, 2019. Who would you recommend, including potentially yourself, who could participate in a targeted committee to propose recommendations for addressing this specific topic by the deadline?*

Perceived Issues [as mentioned in response to Question #3 or #14]:

- **Fox Hunting/Dog Preserve:** some topics, like controlled pens, are hotter than others; this is a way of life for some and beneficial to them. WRC has responsibility to the public for impacts to wildlife, including for commercial and private Fox Hunting Preserves. The assumption is that WRC wrote the rules for the Commercial Fox Hunting Preserves and local governments make recommendations regarding hunting in the counties. Is WRC prepared to manage other "controlled hunts" like pheasant, quail, beagles with rabbits, deer hunting enclosures or deer farming? WRC needs to consider how to manage users. What is equitable access? How do you regulate it? What are too many dogs in a pen? How do you make it fairer given the different layers, impacts, and social impacts? What are the legitimate concerns? Such as # of dog per acre? The number of runouts, hideouts, escapes? Smaller pens do not want to be hurt by behaviors of others. I think enclosures are better managed with regulations. Hunters value their dogs that compete,

pay for them to be trained, and pay for them to compete.

- **Wildlife Conservationist:** Pens are not in the best interest of wildlife or conservation and are contrary to the principle of “fair chase.” Objective of Pens is profit through tournaments, competitions, and dog trading. Brings big business to some pen owners. They increase the possibility of rabies and distemper transmission. Can change the rules; cannot repeal the rules.
- **Wildlife Preservationist:** very opposed to them.
- **Fox Hunter/Dogs:** some people are sore about the pens and are hoping something good comes out of this like regulating number of dogs per pen size.
- **Mounted Fox Hunter:** We use pens for training puppies.
- **Fox Hunter/Dogs:** The fox preserves have to be regulated. There’s no enforcement; people are trapping out of season and buying out of season. I don’t want the pens closed; I just want them regulated.
- **Fox Hunter/Dogs:** Fox pens keep the population in check.
- **Fox Hunter/Dogs:** Pens need to use coyote to reduce the market for foxes. Put restraints on people—they often have too many dogs in too small a pen, so foxes get killed very quickly.
- **Fox Hunting/Dog Preserve:** Is WRC prepared to manage other "controlled hunts" like pheasant, quail, beagles with rabbits, deer hunting enclosures or deer farming?
- **Fox Hunting/Dog Preserve:** Controlled Fox Hunting Pens regulations are not updated every 10 years; in fact the rules have never been updated. This focus is driven by wildlife preservation advocates who are raising questions and lying about what fox preserves do. Current regs are fine; do not need changes nor need new policies like Va. If the rules change, it will create a coyote explosion since there would not be as many sold to the Pens.
- **Trapper:** would like to participate as a primary stakeholder.

Thirteen interviewees indicated interest in participating in a specific committee focused on Controlled Fox Hunting Preserves. This included people from several categories: Trapper (1), Fox Hunter/Dog (2), Wildlife Management (1), Mounted Fox Hunters (2), Fox Hunters/Dog Preserve (4), Wildlife Conservationist(1), Wildlife Preservationists(2) Three indicated that they might attend; most interviewed indicated that they would not participate in a committee targeted for this discussion. Some were not interested and others, while they may have an opinion about preserves, their organization does not; therefore, they will not contribute professionally to the discussion. Lastly, two of those interviewed are not interested in updating the regulations but want to focus their efforts on closing the preserves. Both parties were reminded that the focus Controlled Fox Hunting Preserves is on updating the regulations related to preserve operations, not closing the operations or repealing the regulations.

Strategies for Managing Preserves

- **Fox Hunting/Dog Preserve:** I am not sure concern for management strategies or stakeholder interests are driving this study; believe a national animal rights group is behind it. Mother nature sort of takes care on her own. When man gets involved does not help too much.
- **Fox Hunter/Dogs:** I do not want the pens closed but I do want them regulated (example: control the number of dogs allowed to run in a given sized pen).
- **Wildlife Preservationists & Red Wolf Advocate:** very opposed to existence of fox pens and believe they should not exist.
- **Fox Hunter:** we want gray foxes out of the pens to preserve their populations.
- **Fox Hunting/Dog Preserve:** we do not want gray foxes in preserves, prefer coyotes.
- **Wildlife Management:** there probably needs to be group discussion, whether productive or not; with the right people who can work together. The historical data that the WRC has is really important. Some inaccurate information is out there. The historical data needs to be officially known.

Since a year-round coyote trapping season and coyote bounty programs are not reasonable management options, respondents were asked,

Question #4: *“What other specific options do you think would work to manage foxes and coyotes, including potential changes in policy?”*

The responses resulted in four themes:

- 1) Changes to Trapping Seasons & Equipment,
- 2) Education and Management of Nuisance Species,
- 3) What does the word, “Management, mean?, and
- 4) Ensure Non-Lethal Strategies are Front and Center Just as Lethal Strategies are Front and Center.

Changes to Trapping Seasons & Equipment

Several answers still revolved around trapping, suggesting tweaks in seasons, changes in types of traps used, etc. With respect to hunting and trapping seasons (some want year-round on coyote; some want to limit to protect dogs used in dog hunting, some want to avoid gestation period, nursing times, and periods of extreme heat or cold.) One person saw a bounty program as necessary.

- **Land Conservation:** hunting is a strategy. Is there value in expanding lease hunting?
- **Land Conservation:** prime approach is a bounty program as trapping is limited to those with the knowledge and experience.
- **Land Conservation:** review what Florida is doing with its abundant alligator population.
- **Trapper:** expand fox and coyote trapping season by opening trapping earlier in the year or both statewide. Some counties offer trapping in summer allowing trapping of young, immature foxes (unhealthy practice). By increasing trapping season, say from Oct 1 into March, will help manage coyotes. Manage fawning time in spring. Can use Wildlife Districts to help manage by season, by county, and while showing concern for landowner rights.
- **Trapper:** would like to see the laws/rules/regs developed based on science and recommendations of the biologists as to how best to manage species. Current policies appear to be set based on full utilization of sport hunters with dogs where there is fox hunting, hence providing a single resource use for a specific group of users. Wildlife is a public resource; need to legally be able to trap as well as hunt, and with a landowner's permission. Foxes should be managed as a furbearer - currently listed as game species. Trapping is a viable resource management tool. Encourage open trapping season all around in counties PLUS educational opportunities to know the biology of the situation and thus take appropriate action to manage the populations.
- **Fox Hunter/Dog Preserve:** not anti-trapper; just want no year-round trapping (not during gestation period)
- **Trapper:** consider extended season, say from Oct - Feb. Trappers need to know the proper way to trap to secure bounty sought. Trapping is not as simple as laying out a trap. Involves a lot time and precision. Such as being cautious about allowing personal scent to contaminate traps: need to boil all traps, sanitize, put sterile into holes. Avoid the summer months given the level of work involved and impact on animals. If animals are for fur, use all the parts
- **Fox Hunter Dog:** understand, fur market is about gone (very, very weak). Payments range: coyote (\$80-100), Red Fox (\$60), Gray Fox (\$40). Trappers are currently providing service to live markets. Trust is broken for some folks; need ongoing communication to rebuild trust and any sort of common ground.

Example: mutual ground for between external hunters and pen hunters or that the red wolf left the refuge for private property, yet communication did not remain open. Work beyond PETA, who go undercover to take videos; work together to resolve NC issues. Not all Pen owners prefer an overrunning of dogs or ignore their animals.

- **Fox Hunter Dog:** do not think adding length to the trapping season would help. If they extend the trapping season, it would overlap with dog hunters and they would catch more dogs without reducing the coyote more. Some people are respectful; some are not. VA still has a bounty (\$50 per coyote) and cannot transport them alive; may not work.
- **Wildlife Management:** do not support bounty, do support depredation permitting. Having year-round season pretty well exists for predation, and it is important. Do not need year-round trapping. New strategies might be to have 2 different trapping seasons—one for coastal and one for rest of state; coastal counties have been heavily hunted. Having 1 would be valuable to foxhunters. Eliminate the local laws and have statewide-- for both foxes and coyotes. This would make the regulatory structure more manageable and more enforceable. Deer season and all other hunter seasons not ending until 1/1; trapping season starts later; trappers feel they do not have support to override the dog hunters. Coastal trapping season starts 12/1 instead of 11/1 everywhere else.
- **Wildlife Conservationist:** there is not a year-round trapping season, but there should be. A bounty program would not work.

Education and Management of Nuisance Species.

- **Wildlife Conservationist:** NC's Wildlife belongs to the broader public trust. There are a number of discussions at various levels about how to manage. Our organization has provided recommendations to WRC including:
 1. continued acknowledgment of difficulties in coyote and fox management while focusing efforts on public education and management of nuisance individuals.
 2. education and outreach are of paramount importance to understanding coyote management. Technical resources, educational materials, workshops, programs, and partnerships are needed.
 3. creating/promoting a trapper (coyote) referral program and developing strategies to target specific nuisance animals (wildlife damage control agents, trappers). Provide education to reduce interactions.**Trapper:** Target them. Provide educational opportunities when removing habituated animals. At the same time, ensure owners are educated about the reasons animals become habituated: composting in back yards, feeding pets on back deck and leaving food out, leaving birdseed/feeders out at night. Combine educational outreach with other events: Master Gardner, local media, neighborhood social media. During the May and June fawn drop, coyotes are more easily harvested if someone requires removal of a targeted species.
- **Land Conservation:** Educate; learn about how one's actions impact wildlife, and how to limit those actions.

Management - What Does This Mean?

Several stakeholders questioned the presumption of the question, and responded that the best management plan is to leave the coyote alone, while others commented on the value of the Coyote Management Plan:

- **Academia:** is the goal sustainable harvest or eradication?
- **Fox Hunter/Dogs :** what are the reasons to manage? Wildlife exists - why does it need to be managed? What is the direct evidence that the species is out of control and needs management? Best thing is to leave things alone. Let nature take care of itself.
- **Mounted Fox Hunter:** cannot hunt in a pen and require permission to hunt on a landowner's property. Some counties are closed to dog hunting, and some counties have different trapping governance regs. If

possible, may want to streamline for effective management. There is a growing population of coyote and the coyote is blamed for a number of things. Think about the positive effects of coyotes as opposed to negative effects on the landscape (referenced; Survival and Cause-Specific Mortality of Coyotes on a Large Military Installation, Moorman, et al, 2016). Coyote are best at surviving; implications for management in the 2016 report.

- **Fox Hunting Preserves:** fine like it is. If you change trapping, you hurt foxes.
- **Wildlife Preservationist:** do not think we need additional regulations beyond the Coyote Management Plan. These species will manage themselves.
- **Fox Hunting/Dog Preserves:** keep promises. Release of the Red Wolf was done in an area where folks were promised that someone would check on the red wolf, when it left the refuge, but that did not occur. Idealism was more important. When calves or chickens are missing, some folks in the area think it is related to the red wolf. Need to keep promises.
- **Red Wolf Advocate:** Need to know what reasons there are to manage; wildlife exists - why does it need to be managed? What is the direct evidence that the species is out of control and requires management? What research and monitoring of populations is required and can describe compensatory reductions? There is a lot to learn about predator species and their role in the landscape. If the issues are human conflict, lots of methods available including management of the perceptions surrounding canids (teaching, outreach, how to behave around canids, and understand what myths are present). Do not see how to prioritize a management scheme without non-lethal means.
- **Wildlife Preservationist:** Believe coyotes are self-managing. Consider strategies that move beyond lethal outcomes such as co-existing, hazing approaches for both urban and rural areas, guard dogs, electric fences for livestock. Reduction in population will occur once rural areas become urban. Coyotes live in social groups. If a member is removed, the females spilt up in order to breed and regain social control.
- **Wildlife Management:** many deer hunters believe the harvest of the deer population has been declining in North Carolina due coyote attacking fawns. Other questions to ask: Is the hunting season too liberal? How to approach this matter? WRC did an excellent job on the coyote report. Cannot shoot or hunt one's way out of the growing population. Clever breed and prolific breeder. Sterilization has been documented successfully out West with coyote predation on inter-mountain sheep populations. Need to continue to talk about a broader suite of techniques. For instance, convening a stakeholder forum on the Albemarle-Pamlico Peninsula, a facilitated topic on potential research topics and solutions. Consider a public involvement process that seeks to inform and engage, is open to the public and accessible for learning and problem-solving discussions.

Place Non-lethal Strategies Front and Center as Much as Lethal Strategies are Front and Center

- **Livestock Producer:** population control not elimination: ecological balance is key
- **Land Conservation:** can manage but will not remove population since it is a public resource. Educate; learn about how one's actions impact wildlife, and how to limit those actions.
- **Wildlife Management:** consider sterilization as a potential tool; has been used successfully in the inter-mountains West with coyote predation on sheep.
- **Red Wolf Advocate:** US Fish and Wildlife had a program of sterilization that could work. That holds the territory and allows population to regulate itself; the population will self-regulate if hunting of the breed stops.
- **Livestock Producers:** sterilize males? Ultrasonic sound that sends away? Species-specific disease entities to control?

There are key issues that the participants have identified to be discussed in a future process.

Question #6: Respondents were asked, “What are the key issues they believed needed to be discussed for this collaborative effort to be successful?”

Three themes resulted:

- 1) What is the need? What is the purpose? for Managing?,
- 2) Value of Learning, Listening to Others, and
- 3) Clarity About Statewide Laws and Regulations.

What is the Need? What is the Purpose? (Why are you managing?)

- **Land Conservation:** with respect to key issues, identify: what are the needs? what are the goals? Determine needs first then identify key issues.
- **Livestock Producer:** key issues can include what each group would like to share and convey in order to determine coyote control. Become informed about the stake each organization has in the discussion.
- **Trapper:** need to determine: 1) what are the problems and areas of concern; 2) each group explain their special needs and interests; and 3) explore proven and unproven options or solutions. As the population of coyotes grows within rural and urban areas, the philosophy to live with the coyote may be less acceptable in the future. Example: hazing may not/is not appropriate if a predator is coming after a child, pet, or livestock; the reaction may require more force on a case by case basis, and education about these types of situations if more and more coyotes become habituated.

Value of Learning, Listening to Others

- **Foxhunter:** listening to others, recognizing their passions while remaining flexible is important.
- **Academia:** ensure the opportunity for open dialogue is available. Need opportunities to educate each other about the role of each species in nature, how they are different, and how it is hard to treat them the same. Then decide, why we are here. Is it to regulate harvest? If so, how? A reason for harvest is to manage without damaging—what sex, age, etc. can you take and do that? Or, if someone thinks they need to be exterminated, they need to be allowed to say so.
- **Land Conservation:** a specific value of collaboration is that recommendations can result. What are the issues? What requires adjustment? How does the science guide us? May manage but will not remove population since it is a public resource.
- **Fox Hunter/Dogs:** take into consideration, other animals are out there, including pets; what are the impact of policies on landowners? Given the decrease in the sale of hunting licenses in NC, what are percentages of hunters in various locations throughout the state? What kind of education is important for the state (everyone) not just self, and how to do this together?
- **Livestock Producer:** key issues can include what each group would like to share/convey in order to determine coyote control. What is the respective stake each has in all this – inform the rest of us. It is an opportunity for give and take, to avoid lamenting or griping and get it figured it out; moving onto to solving what’s in front of us. Issues may include being bitten by a fox or coyote (knowing what to do and how to report), being aware of diseases like blue tongue in deer population, determine the full range of predators for fawns, including black vultures, and the impacts of coyote going rogue when mate is killed and the female becoming emboldened
- **Red Wolf Advocates:** manage social media. Use social media to educate populace, other professionals, and manage species. Management of public perceptions around hunting, species, and species management. Help people understand risks involved.

Clarity About Statewide Laws and Regulations

Currently, there's not consistency with county fox hunting laws and there is the belief among some that the consistency can be established when fox is included in furbearer management. [If and when foxes are reclassified as furbearer instead of game animals, different rules pertain to each category. Foxes are currently defined as game species and are managed as such. But WRC only has authority to regulate trapping of furbearers.

- **Wildlife Conservationist** resolve and simplify regulatory authority. Authorize WRC to regulate all manner of take for fox trapping, including trap types, season, and limits. This change will increase coyote harvest.
- **Fox Hunting Preserve:** create a depredation permit change for relocation vs kill at the trap. Maybe it would be a benefit including opening the fox season earlier in order to trap both fox and coyote. Some farmers would like to see coyotes dead so ensure early trapping. Consider humane way to use traps.
- **Wildlife Conservationist** fox should be included in game and furbearer management as are other species in NC. Current management of fox brings morass of issues including multiple authorities to contend with. Resolve; and simplify regulatory authority. Authorize WRC to regulate all manner of take for fox trapping, including trap types, season, and limits to increase coyote harvest.
- **Livestock Producers:** target seasons based on what we know from biology such as not trapping during freezing temperatures and keep depredation rules.
- **Trapper:** to consider better management of resources, coyote population could be better managed with authority that establishes fox trapping. WRC have authority to manage foxes; landowners choose method for better management of resources

Perceptions About Geographic and Cultural Differences

The interviewees were asked about ways in which geographic and/or cultural differences across the state potentially affect management of foxes and coyotes in NC. A second question asked about specific management strategies that might effectively address those differences. A third question invited any recommendations for a comprehensive approach across North Carolina. The respondents (except one) stated that there are differences geographically (and demographically), especially between urban and rural areas. These geographic differences are compounded by an ever-growing population in North Carolina, which is currently the 9th most populous state and projected to be the 7th most populous by 2032. In North Carolina, the larger population centers are in the more central part of the state. There is the belief by some that there are fewer problems in rural areas while others suggest the issues, current and future, overlap areas in the urban and rural regions. Any statewide or comprehensive management approach would require the flexibility to accommodate across geographic regions since the biology varies across the state with differences in temperatures and timing.

Three themes resulted:

- 1) Urban Areas May Experience More Wildlife Conflict (though Rural Areas Appear to Have More Wildlife),
- 2) Rural Areas Are Experiencing Changes in the Landscape, and
- 3) Interdependence & Regional Differences Plus the Role of Politics

Urban Areas May Experience More Wildlife Conflict (though Rural Areas Appear to Have More Wildlife)

- **Livestock Producer:** rural areas different geographically; in the east are lots of swamps with lots of wildlife, including fox and coyotes; that's different from urban areas where they're losing habitat.
- **Fox Hunter/Dogs:** there are more animal-to-people conflicts and people-to-people conflicts where there are more people. In the east, there is not nearly as much interaction between people and the species, with more interactions as you move further west.
- **Trapper:** western folks are not as familiar with the large-scale use of hunting with dogs (though bear hunters in the western part of the state may use dogs). Urbanites may be non-hunters or non-trapping types and scared of wildlife.
- **Fox Hunting/Dog Preserve:** no cultural or geographic differences exist. May need to educate folks in the urban areas. Helped to trap coyotes at an HOA that had frequent sightings (ensured pets were safe). Residents were educated about removal of food sources such as pet food after each outdoor feeding, removal of trash, etc.

Rural Areas Experiencing Change in the Landscape, Remain Proud of Traditions

- **Fox Hunter/Dogs:** fox hunting has a lot of support down east. Since 2011, not a county down east has passed a law allowing fox trapping, except maybe the county that Wilmington is in. Probably need different laws for east and west. There is a strong tradition of hunting and trapping in the rural eastern parts of the state, and it is a tradition that hunters and trappers want to pass on to their children.
- **Fox Hunter/Dogs:** consider how rural areas need to handle versus the urban edge which may be more concerned with rabies, distemper.
- **Mounted Fox Hunters:** have acceptance of fox pens in some areas of the state. There is a love of night hunting with dogs - each rider knows the sounds of his/her dogs and listens for those sounds. Hunters have investment (time and money) into a solid broke hound whether for deer or coyote hunting. Dogs that roam outside of boundaries have tracking (training) collars so owner can retrieve their dogs.
- **Red Wolf Advocate:** rural areas also face a distinct set of issues such as keeping deer away from my crops.
- **Livestock producer:** rural areas may be less concerned than urban given the amount of range available and food sources.
- **Fox Hunter/Dogs:** things are changing, but fox hunting has been here a long time. I started as a little boy; my son started as a little boy and want his little boy to be able to fox hunt too. I do not want that to change though it may become different where there are more people. Have to think about what needs changing; it's complex. I want to be fair, and to hear other people. We need to learn things about the way things are; then come to an agreement that is better. Do not do something just to do something.
- **Land Conservation:** believe the red wolf project has failed given in part hybridization but more so because there is not enough natural habitat.
- **Fox Hunter Dog:** significant difference down east but even there a lot of people are moving in who have not experienced country life and the area is changing. People moving in, buying 1 acre, and wanting to control area miles around their residence. Yet, people in an area have to determine how to move forward. Stakeholders from around the state need to try to work out compromise.
- **Fox Hunting Preserve:** animal welfare from local shelters work to do what is right for stray animals. Though lively debates on issues, shelters spay, neuter, which are options to reduce populations, and it is important to care for stray animals. National animal rights groups believe animals have rights, discourage pet ownership (state you cannot own a dog), that one should not eat meat, want to regulate what the rest of us do with our dogs. Within a gated community in Duplin County, a new resident encouraged the drafting of an ordinance to ensure all dogs are leashed in that county. Did not pass. There are a number of deer hunters in the county who hunt with dogs.
- **Fox Hunting Preserve:** not an outside fox hunter as there are not a lot of places for this to occur that may

not involve another's property. Outside fox hunters like to run foxes with a broke dog trained to specific game. Friends live in rural areas to outside fox hunt. May consider opening fox hunting where restricted, and it may benefit hunting in general. I do not see problems where I hunt. As an avid outdoors person, I love and enjoy working with my hounds; brings me great pleasure to hear them, watch them, run with them. Hunting is more about bragging rights; it is a traditional way of life that runs deep with me. How will WRC balance decisions to be made? For example, in counties that do not allow fox hunting, local counties are managing the population in what is WRC domain.

- **Fox Hunting Preserve:** currently trapping for live market is controlling the market (vs fur market) in order to replenish pens. Some states do not sell to live markets.
- **Wildlife Conservationists** some people may not understand what coyotes do. Geographically, there are issues in trying to hunt or trap in different areas; there are more animals in some areas than others.
- **Fox Hunter/Dogs :** probably only one person in my county who still hunts outside; there are still some people doing it in other counties, but there are fewer and fewer because there is no game; old hunters have died off; the younger ones aren't pursuing it as much.

Interdependence & Regional Differences Plus the Role of Politics

- **Livestock Producers:** there is a rural/urban issue, with different impacts in different areas. However, this is not a reason to divide geographically east, west and piedmont. Civil dialogue can be used to understand different perspectives, with an exchange of information derived from science. Try in good faith, to give and receive information, with empathy. There can be state laws and differences between public and private property, that do not have to go to local authorities. If there are statewide strategies, they need to be managed by the NC statewide agency responsible for wildlife. It is an exceptionally large issue with many facets and interests. A statewide approach must go with one statewide agency but would have to vary across geographic regions because of differences in temperatures and timing; the biology varies across the state. Ideally would have one agency with oversight, but they would have to have the flexibility to accommodate geographical/seasonal differences, differences in biology.
- **Academia:** one of the issues is that foxes are managed on the county level. Managing county by county is cultural. WRC has done a respectable job of looking at harvest data and then setting quotas regionally based on what can be sustained. The biggest obstacle toward a statewide approach is political.
- **Trapper:** foxes are the only game species that WRC does not manage in the state. Houndsmen gained political support in the 70s for legislation of fox as game species in the eastern area. Management of wildlife is in part handed to the legislature to manage. Since then, the management of foxes has been maintained by the houndsmen/legislature, in part because this group is such a strong advocate for its interests.
- **Trapper:** general division between the eastern and western portion of the state, coastal and central portions of the state largely around the traditional use of dogs in hunting with deer or other animals. Western folks are not as familiar with large scale use of hunting with dogs (though bear hunters in the western part of the state will use dogs). Territory area is the urbanites - who may be non-hunters or non-trapping types, and are scared of wildlife. Historically folks have used dogs to hunt smaller animals such as quail or duck, and when hunting for foxes, coyotes, or deer, typically in central and eastern part of NC.
- **Fox Hunting/Dog Preserve:** not a strong advocate for the number of county laws. Legislature needs to set laws across state. County laws are especially influenced by a few wealthy landowners. Biggest problem is people think it is ok to do what they have done all their life, regardless of the law. And the law needs to be enforced. I have not seen one game warden in 20 years and people hunt all around here.
- **Red Wolf Advocate:** Huge cultural differences between urban and rural. Hunting is big in rural areas; it is part of their traditions; some people hunt to eat, which is not so true in urban areas. Must have laws and rules that take into consideration both urban and rural areas, not separating. Need a unitary approach.

Have not known WRC to have different rules for different areas, except seasons. Animals will move; need to be consistent across the board and use available good science: how they reproduce, eat, live, move; need these studies to look at data and use that to develop strategies.

- **Fox Hunting/Dogs:** expect maybe overarching strategies but not one size fits all between urban and rural, or coast and mountains.
- **Land Conversation:** political problem between urban and rural regarding management; define problem perhaps on situation, regional level.
- **Wildlife Conservationist:** consider area-specific management as management goals and techniques will differ between locations, dependent upon social and biological factors.
- **Wildlife Conservationist:** hunters understand better than non-hunters. Urban people don't understand the problems with coyote.
- **Land Conservation:** both urban and rural areas make adjustments - example of Canadian geese stopping traffic frequently or contending with their debris or contending with black vultures coming onto the landscape.
- **Livestock Producer:** natural boundaries and barriers can make it difficult to manage or control populations, whereas on flat lands, it's easier to control. For a comprehensive strategy to work will need to consider terrain as some recommendations will be feasible in one area and not in others.
- **Fox Hunters/Dogs:** the west and east are divided; cannot use the same brush across the state; from Smithfield west hugely different; nobody hunting up in Mitchell County. Probably need different laws for east and west. Rural areas may be less concerned than urban given the amount of range and open space available, and food sources.
- **Mounted Fox Hunters:** there is a lack of awareness about a number of topics at various levels of government and in the urban and rural areas. Perception management will be very important, including offering an educational strategy from which to understand what mystique is and what is fact-based.
- **Wildlife Management:** getting people to share the resource is the challenge. Hound hunting along the coast and in the mountains; the urban/suburban aspects important in the central part of the state.
- **Wildlife Preservationist:** NC is very diverse both geographically and culturally. Can always have agreements between feds and states and develop understanding between interested communities through public education and collaboration.
- **Wildlife Preservationist:** in the urban and suburban areas, there may be a misunderstanding of best wildlife controls; need more education. In rural areas, there is a cultural misunderstanding of effects of coyote on deer, turkey, etc.—also needs education; need to understand that these species are not adversely affecting game species they want to hunt. A management needs to be out there for everyone to understand. Coyote Management Plan covers recommendations for comprehensive approach pretty well.
- **Wildlife Conservationist:** fishing and hunting may be on the decline. It's urban vs rural.
- **Fox Hunting/Dog Preserve:** How will WRC balance decisions to be made? For example, in counties that do not allow fox hunting, local counties are managing the population in what is WRC domain.
- **Red Wolf Advocate:** an urban area like Raleigh faces a different set of issues and the strategies to handle those issues. Rural areas also face a different set of issues such as keeping deer away from corn or soybean crops. Geographically urban and rural also differ from the mountains to the coast. Expect overarching strategies there may not be one size fits all between urban and rural, or coast and mountains.

Interdependence of Urban and Rural Dynamics (offered by a Wildlife Conservationist)

For the urban and rural dynamic, consider the entire landscape, the respective interests, followed with educational opportunities and strategies:

- recreational interests
- hunting interests
- trapping interests

- misinformation about coyote
- misplaced fears about coyote
- comprehensive education and outreach about coyote with partnership with multiple stakeholders/partners.
- consider management goals and techniques will differ between locations, dependent upon social and biological factors.
- acquire dependable data on impacts of coyote to other species (example: concern coyote depleting populations of deer especially fawns or other small game).

General Perceptions Around Foxes (offered by a Livestock Producer)

Perception and management of foxes varies across areas, for example:

- Fox hunters on horseback want the fox population (they are breeding them in fox pens)
- Some rural areas do not want fox (might get the chickens)
- Some people want to preserve foxes;
- Some want both foxes and coyotes eliminated
- Some of the more urban animal rights groups may be misinformed—they do not want any destroyed.

Perceptions About Collaboration

A primary objective of the assessment was to gather information about what people think about collaboration and how they think collaboration might work in making recommendations to WRC on management of foxes and coyotes in North Carolina. When respondents were asked a series of questions to elicit their views about collaborative processes, it was noted that a limited number of respondents have participated in a facilitated collaborative process such as the one contemplated by WRC.

Some respondents view collaboration as any effort where people work together for a specific project or endeavor though not necessarily as a facilitative event for engaging stakeholders in a deliberative decision or recommendation process. For example, an association is considered a collaborative by some given a broad membership base with varying interests who are often committed to the organization’s success. Others understand collaboration to be a series of in-person meetings with a broad spectrum of stakeholders with diverse opinions, where people sit down, develop a shared knowledge base, have deliberative and open civil exchange, focused on working together toward some level of a satisfactory agreement. The importance and value of education in a science-based discussion is to learn about topics such as populations, predations while understanding others’ perceptions and interests. Of those interviewed, a number of folks would like to participate in collaborative discussion; a few preferred to be kept informed.

Collaborative processes have a structural element and a temporal element. Considerations for the structural element include who will be involved and the setting in which people will interact. Designing the temporal element requires a solid understanding of the issues that the group will explore and deliberate, and knowledge about the type of information the group will require to address the issues. Gaining an understanding of the issues can orient the group to the problems to be solved and provide clarity on how the problems or aspects of the problems can be addressed.

The respondents participated in a series of questions to help understand the issues, the stakeholders, and the process design. Four major topics were explored in this section on perceptions of collaboration:

1. Conditions for Collaboration
2. Collaboration Milestones
3. Benefits of Collaboration
4. Consequences if a Collaborative is not Undertaken

Conditions for Collaboration

To gather information on what respondents considered to be necessary conditions for collaboration, interviewees were asked two simple questions, “From your perspective, what is a collaborative effort?” and, “How does it work best?” These questions generated a significant volume of information on how respondents viewed and understood collaboration and the conditions they considered essential for collaboration to work. Eight themes resulted from the data on conditions for collaboration:

- defined decision space
- shared knowledge base
- attendance to a structured, fair, & open process
- engage the “right” people
- presence of effective communication
- willingness to work together toward a range of options
- willingness to work toward a higher goal
- recognize benefits of convening even if agreement on recommendations cannot be reached

Defined Decision Space: amount of authority and/or discretion that a natural resource manager can share with stakeholders in shaping the decision or recommendation. Decision space can be constrained by laws, administrative rules, court rulings, public opinion, budgets, ecological conditions, time, etc. WRC should be clear in how the stakeholders can support the agency with respect to fox and coyote management in North Carolina. A sample of key comments pertaining to the theme include:

- **Livestock Producer:** know what is on the table.
- **Trapper:** not clear on the public hearing/involvement timeline and how it will connect with a stakeholder involvement process.
- **Fox Hunter/Dogs :** ensure all understand the criteria from which to participate. Explain the process from the get-go.
- **Fox Hunter/Dogs /Preserves:** a process [needs to be] established.

Shared Knowledge Base (Handle Data and Information Fairly): respondents across the board identified the importance of incorporating evidence-based (substantive) knowledge into a process. Scientific data, expertise, and experience – all are significant in framing the decision/recommendation context. Trust in the data was considered by several individuals as an essential element in a collaborative process. Some comments to this regard included:

- **Fox Hunter/Dogs Preserve:** allow each person time to state their perceptions; explain the perceptions from geographic locations; understand the reasons for the perceptions; know what each person believes.
- **Trapper:** primary recommendation is to discuss from the context of science-based and use this base from which to make major or strategic recommendations, rather than bending to one political pressure vs another.
- **Trapper:** encourage educational sessions to build understanding and learning.
- **Livestock Producer:** provide the time needed to learn from each other.

<ul style="list-style-type: none"> ▪ Trapper: means getting those together who are different from us. Encourage educational sessions to build understanding and learning. ▪ Fox Hunter/Dogs : know what the human population maps say, where the lines of growth are moving into which counties and how urbanization will affect our outdoor efforts. Need visuals to understand these impacts, and how to respond. ▪ Trapper: increased unbiased education so that people understand the biology of the animal, the pros, and cons of the issues at hand while being able to communicate accurately, with knowledge.
<p>Attendance to a Structured, Fair, and Open Process: some respondents stated that a collaborative process needs structure, moderation, and facilitation by a neutral party who can maintain openness and fairness. For example:</p>
<ul style="list-style-type: none"> ▪ Red Wolf Advocate: closely facilitate a process of open discussion. ▪ Livestock Producer: will need transparency. ▪ Trapper: requires a moderated situation given the spectrum of interests. ▪ Wildlife Conservationist: have a mediator available given some of the polarizing topics. ▪ Trapper: require a mediator or facilitator to help group determine if there is a middle ground.
<p>Engage the “Right” People: the right people were described as a broad mix of representation and viewpoints; whose demeanor and personality enable them to remain objective and open-minded during discussions, and who are willing to test beyond the status quo. Examples included:</p>
<ul style="list-style-type: none"> ▪ Land Conservation: ensure a wide-range group vs a targeted group (the latter will simply drive their own interests) ▪ Livestock Producer: not sabotaging the process with an unyielding mindset; being willing to compromise. ▪ Wildlife Manager: finding the right people to bring to the table; the right person from each stakeholder group who can listen to others. ▪ Livestock Producer: temperament is important. Must be willing to listen to others and work toward middle ground. ▪ Red Wolf Advocate: representation is proportional to statewide representation
<p>Presence of Effective Communication: clear, effective, face-to-face communication was cited as a necessary ingredient for collaboration. Talking about the issues with others, learning about others’ perspectives, and getting to the facts were emerging key points:</p>
<ul style="list-style-type: none"> ▪ Wildlife Preservationist: open exchange, meeting in person, listening to others, non-inflammatory language, work toward a collaborative outcome; nobody completely happy but can move forward given effective communication. ▪ Trapper: be able to accurately communicate messages and knowledge.
<p>Willingness to Work Together Toward Common Solutions/ Develop a Range of Options: for some, collaboration means working together to develop a common approach to proposed recommendations found in the two reports. Terms such as ‘negotiation,’ ‘working together,’ ‘middle ground,’ ‘live with’ are familiar terms for some. For example:</p>
<ul style="list-style-type: none"> ▪ Fox Hunter/Dogs : trying to understand all sides of a problem and producing a solution that everybody can live with. ▪ Trapper: require a mediator or facilitator to help group determine if there is a middle ground.

- **Fox Hunter/ Dog Preserve:** as sportsmen we need to work together; either we start to work together, or things are going to fall apart.
- **Livestock Producer:** willingness to consider options that can address their interests as well as others.'
- **Livestock Producer:** learn about new opportunities.
- **Land Conservation:** benefits of working with each other is learning new approaches, ideas, and ways to move forward.

Willingness to Work Toward a Higher Goal: collaboration can work best where conflict is prevalent or exists by having a higher goal or seeking something beyond one's self interests. A higher goal for this group might include enhancing and protecting outdoor space for game and habitat while ensuring public health for all species.

- **Fox Hunter/Dogs s:** everybody working together toward main goal; have game and have habitat for game.
- **Wildlife Preservationists:** find common goals.
- **Fox Hunting/Dog Preserve:** people need to get educated on what is best for all the resources—if we destroy the resources, everybody is damaged.
- **Fox Hunter/Dogs s:** As foxhunters and houndsmen, we have to protect game.
- **Fox Hunter/Dogs s:** manage coyote populations while preserving fox populations.

Recognize the Benefits of Convening Even if Agreement Cannot Be Reached

- **Wildlife Preservationist:** just the awareness that somebody is trying to do something has value, even if it does not end up any better.
- **Wildlife Conservationist:** [there's benefit in] just getting people together, understanding multiple perspectives.

Collaboration Milestones

Interviewees were asked, "Given your definition of a collaborative process, what are the milestones that will tell you that you are on a successful path?" Responses to this question were articulated that if a collaborative process must exhibit specific conditions to work, then the milestones of success are that those elements are in place. Four themes emerged from the responses to this question, namely:

- people are working together on the problem
- good data and information are being applied in the discussions and application to the problem
- people's ideas and values are being acknowledged
- a process is in place

People are Working Together on The Problem: one thread among the respondents was that people would be focused on the problem or opportunities, doing what it takes to generate recommendations. Some of the responses consistent with this theme were:

- **Red Wolf Advocate:** currently unclear; need to clarify and define the problems that will be addressed.
- **Livestock Producer:** opportunities for exchange of information and viewpoints to generate options.
- **Land Conservation:** convening one meeting and then being able to schedule a second meeting, that there's value in continuing.
- **Trapper:** learning from each other and about each other.

<p>Good Data and Information are Being Applied to the Problem: data, access to it, understanding it, and being able to apply the knowledge continues to be of significant importance to this group.</p> <ul style="list-style-type: none"> ▪ Land conservation: Working with others, learn about what others consider are small but important wins.
<p>People’s Ideas and Values are Acknowledged: the importance of people’s ideas and values being acknowledged by other stakeholders emerged in response to this question. Expressed similarly to prior statements such as ‘working together toward a common solution’ and ‘communicating effectively,’ acknowledgement is important to individuals working together.</p> <ul style="list-style-type: none"> ▪ Wildlife Conservationist: just getting people together and understanding multiple perspectives available.
<p>A Process is in Place: the need for a managed, structured process was reiterated again.</p> <ul style="list-style-type: none"> ▪ Wildlife Preservationists: as you move through the steps of progression, get the low-hanging fruit that people can agree on and then move to other issues. Some issues people are not going to agree on.

Benefits of a Collaborative

Interviewees were asked, “What could be the possible benefits to you and others for participating in a successful collaborative process that helps improve fox and coyote management in North Carolina?” Three themes emerged from the responses to this question, namely:

- do some good through discussion and on-the-ground education
- species benefit from seeking improvements to management approaches
- benefit to stakeholders and communities when trust is built or rebuilt

<p>Do Some Good Through Discussion and On-the-Ground Education: stakeholders serving a process can influence one another. They are capable, by learning together to help themselves and others, meet their goals and satisfy their needs.</p>
<ul style="list-style-type: none"> ▪ Land Conservation: benefits of working with each other is learning new approaches, ideas, and ways to move forward. ▪ Wildlife Preservationist: though may not achieve a full consensus, if interest groups can agree to partial recommendations in the tough areas, we will have an excellent product. ▪ Livestock Producer: possibility to do some good. Just the awareness that somebody is trying to do something has value, even if it does not end up any better. ▪ Trapper: learning from each other and about each other ▪ Trapper: increase unbiased education so that people understand the biology of the animal, the pros, and cons of the issues at hand, and being able to accurately communicate messages and knowledge. ▪ Wildlife Conservationist: learning from different expertise, knowledge, and the unique skill set overall in this group. ▪ Land Conservation: stakeholder processes can help change behavior and increase the public's overall knowledge through the right educational venues and interactive outreach efforts. So connections for us all to think about is the overall reduction in litter (attracts animals; secure lids on trash cans as well as containers for land dumps or recycling areas) reduce any type of behavior that habituates animals to non-traditional food sources such as litter thrown out on highways, pet food left outside at night including birdseed, or forms of trash. Learn how individual choices impact wildlife behavior.

Define Responsibilities to Species: wildlife in North Carolina is a public resource. Stakeholder groups discussed the responsibility of these groups to managing the species and how management may aid improvements to the populations.

- **Fox Hunter/Dog:** As foxhunters and houndsmen, we have a responsibility to protect game.
- **Mounted Fox Hunters:** manage coyote populations while preserving gray fox populations.
- **Mounted Fox Hunters:** benefits may be limited if coyote is only seen negatively. See coyote more positively. Coyotes are generalist; foxes are specialists. Understand their patterns.
- **Fox Hunter/Dogs Preserve:** improvements to wildlife matters to all users. We can resolve longstanding issues.
- **Academia:** Need to establish the facts. *What is defined as a game species in state statutes as opposed to everything else? Coyote being treated as vermin.* If the species are fur-bearers [are legally defined as separate and distinct from game animals], the regulatory agencies are going to be (WRC, USF&W, tribes, local groups, etc.). You have to include them, in addition to the people setting traps and hunting, the wildlife advocates, the birdwatchers, equestrians who want to ride on Sunday without getting shot, people who make their living in nature and rank and file citizens.
- **Fox Hunter/Dog:** it's a fine line to satisfy everybody. Especially in the East we're not catching foxes because we don't have them and want more of them on the outside. Can control population with coyotes in the pens.
- **Trapper:** coyote population will decrease given competition of food source, increase in human interactions, and based on how the coyote is perceived by others. Fox has been pushed into the urban greenway systems by the coyote. If better managed, then fox will grow in population.

Build or Rebuild Trust: different people and different groups think in different ways. Demonstrating trustworthiness can help build and sometimes rebuild trust. Where working relationships are considered as valuable as tasks, goals, and agendas, working relationships can become more productive.

- **Academia:** restoration of trust and confidence not only in each other but in the governance structure.
- **Fox Hunter/Dogs:** Rebuild trust. Several of us have done so. In the past, WRC agreed to change rules/processes and then did not follow through. Hunters left thinking they are operating under one process and then another prevailed without any communication of the change from what was agreed on. Allow issues to be heard, follow through and do not waste time of stakeholders.
- **Mounted Fox Hunter:** question is what is driving this process? What is about fox and coyotes that requires addressing?
- **Trapper:** increased unbiased education so that people understand the biology of the animals, the pros and cons of the issues at hand, and being able to accurately communicate messages and knowledge. What is accurate information? Example: Person putting food out for little animals (like squirrels) trains these animals where their food source is (believing wildlife are without a food source) and thus can attract larger animals to come after the little ones, creating a unique food chain and circumstances. Or, it's not always true if a racoon or fox is out in the daytime that they are rabid. Or, that it's unusual to see young animals in the spring, out without an adult; sighting of young animals in the spring is common.

Consequences of No Collaborative

Interviewees were asked, "What might the potential consequences be to you and others if a collaborative

process is not undertaken or is not successful?" One major theme emerged, namely: 1. Business as Unusual.

<p>Business as Usual: for some respondents, if a collaborative process is not undertaken, then its business as usual. While several respondents might be all right with maintaining their own status quo, others appear less supportive of a "business as usual" approach and will manage situations themselves.</p>
<ul style="list-style-type: none">▪ Livestock Producer: conflicts will continue to escalate both between people and wildlife and people to people. People will look for ways around to manage the situation themselves.▪ Academia: even if improvement cannot be realized; we have tried, that is a good thing.▪ Wildlife Management: people will go to the County Commissioners, and get things changed without full wildlife knowledge or broad stakeholder input, or people will go the General Assembly to get bills adopted that may not be feasible or appropriate.▪ Land Conservation: business as usual; better to work with partners if possible▪ Red Wolf Advocate: Problems do not go away.▪ Wildlife Management: People remain at a "we-them" level, continue to be angry, and unable to develop better management strategies.▪ Trapper: continued decline in fox population.▪ Fox Hunter/Dogs : if we do not get together, coyotes will not be managed properly, and gray foxes will go the way of the dinosaurs.▪ Trapper: mismanagement continues in some cases. In others, anecdotal information supports decision-making instead of building new recommendations from science-based discussions.▪ Fox Hunter: if the game is not there to hunt, we lose the experience and so do our children.

Perceptions About Process Design

The respondents in this section, provided recommendations about how to structure and conduct a collaborative process. Discussing their perceptions about interpersonal dynamics, they offered their insights regarding perceived barriers to successful collaborative processes and ideas for overcoming constraints. They stated preferences for structural elements around time, distance, and availability when attending meetings and their perceptions for a representative group size. Specifically, the respondents commented on the following points about process design:

- techniques or methods that could be employed to help interested parties engage more effectively with each other;
- constraints and barriers that could impede a successful process (i.e., value differences, personalities, conflicting technical information, or lack of communication) as well as suggestions for how to overcome those constraints and barriers;
- workable meeting days and times, including how long to meet and where; and
- a feasible group size that is inclusive and productive.

Techniques or Methods

Techniques or methods abound to help interested parties engage more effectively in complex discussions that can affect a number of organizations or individuals. For example, ensuring all members of a group have a chance to speak, to think through and finish out their thoughts or assess ideas not fully formed by establishing a ground rule to support this behavior. Participants joining a group process want to understand the nature of a collaborative, how it can and does work, and be trained in areas that they are not familiar with. The respondents offered well thought out ideas, techniques, and methods that they

believe are acceptable. For instance, as one interviewee suggested, “During a spirited discussion, keep the discussion focused on the content of ideas and opinions, not on personalities”. During disagreement, members of a group can work together to resolve a dispute, solve a problem, create a plan, make decisions, find principles all can agree on, or come to a recommendation that can further the discussion.

The conflict resolution literature identifies three types of outcomes to satisfy if the complexities of a major topics are to be resolved successfully (Moore 2014). The first is *substantive outcomes* – the ‘material things’ and issues that people are negotiating such as access to services or information, solitude, a safe community; the second is the *procedural outcomes*, the process and procedures that must be understood and agreed upon by the stakeholders; and third, *psychological outcomes*, such as listening when others speak or being willing to provide the space and brainstorm ideas when ideas are not fully formed. Techniques or methods that can be designed to help interested parties work toward satisfying all three types of outcomes, are available in the process design literature and include the following ideas generated by the respondents:

Collaboratives work best when:

- need and purpose are clearly determined
- safe discussion spaces are created
- ground rules or open standards are generated by the participants and used effectively
- small groups are used to encouraged diverse levels of interaction and discussion
- topics are learned outside one’s discipline or expertise
- the public is informed about the process, including direct constituency groups
- the right people are available to represent each stakeholder group and are able to influence each other
- temperament is important; as is the willingness to participate and listen to others, work toward mutual interests.
- all receive the same opportunities and respect during the process, not the loudest or most aggressive person.
- remain realistic during the recommendation process and recognize some discussion areas may not achieve full support
- conveners should reserve judgement; decision-makers should be clear about any sideboards to a discussion and consider the range of recommendations and rationales, not the most outspoken

When Collaborative Work Best – from the perceptions of the respondents.

Procedural Outcomes:

- **Fox Hunting/Dog Preserve:** allow each person time to state their perceptions; explain the perceptions from geographic locations, understand the reason behind the perceptions, and know what each person believes.
- **Academia:** take field trips, meet with people outside their usual places to see how it all works. Take field trip (to a fox preserve), for example, to see operation. Go to where the work is rather than Raleigh all the time.
- **Livestock Producer:** convene together then break down in specialized groups (livestock producers and Vet Services in a smaller group together for example) who focus on aspects relating to their group; make recommendations to report to the larger group.
- **Wildlife Management:** consider a joint fact-finding process.
- **Livestock Producer:** consider meetings throughout the state like Morganton, Asheville, Winston-Salem, Raleigh, Wilmington (similar process held for Captivated Deer Farm). Might set up a master group, a

steering committee group (Master Group of 15 - does not include alternates) who will conduct outreach and work to provide recommendations. For the Deer Farm discussions, used a facilitator for the Steering Committee and then worked with the outreach areas. Convened by NCD, State Vet, WRC.

- **Wildlife Conservationist:** have at least 4-8 meetings, properly scheduled to discuss the issues, then as needed, communicate by conference calls or use of technology. For those who do not have access to technology, can work with local Extension offices to set up space.
- **Red Wolf Advocate:** send out an agenda 1 week before meeting, if not earlier.

Psychological Outcomes:

- **Livestock Producer:** people come to table with an open mind, willing to hear other points of view and consider options that can address one's interests as well as others. Not sabotaging with an unyielding mindset. Being willing to compromise, have a spirit of cooperation, look at the bigger picture, and be open to possibilities.
- **Fox Hunter/Dogs :** during public hearings, people feel like WRC has already decided, though they did listen regarding bear-hunting. Usually, it appears they are going through the process. I would like WRC to demonstrate that they are really listening to others.
- **Wildlife Preservationist:** create an open exchange by meeting in person, listening to others, and using non-inflammatory language when speaking with others, work toward a collaborative outcome even if everyone is not completely happy.
- **Fox Hunter/Dogs :** sitting down, just talking and being civil would help. Trying to understand all sides of a problem and producing a solution that everybody can live with. Hunters are their worst enemies—they know what they want and are not willing to give at times.
- **Trapper:** parties work together - houndsmen and trappers collectively look for areas of middle ground. For the process to work will need a committee willing to negotiate. Require a mediator or facilitator to help group determine if there is a middle ground. Folks who are not willing to work toward middle ground can limit options.

Substantive Outcomes:

- **Trapper:** encourage educational sessions to build understanding and learning
- **Livestock Producer:** provide the time needed to learn from each other
- **Trapper:** require a moderated situation given the spectrum of interests. Primary recommendation is to discuss from the context of science based and use this base from which to make major or strategic recommendations, rather than bending to one political pressure vs another.
- **Fox Hunting/Dog Preserve:** what are the facts to know? Additional studies to provide? Topics for discussion? Remain open minded (come to table with multiple interests), Listen for time to engage. Develop options based on data
- **Fox Hunter/Dogs :** explain process from the start. Bring people together and allow them to have time to tell their story with no interjections by anyone else (sometimes we think we know what others believe including those in our own circles and we do not). Require discussion to understand each other (an ensure all concerns are transparent). Be open to what others can bring to the conversation and ensure all objectives are easily understood and the criteria to participate. It is important that each person has an open mind, is willing to explore the subjects at hand, and is open to talk, to focus the conversation, from start to finish. Lastly, share philosophy to give an inch for the betterment of the mile.

Respondents were asked to describe their perceptions about constraints or barriers to a successful process (i.e., value differences, personalities, conflicting technical information, lack of communication are examples of potential constraints). The respondents described several categories of potential constraints and barriers: some are explicit limitations that could create issues when pursuing an objective while others are potential barriers or obstructions to achieving a goal such as “not keeping an open mind and focused solely one’s primary interest or goals.” Several people suggested that all of the listed obstacles could be significant, with differences in values, communication, and conflicting information being the most commonly mentioned.

Greatest Obstacles to Problem-Solving: not keeping an open mind and focused solely one’s primary interest or goals.

- **Trapper:** greatest obstacle- people focused solely on one's primary interest. Will need open-minded people who can establish new areas of common ground and then agree on what cannot be agreed upon.
- **Fox Hunter/Dogs :** just need the right people and listen to them. Get experts who do not necessarily have a degree.
- **Fox Hunter/Dogs :** probably lack of communication. [The solution is] in this process—sit down with a group and talk.
- **Wildlife Preservationist:** competition for resources; value issues; people not having or not believing information (anecdotal vs. scientific).
- **Fox Hunting/Dog Preserve:** not keeping open mind. Other obstacles are perception about some of the data in the studies (and a study from Virginia Tech). Who is gathering the data? Who are the researchers? Is the data valid?”
- **Wildlife Conservationist:** operating from emotion rather than science-based information.
- **Wildlife Management:** lack of trust and confidence in the ability to produce an outcome. Willingness of each party to engage and stay involved even when the going gets tough.
- **Fox Hunter/Dogs Preserve:** ensure there is nothing behind this effort except achieving fundamental agreement.
- **Wildlife Preservationist:** preconceptions of different groups occur across the board. Sit down, get past that and get to solutions. One way to resolve, use other types of communication to clear up misconceptions before meeting—policy statements of the groups, etc.

Sources of Conflict include miscommunication, competing interests, structural changes, values-based, misinformation, and relationships. The participants were asked to describe the sources of conflict in fox and coyote management, or areas of disagreements.

Most of the participants responded with a mixture regarding the sources of conflict, though data issues rise to the top as well as the specific issues identified below:

- trapping time of year
- moving beyond past history with WRC.
- perceived competition for a resource
- animal rights for some
- fox trapping county by county because WRC does not have management

Actions to Manage Conflict

- **Wildlife Management:** willingness of stakeholders to engage and stay involved even when the going gets tough. Ensure that if agreements are reached, an implementation team is in place to help carry through the recommendations.
- **Livestock producers:** actions to manage conflict include learning from others what measures they value

to have more and healthy wildlife. Some people are fine with wildlife near them, others are not. Some people want dominion over wildlife, others do not.

- **Wildlife Management:** find people to serve that have more than one interest. People that are well-rounded in the outdoors and can speak to more than one topic, who come with multiple interests.

Suggestions for Overcoming Obstacles

- **Livestock Producer:** have an experienced 3rd party facilitator who can identify conflicts as they arise. With everyone exchanging information and able to do so without retribution. Offer an introduction of science-based information.
- **Trapper:** Focus on a larger goal. Use factual data to support decisions.
- **Wildlife Conservationist:** Allow adequate time for every perspective; have longer meetings and a series of meetings.
- **Fox Hunter/Dogs:** Explain process from the get-go. Bring people together and allow them to have time to tell their story with no interjections by anyone else (sometimes we think we know what others believe including those in our own circles and we do not). Require discussion to understand each other (and ensure all concerns are transparent). Ensure all objectives are easily understood. Important each person has an open mind, willing to explore, be open to talk.
- **Trapper:** Have neutral location and provide food.
- **Fox Hunter/Dogs:** notion of “give an inch, they’ll take a mile” how about instead “give an inch for the better of the mile.” Introduce different ideas for the stakeholders. Example: most fox pens are created to run dogs in a controlled environment with dogs competing with each other in speed and agility.

Inclusive and Productive Group Size

Respondents were asked what size group they believe would be inclusive and productive. Responses differed for both criteria (inclusive and productive).

Group Size for Inclusivity and Productivity

To maintain group productivity, respondents listed group sizes ranging from 10 to 15 or 15 to 20; mostly under 20 or under. One person suggested 30 or less. Another person suggested 100.

With respect to inclusiveness, some respondents stated that the “group size should be as large as needed to include anyone who wants to be involved,” while others said “it should be proportional to the representation needed to accomplish the task at hand” and perhaps hold several public events to communicate about the purpose and outcomes of this effort.

Based on comments provided by respondents regarding preference of group size and composition the following criteria are suggested for organizing a collaborative group:

- Strive for inclusivity while maintaining opportunities for learning and engagement that lead to productive group work;
- Identify key stakeholders before bringing them together, perhaps 1 to 2 people from each agency, organization, community or affiliation who are most interested in working with others, with one person as the primary and the second person as the alternate; and

- Maintain consistency within the groups or with those who attend the meetings (have some sort of expectation checklist so that potentials members understand the responsibilities involved).

Workable Meeting Location, Days, and Times

Respondents were asked which day, times of day, duration of meeting and location are best to meet, and what size group they believe would be inclusive and productive.

Meeting Location, Days, and Time

Meeting Location: several people mentioned the importance of a neutral location and some suggested moving the meetings around. Several voiced the importance of ample advance notice of meetings. Respondents provided some general comments with respect to scheduling and duration of the meetings such as:

- centrally locate meeting space - conflicts are geographically centered. Triad, Triangle Metro; Raleigh is in the center.
- Location of meetings makes a difference in how people participate
- consider moving the meetings to various locations
- challenges may include travel time (may consider district meetings where possible)

Meeting Days: In general, there was a wide range of preferences for the best days to meet though most interviewed would prefer to meet during the week and would consider a meeting on Saturday.

- a number of people preferred not to meet Monday or Friday, though a few were willing
- most folks requested Tuesday, Wednesday, and Thursday; this could include part of the day on the day of arrival, and more toward late afternoon, and at times in the evening
- volunteer stakeholders preferred Saturday including meeting in the evenings

Meeting Time: With respect to time of the day, there was general agreement to meet during the day and have longer meetings (more than ½ or ¾ day) – something like 9 am to 1 pm, or 10 am to 4 pm or include a combination of afternoon into evening.

Perception About Use of and Access to Information

Respondents were asked to describe their preferences about the use of and access to information. Specifically, they were asked about:

- kind of resources (i.e., technical support) needed to participate effectively
- learn about the kinds of information and experience stakeholders can bring to a collaborative
- most effective means of sharing information

- best way for the WRC to receive feedback from respondents about the process during the process

Resources Needed (i.e., technical support, relevant information) to Participate Effectively
<p>Stakeholders were asked about the resources needed to participate effectively:</p> <ul style="list-style-type: none"> ▪ people want information: studies; the science; current population information; background on laws and regulations; background on history; results of polls of public demonstrating desire for humane treatment; what other states are doing ▪ need time to get to know each other and build trust. ▪ meet face to face. ▪ use technology, educational materials; ensure all have access to same information ▪ give notice of meetings at least a couple of weeks prior to meeting. Have some flexibility. ▪ provide read-ahead information (pre-work required to prepare for the meeting) ▪ provide a copy of the situation assessment to each stakeholder
Resources Stakeholders Can Bring
<p>When stakeholders were asked what information, resources or experience they can bring to the process, responses included:</p> <ul style="list-style-type: none"> ▪ scientific knowledge of the species. ▪ decades of experience hunting and being in the field. ▪ decades of running fox preserves. ▪ experience of knowing about diseases, livestock losses, and the ability to listen. ▪ interest and long-term commitment to improving management; animal welfare interests; some technical knowledge. ▪ been on the controversial side of canid issues; I understand how there are strong opinions on different sides; consensus is really important; I bring calm and listening skills in the face of differing opinions ▪ Other considerations from a facilitator's point of view: <ul style="list-style-type: none"> ○ Professional expertise ○ Personal experience ○ Literature
Methods to Present and Share Information
<p>Most people liked all three approaches mentioned (presentations, handouts, and small group discussions).</p> <ul style="list-style-type: none"> ▪ in-person presentations, including Q&A ▪ handouts, before meeting [one person mentioned receiving at least 2 weeks so that people can be prepared]. ▪ provide agenda. ▪ conversation. Q&A's. small groups. ▪ game for any approach. ▪ happy about this possibility to meet and go as low tech as possible
Best Ways to Receive and Share Information with Others Between Meetings
<ul style="list-style-type: none"> ▪ by far the most common answer was email. ▪ a few mentioned establishing a website. ▪ several mentioned phone. ▪ one requested USPS mail (does not use email).
Best Way for the Wildlife Resources Commission to Receive Feedback About the Process

The most common answer was email or phone.

- another person suggested continued phone interviews.
- one person suggested on-line surveys.
- several people mentioned providing feedback in meetings.
- other suggestions included:
 - I'm assuming that WRC will be participating which is important.
 - Provide a particular email for folks to respond, monitor, and perhaps provide mechanisms for broader outreach that includes information to wider audiences about the topics, discussions, information to share, etc.
- in general, a number of participants expressed appreciation for this effort, Thanks!, and the opportunity WRC provided.
 - Folks want to be clear about what are the next steps? Will we get to see a copy of this report or be directed elsewhere? Appreciate the opportunity!
 - If they have this process, when would it be? I do not want to be doing it during bear season. I hunt every day and the season is short (November and December).
 - Two people commented positively (one to each interviewer) on the job of the interviewer and extended their thanks to the researchers.
 - Glad WRC is doing this; hope you can get the right people together and move forward.
 - Glad this process is moving forward.
 - Great that WRC is listening to stakeholders; it is the thoughts and ideas that come out of the process and then THEY communicate back.
 - Want to learn what livestock producers have to say about the topic. Ensure Wildlands Network and Federal partners are contacted. Canid biologists at WRC, NCSU, UGA are amazing and hope they will be in the room.
 - Would like WRC to provide timeline of public comment process for 2019 rulemaking process.

Conclusions and Recommendations

This section provides a summary of conclusions followed by a list of specific recommendations that can contribute to WRC's desire to involve the public in fox and coyote management. Many of the suggestions provided by the participants focused on how to improve the existing forums for sharing information and clarifying issues, as well as some different methods for generating alternatives to controversial proposals.

Significant Findings

1. The respondents, except for 4 individuals, shared the following values:
 - a. their love and enjoyment of the outdoors, North Carolina's diverse wildlife and terrain, and the importance for ensuring these experiences and connections are available to the them and their families into the future;
 - b. pride in their connection to the outdoors and outdoor activities; and their respective level of knowledge, expertise, and experience in being able to competently engage in the outdoors; and
 - c. the importance of ensuring viable public health, and the health of pets, livestock, and wildlife.

Regarding the four individuals who did not express these shared values since they did not fully participate in the interview process; and while the fourth person participated in a full interview, the views expressed were specific to the importance of ensuring viable public health and health of pets, livestock, and wildlife.

2. Collaborative efforts generally are inclusive, and people are convened with various interests and aspirations to encourage inclusivity. Nearly all of the respondents reported a willingness to engage in collaborative effort, and as appropriate, serve in a primary or alternate role if a stakeholder process was convened. A number of individuals expressed interest in learning about others' perspectives in a civil manner, perspectives they had never had the opportunity to hear and in learning about recommendations that could satisfy multiple interests, even if a comprehensive agreement might not be achievable.

Some of the respondents are skeptical, concerned that collaboration will not promote their interests, though they remain willing to take part in effort, offer recommendations, and potentially support changes as long as the proposed changes are supported by data-driven evidence. It was also suggested that the effects of any proposed changes are monitored and adjusted when future data became available. While a few respondents seek to protect their interests; others are focused on learning about the proposed changes and how this group can help advance evidence-based changes for North Carolina. Some see collaboration as a potential tool to address their interests; others are not clear how to go about it. A few respondents shared their preference for maintaining the status quo, believing changes may impact their joy and livelihood (example: regulatory changes to controlled fox hunting preserves).

A number of respondents specified preconditions for a collaborative effort. The preconditions are:

- a. acknowledging what the problem is/is not with respect to fox and coyote management, the proposed changes being considered, and identification of the public involvement timeline;
- b. recognizing some stakeholders believe wildlife self-manages except at a specific sites or situationally based events such as fox predation on chickens;
- c. that each participant is expected to participate with an open mind and the willingness to engage in a thoughtful "learning conversation;"
- d. understanding the importance of a collaborative as an educational process which includes data-drive conversations about facts pertaining to populations, predations, and policies (for example) while learning about the respective perceptions and interests of others; and

- e. the importance to some for maintaining the status quo or limiting changes.
3. Respondents understand that their role will be to provide recommendations when WRC convenes a group. Therefore, expectations are/appear to be realistic about potential stakeholder contributions. However, it is not clear to the respondents what the process timeline might be and therefore the expectations regarding their time commitment to a process.
 4. A collaborative process, in this situation, requires the following elements:
 - g. a clearly stated decision space.
 - h. a structured process that is fair, open, and encourages meaningful interaction.
 - i. information that is shared openly and readily such that everyone has access to the same information.
 - j. the "right" people are participating; they are committed to learning, and diligent in educating their constituents about the challenges and potential opportunities that result from the meeting discussions.
 - k. satisfaction of multiple interests is a possibility.
 - l. attainment of a higher goal is a possibility (example: better management of wildlife in general while serving to inform WRC about future issues and opportunities).
 5. A number of respondents have voiced gratitude for the opportunity to collaborate on recommendations pertaining to fox and coyote management. Others have voiced specific concerns about the motives of other stakeholders including the motives of WRC in providing a stakeholder process. Some stakeholders believe WRC will specifically prohibit them from participating in their traditional ways of hunting. Assumptions about others can stifle effective communication and quickly lead to misunderstandings and adversarial tones when specific characterizations lead one's perceptions. Where mistrust exists, it will be helpful if those stakeholders can set aside their "judgements" to create a climate for collaboration while testing whether their theories of conspiracy are accurate.

Recommendations

1. Based on the interviews and qualitative data analysis, the project researchers recommend convening a stakeholder process that can result in recommendations to WRC regarding the management of fox and coyote in North Carolina. The process is expected to be efficient, transparent, and inclusive, with a clear decision-making process and decision space. Stakeholders, convened to participate, will be asked to commit to their roles, as well as clearly defined procedures that will govern the stakeholder process.
2. We recommend a four-part process:
 - a. A Single-Text approach to update regulations pertaining to Controlled Fox Hunting Preserves in North Carolina given the limited time available for other forums of discussion. Based on the development of a template of proposed recommendations by WRC, a facilitation team can manage the development of a single working document that reflects the issues, concerns, and mutually held interests shared by stakeholders, including the identification of topics with broader support. A straw or draft set of recommendations in edit-able form (e.g., Word) can be sent directly to the stakeholders with a deadline for the return of proposed and redline edits that will form the development of draft 2.

For proposed changes that appear non-controversial, and/or where there is full support of the same recommendation(s), the facilitation team can incorporate those edits into draft 2. For more substantive negotiations about controversial items, the facilitation team can include the items for

discussions, and distribute for additional edits. The team will facilitate the same steps until there is agreement on the recommendations, or agreement about some of the recommendations which may result in the groups' best work. The latest version is expected to express the interests of the stakeholders in an acceptable manner, bringing some level of support or agreement (Shane, 2005). In addition to collaborating with the primary stakeholders on updating the regulations, events such as public open houses could be offered to inform the public about the status and/or results of updated regulations

- b. Convene a broader group of interested parties focused on fox and coyote management in North Carolina. The group would be tasked with reviewing the two WRC reports and proposed changes contained in the reports. The recommendations could be evaluated based on technical and scientific information, stakeholder expertise and experience, regulatory requirements that may need to be considered due to the specific recommendations, and any known budget and staffing constraints to produce a series of recommendations for WRC to consider. Some level of joint-fact finding may be employed in this process including public engagement process (public open houses for example) that invites additional feedback before final recommendations are submitted. The broader stakeholder process focused on fox and coyote management should be distinctly separate from the discussion about Controlled Fox Hunting Preserves which is expected to launch initially, during a much shorter timeline.
- c. Support for the broader stakeholder group can be created by establishing an advisory or steering committee from amongst the members of the stakeholder group. The role of the advisory or steering committee is support to the facilitators and WRC in the development of a timeline and meeting agendas, and to assist in guiding the overall process. Further, the advisory or steering committee along with WRC staff can recommend technical experts to present important and useful information for consideration by the stakeholders. Those with technical knowledge can help review preliminary and current studies and provide comments and suggestions prior to distribution to the stakeholder group.
- d. Consider the value of convening community and professional leaders who support a long-term collaborative that can foster future recommendations in support of management decision-making. This group could serve as a mechanism for gathering feedback from stakeholders. A long-term public involvement approach could help various groups and WRC maintain ongoing communication and accountability about future wildlife resources issues in North Carolina. This model could include establishing work groups to explore topics, develop proposals, and resolve future differences. Such a group could be particularly valuable as the state's population grows and with it, the built environment, potentially resulting in habitat loss and fragmentation, which could affect wildlife interactions.

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Appendix A: Introductory Correspondence

Introductory Email

The NC Wildlife Resources Commission (WRC) is interested in gathering input from stakeholders like you who have an interest in fox and coyote management in NC. Input from stakeholders will help inform effective and efficient management of foxes and coyotes throughout North Carolina, while:

1. allowing equitable access to these species for all users,
2. maintaining sustainable populations of foxes,
3. continuing to provide tools for reducing depredations by these species, and
4. optimizing wildlife welfare considerations.

To begin this process, WRC is seeking assistance on how best to involve stakeholders, share information, and work as collaboratively as possible on the completion of this effort. Because collaboration means different things to different people, WRC would like to understand the views of stakeholders and their perspectives with respect to collaboration, in particular their expectations for how all interested parties can best work together, and under what conditions. This information will help WRC determine how to engage interested parties beyond this initial information-gathering phase (referred to as a Situation Assessment).

A list of potential interest group we plan to engage include:

- Academia
- Fox hunters
- Mounted Fox Hunters
- Fox hunting preserve operators
- Fox trappers
- General wildlife advocates
- Land Conservationist: professionals
- Livestock producers
- Municipality representatives
- Non-canid wildlife advocates
- Public health officials
- Red wolf advocates
- Wildlife management professionals
- Wildlife Preservationists

To help us get started, please review WRC's Executive Summary with information regarding the process (attached). Additional supporting information can be found in the NC Coyote Management Plan and the Fox and Coyote Population Study at the links below.

- [NC Coyote Management Plan](#)
- [Fox and Coyote Population Study](#)

If you are interested in helping us to understand your perspective, please email me (mladdor@ncsu.edu) with several options for dates/times in which you can participate in a schedule interview (allow about an hour). If we do not hear back by Tuesday, 1/29, I plan to reach out and solicit several date/time options. Scheduling times can include early morning, typical work hours, evenings, or the weekend. In addition, if there is a more appropriate person to submit this request within your organization, please let me know.

Thank you for your consideration and support.

Script for Arranging Interviews:

Thank you for taking time to participate in our short interview.

Again; I am XXX with North Carolina State University. As I mentioned earlier, we are interviewing people who have a strong interest in improving fox and coyote management in North Carolina. We are gathering information from a wide range of interested parties to better understand their perceptions on collaboration, and if and under what circumstances they are willing to work together. We expect to interview about 40 people.

Information gathered from this interview will be grouped with all the other interviews and included in a written report that will be submitted to WRC. We will not identify you or use any information that would make it possible for anyone to identify you in any notes, presentation, or written reports about this interview. Where appropriate and with your permission, I might want to use a direct quote from you. Rather than attributing the quote directly to you, however, I will attribute it to a general affiliation such as: "a fox hunter...," or "a livestock owner reported that..."

This Situation Assessment is being paid for by the NC Wildlife Resources Commission. There are no expected risks for helping us with the study as we will not attribute your comments. One expected direct benefit is that this and any future processes may aid in the overall management of foxes and coyotes for the state of North Carolina. You may stop the interview, or shorten it, at any point. If you or we get interrupted, we can complete the interview at another time.

Is this a good time for you to participate in an interview?

Appendix B: Interview Protocol

Stakeholders Information and Perspectives:

The first few questions are about you, your connection to management of foxes and coyotes in North Carolina, and your experience with any similar planning processes.

1. Please tell me a bit about yourself. What is your connection to fox and coyote management?
2. Have you participated in any planning efforts related to management of foxes and coyotes? If so, can you tell me about the purpose of that effort, your role, and outcomes of that effort?
3. a. What do you believe are the desires of stakeholders with respect to management of foxes and coyotes? What management strategies could be used to effectively and responsibly manage both foxes and coyotes at the same time?
4. Current evidence supports that a year-round coyote trapping season and coyote bounty programs are not reasonable management options (NC Coyote Management Plan). From your perspective, what other specific options do you think would work to manage foxes and coyotes, including potential changes in policy?

Views About Working Together:

The next set of questions is related to working together with other groups. Collaboration can often mean different things to different people. We want you to think about a process that will allow you to work with others in identifying and recommending management actions while working with other parties who may have different perspectives than yours, regarding how foxes and coyotes could, or should, be managed in North Carolina.

5. From your perspective, what is a collaborative effort? How does it work best?
6. What are the key issues you believe need to be discussed for this collaborative effort to be successful?
7. What could be the possible benefits to you and others in participating in a successful collaborative process that helps improve fox and coyote management in North Carolina?
8. What might the potential consequences be to you and others if a collaborative process is not undertaken or is not successful?
9. Given your definition of a collaborative effort, what are some milestones that will tell you that the group is on a successful path? What will you consider to be a successful outcome?
10. Collaborative efforts as a general rule are inclusive and people with various interests are convened to encourage inclusivity. During the interviews, we want to understand the desires of those being interviewed to participate at some level, in a stakeholder recommendations process.

WRC has identified you as a potential representative of XXXXXX group. Given this: if a recommendation process was convened, would you be interested in participating? And if so, as a lead representative of your interest group? As an alternate representative of your interest group? As someone who will stay informed but not be directly involved in any meetings? Are there others you might recommend who could speak for you as a representative of your interest group? If yes, can you provide contact information?

11. WRC's stated purpose of this effort is to gather recommendations from stakeholders about evidence-supported methods that will provide effective and efficient management of foxes and coyotes throughout North Carolina, while:

1. allowing equitable access to these species for all users,
2. maintaining sustainable populations of foxes,
3. continuing to provide tools for reducing depredations by these species, and
4. optimizing wildlife welfare considerations.

a. What clarifying questions might this purpose raise for you? b. Beyond clarifying questions, do you have any concerns, and if so, what recommendations or suggestions might you propose to respond to those concerns?

12. In general, there six sources of conflict: sources of information, mis-communication, interests, structural, values, and relationships. From your perspective, describe the sources of conflict in fox and coyote management. Do you have recommendations that might help resolve these conflicts?

13. From your perspective, how do geographic and/or cultural differences across the state potentially affect management of foxes and coyotes in NC? Based on your response, what management strategies could be effective in addressing those differences? And what recommendations might you suggest for a comprehensive approach across North Carolina?

14. WRC is tasked with updating the regulations pertaining to controlled fox hunting preserves in NC and needs stakeholder input by March 31, 2019. Who would you recommend, including potentially yourself, who could participate in a targeted committee to propose recommendations for addressing this specific topic by the deadline?

Defining Meeting Processes:

During a collaborative process, there are approaches that help participants engage with each other more effectively. Examples can include meeting from 9 - 4, establishing ground rules, working in small groups, exploring and defining technical information, training in effective negotiation techniques, etc. This section seeks your opinion on what approaches would be most useful to you:

15. What could assist you and others in working together to develop recommendations for fox and coyote management in NC?

16. What do you think will be the biggest obstacles to generating recommendations for fox and coyote management in NC (i.e., value differences, personalities, conflicting technical information, lack of communication, etc.)? Based on your responses, what approaches might be helpful to overcome these

challenges?

17. a. What are the resources (background information, technical support, etc.) you will need to take part effectively? b. What information, resources, or experience can you bring to the process? c. What is the best way for information to be presented to you during meetings (presentations, handouts, small group discussions to process information)? D. What is the best way for you to obtain information between meetings (email, Google Drive, etc.)? e. How do you prefer to share information with others (Google Drive, email, listserv)? f. Do you or someone you work with have access to technology, including the internet (assuming we will need both to communicate during and between meetings)?

18. For you, what are the best days of the week, times of day, **and** places to meet?

19. What size group do you think will be most inclusive, but also productive?

20. What are the best ways for WRC to receive feedback from you about the process?

21. Do you have any questions for me?

Appendix C: Executive Summary of the Process

Fox and Coyote Management Stakeholder Engagement Process Executive Summary



Overview

The NC Wildlife Resources Commission (WRC) manages North Carolina's wildlife and fisheries resources in trust for all North Carolina citizens and to ensure the conservation of those resources for generations to come. WRC regularly looks to improve the effectiveness of regulatory programs so that they meet the evolving needs of wildlife in a changing landscape as well as the desires of the citizens of North Carolina.

In March 2018, WRC completed the North Carolina Coyote Management Plan (Coyote Plan), which provides a comprehensive framework for addressing the impacts of coyotes in the state and provides management recommendations. Completion of the Coyote Plan followed completion of the Fox and Coyote Population Study (Fox Study), released in 2012. The Fox Study describes the state of these species and recommends methods for conserving populations of foxes while managing adverse effects of coyotes. Both reports recognize the possibility for regulatory changes that would increase the harvest of coyotes, while acknowledging that structured feedback from stakeholders is crucial for the success of any proposed changes.

WRC is initiating a stakeholder engagement process led by a third-party facilitator, North Carolina State University's Mary Lou Addor and co-facilitator Nancy Sharpless, to seek input and recommendations from representative stakeholders who are impacted by fox and coyote management.

What will be involved?

1. NCSU facilitators will conduct telephone interviews in January with a diverse set of stakeholders, including fox hunters, fox trappers, controlled fox hunting preserve operators, Land Conservationist: professionals, livestock producers, municipalities, wildlife advocates, public health officials, and wildlife management professionals. Interview results will be anonymous and summarized into a situation assessment report that will be completed by March 1, 2019.
2. Recommendations from the situation assessment report will be used to schedule one or more in-person meetings with a smaller group of interested stakeholders, where challenges and opportunities for improving fox and coyote management in NC will be discussed. The purpose of in-person group discussions will be for stakeholders to work together and brainstorm mutually-agreeable, practical strategies that WRC could realistically implement. Stakeholders who decide to participate are expected to attend all in-person meetings, as each meeting will build on the other while participants develop a deeper understanding of the issues and refine proposed solutions. Recommendations from the group will be compiled by the facilitator and submitted to WRC, which will then use this input to guide future changes in management of these species.
3. This process is designed as a targeted method of generating input about fox and coyote management from those stakeholders who could be most impacted by changes to current management practices. Public hearings and public comment periods provide additional opportunities for input from the public before any proposed rule changes are adopted, if any such

changes are proposed through this process. Stakeholders participating in phone interviews and/or in-person meetings are not precluded from also providing input via these other avenues.

WRC's end goal

To use evidence-supported methods to improve effective and efficient management for coyotes and foxes throughout North Carolina, while:

- allowing equitable access to these species for all users,
- maintaining sustainable populations of foxes,
- continuing to provide tools for reducing depredations by these species, and
- optimizing wildlife welfare considerations.

What are the issues?

- **Fox harvest opportunities** - Opportunities to harvest foxes are unevenly distributed and the laws that regulate their take are highly complex, adding confusion to who can legally harvest what, when, and where. The General Assembly currently has authority over regulating foxes, and counties are not obligated to rely on evidence-based management practices to establish local laws (Fox Study, Pg. 7-11). Fox trapping is not allowed in many counties, though biological data support the potential for sustainable trapping in some of these counties. Fox trapping and coyote trapping involve the same strategies and tools, making it challenging to exclusively target one species or the other. The absence of fox trapping seasons not only precludes trappers from the opportunity to harvest foxes in these counties, but it also makes harvest of coyotes difficult or impractical.
- **Managing coyotes** – Red and gray foxes have occurred in N.C. throughout recent history, but coyotes are a relatively new arrival (Fox Study, pg. 12-15). Many North Carolina residents see the presence of coyotes as problematic, and frequently request more options to remove them from the landscape. Coyotes can already be hunted year-round, including at night in 95 counties, and can be trapped during any other open trapping season. Depredation permits can be issued at any time of the year to trap and remove individual coyotes that are causing property damage. While WRC recognizes that opportunities remain for increasing take of coyotes in North Carolina, the unique biology of coyotes pose significant challenges to control their population by these means (Coyote Plan, pg. 20-24). For this reason, WRC encourages effective, non-lethal techniques to prevent conflicts with coyotes, while acknowledging that lethal means can be an immediate, short-term solution for removing individual problem animals (Coyote Plan, pg. 27-39). If harvest opportunities for coyotes are to be expanded, it must be understood that fox and coyote management use the same tools and thus are intimately connected. From 2006-2012, the average number of coyotes harvested per county with an established fox trapping season was 31% to 112% higher than in counties without a fox trapping season (Coyote Plan, pg. 32). Establishing fox trapping seasons to all counties that can sustain them may be one of the most practical, effective ways to increase harvest of coyotes in North Carolina.

Controlled Fox Hunting Preserves – Controlled fox hunting preserves are fenced facilities licensed by WRC where fox and coyotes can be run with dogs. The rules for regulating these fox hunting preserves are currently open for review and WRC has until April 25, 2019 to make changes, readopt them as is, or eliminate the rules, which would leave these preserves unregulated. WRC is interested in convening a sub-committee of interested stakeholders who will provide input on how best to

update the rule language before it must be submitted for consideration in the permanent rule making process.

What are the boundaries?

- **Bounties and harvest incentive programs are prone to corruption, expensive, do not increase harvest, and do not target problem animals** (Coyote Plan, pg. 21-24). Ample evidence from case studies supports the conclusion that these methods are ineffective at reducing conflicts with coyotes or impacting coyote populations. These methods have been discontinued by most state and federal agencies and are not considered viable options for managing coyotes in the state.
- **A year-round trapping season for coyotes would result in unacceptable risk to non-target species, especially foxes** (Coyote Plan, pg. 29-31). Pelts from animals trapped in the spring and summer have almost no market value and would ultimately be a waste of the resource. Wildlife depredation permits already allow for the legal removal of problem individuals outside of the trapping season, rendering a year-round coyote trapping season unnecessary to address specific problems.
- **Poisons are inhumane and unsuitable for use in a heavily populated state such as NC. As such, their use is primarily illegal for controlling wildlife.** WRC has no authority to approve use of poisons for controlling coyotes in North Carolina.
- **Controlled Fox Hunting Preserves** are legally established in NC statute, though the responsibility to regulate these preserves falls to WRC (G.S. 113-273). Unless NC statute is changed, fox hunting preserves will continue to exist and be managed by WRC.

Useful Definitions

Harvest/take – “take” is defined in statute as all operations during, immediately preparatory, and immediately subsequent to an attempt, whether successful or not, to capture, kill, pursue, hunt, or otherwise harm or reduce to possession any fisheries resources or wildlife resources (G.S. 113-130.7). The term “harvest” is used synonymously with “take.”

Wildlife management – the manipulation of wildlife populations and habitat to balance the needs of wildlife with the needs of people. This includes conserving populations of protected species as well as controlling populations of species that cause damage to property or pose health and safety risks to humans or domestic animal