

SE Red Fox Symposium

Q&A afternoon session notes

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Q: Do red fox have similar reproductive strategies to coyotes? Is there an increased level of breeding if some are removed?

A: They produce an average of 4 - 6 kits per litter. There is no known change in strategy or frequency with removal. Coyotes have spread and their compensation for removal has been well documented, but not with red fox. Whether recovery occurs can just be a factor of population density.

A: Red foxes exhibit compensatory reproduction – they will make up for losses in population. If they are exploited (more heavily trapped), they will have larger litters. Up to 14 placental scars have been recorded as a result of trapping and hunting. They will breed younger, have higher survival, and have a higher percentage of young reproducing. It is an adaptive reproductive behavior. 75-80% of population being taken out can be compensated for rapidly.

Q: Do we know population numbers compared to ten years ago? Has it increased or is it just that we see them more?

A: In the 1980's, there were population studies by county for red fox. We don't have population estimates for most wildlife. It is difficult to count humans – imagine how difficult to count wildlife. Trends are tracked by road kills, disease outbreaks, and nuisance reports. Overall red fox populations have probably declined. Population of gray foxes may have increased. You cannot trap in Pender County, but grays are very dense there. Rules vary by county. In general, abundant throughout NC.

Q: Why do we have the law about not moving foxes then if density is lower other places?

A: Generally unsuccessful and disturbing to population balances. Foxes can transmit disease to new areas. Competition between relocated animals and existent animals can result in mortality.

Q: Are any non-lethal management methods being used to protect oyster catchers?

A: Most of them problematic for human use areas. It is difficult to find ways to keep foxes out but let birds out, too. Some success has occurred using pepper sauces. Predators generally do not like them. One study from Australia used dummy eggs. Some teaching of avoidance occurred, but often too late for raccoon and other quick moving predators. Pepper was placed all over eggs and birds. The pepper sauce seems to have no effect on eggs and birds. Birds had better germination effect, indicating no impact to birds.

Q: Is there a comprehensive chart for birds that addresses threats, similar to the one Matthew showed for sea turtles? What life stage and threats should we be paying attention to?

A: Foxes are a concern for both eggs and chicks. Once they are hatched and running, though, they have a good chance of survival. There are different impacts for different stages, but no comprehensive chart exists.

Q: What is a typical home range for foxes and how far do pups tend to go?

A: Varies widely, but is dependent on habitat and food availability. One report suggests 6 km as a range.

Q: Do they swim?

A: Absolutely.

Q: Is it possible they are not feeding as solitary predators? Or how do you account for multiple tracks near one nest?

A: It may be multiple foxes checking out the same nest. Several may be capitalizing on the same nest. Generally, they do not use a pack hunting method (as wolves do, for example.) It could be a female with kits.

Q: Will they crossing roads to get to food supplies?

A: Possibly, they may den in an area that has cover but travel to the other side of the road to hunt/forage.

Q: Are they colorblind? Would yellow tape around enclosure screens have an effect?

A: Most mammals don't see color all that well. They generally see in shades of brown and gray. Tape color does not seem to matter.

Q: Does using a portable radio as a deterrent effective?

A: This method has been used to get foxes to move/abandon a den site. The fox might get acclimated to the sound, but it may be effect, especially for moving dens.

Q: How does the recovery plan for the loggerhead sea turtle address predation? What percentage impact is discussed?

A: If predation impact is above 10% in our unit it, would trigger it to be addressed under the recovery plan. (Our unit is NC, SC, and GA) In FL, some sections are/have been at 15-25% or more predation. In our unit, we do not have standardized recording of predation. There is a need to look at how predation is scored/quantified. The FL protocols may already be standardized. Caswell and some others in our unit have been keeping track of this data. There is also loss associated with hatchlings trying to exit the nest through the area of soft sand on the side of a nest where a fox has previously dug in.

Q: Does one fox completely predate a full nest?

A: It is possible that there are multiple returns to a nest by a single fox. Predation does not usually take a complete nest.

Q: Are cameras useful to catch predation?

A: Camp Lejeune tried this but they haven't gotten any shots of fox yet.

Q: What about foxes that get aggressive and unafraid of humans? What can be done about the turtle volunteers who do not feel safe knowing foxes are waiting and are close by?

A: They can make noise, although red foxes don't seem to be scared even with humans with dogs around. They will just wait nearby and look at you. They are not thought to attacked humans ever unless rabid (no one knew of any documented cases). Far more dog attacks occur, but volunteers should still be cautious and aware of foxes. Also aware that foxes sometimes seem to come out to see sea turtle volunteers and may follow humans. They do seem to be making an association between food and humans.

Q: Were red fox in our area imported from England or have they come in from northern latitudes?

A: This is not completely known or proven. It is believed that the red foxes in the Southeast are most likely from England as records do not indicate a population occurring before colonial times. Current genetic research will hopefully help clarify this.

Q: Are there any known cases of cannibalism in red fox?

A: They are scavengers and definitely will eat carrion, but it is not known if they will eat fox remains.

Q: Is it unusual to have red and gray foxes in the same locations?

A: No, they frequently co-occur, although red foxes tend toward more open habitats while gray foxes tend toward more forested/vegetated habitats. They are two different species of predators and need be considered separately in order to be managed appropriately. Habitat should be a major consideration in management strategies. In parks or natural areas, some opportunity may exist to "let nature take care of itself" where listed species concerns are not a factor. In some cases, though, different management goals and needs may exist, as well, such as interaction with human populations. Reaching municipal goals may be supported by adoption of ordinances and the use of the ordinance as an educational tool, i.e. no feeding ordinances.

Q: Is coyote urine effective as a deterrent? Is it expensive?

A: It is used by deer hunters as a cover scent and can be used in scent stations. A variety of wildlife will be attracted and come out to check it out. It is unclear whether it is effective as a fox deterrent.

Q: How can we address the need to educate the public and develop a media message to get the public to understand their role and responsibility in the effects of feeding red foxes?

A: Flyers can be used to reach appropriate audiences (example of a flyer in Spanish at Bald Head to target construction workers).