

NCPARC RIMM Meeting: Wednesday, April 11, 2007

Chair

Mike Dorcas- Davidson College

Participants

Jef Ginsberg- Piedmont Wildlife Center

John Groves- North Carolina Zoological Park

Jeff Hall- North Carolina Wildlife Resources Commission (NCWRC)

Jeff Beane- North Carolina Museum of Natural Sciences

Ann Somers- University of North Carolina at Greensboro

Grover Barfield- North Carolina Herpetological Society

Jeff Humphries- NCWRC

Ron Sutherland- Duke University

Kim Coffey- Mecklenburg Parks and Recreation

Dave Lee- Tortoise Reserve

Introductions

Mike: I sent out an agenda and Dave sent me a few things he wanted to discuss. We will try to keep things moving.

Mike gave Carolina Herp Atlas <http://www.carolinaherpatlas.org/> update; there are 150 users; 28 rattlesnake records; green salamander record; 10 spotted turtle records...

Mike: A lot of those records have photo vouchers. So far it is going really well. If you have suggestions, please let us know. Everyone here should be registered and submitting records.

Mike reminded everyone about the Herp Registry on the NCPARC website.

Jeff Hall gave update on the NC Herp Bibliography; Lori and Alvin will not have any time to work on it until June or July.

Jeff Hall gave update on Calling Amphibian Survey Program (CASP). We have 139 routes statewide and 103 are filled; 47 volunteers have attempted the quiz; 34 have passed the quiz; 48 have not attempted the quiz; and 14 volunteers did not have to take the quiz because they passed it last year. We have held four workshops and it will be interesting to see how many volunteers actually run their routes. There was discussion about the quiz and how its difficulty may affect volunteer interest. Also, the lack of piedmont workshops was discussed. John brought up his frog call surveys and possibly coordinating with CASP for his high school student junior zoo keepers.

Mike: On to hellbenders; John, do you want to tell us about statewide surveys?

John: In August of last year there was a population viability assessment (PVA) for hellbenders throughout the United States. There were recommendations for initiating research projects. Lori has come up with some dates for hellbender surveys and will be needing volunteers. Anyone willing should contact her.

Jeff Humphries: I will be doing a hellbender piece on Animal Planet this month.

John: The zoo is getting very active with amphibians. We will be raising funds for hellbender research by developing a button that says "Save Our Snot Otters". Also, hellbenders have been found with chytrid fungus and a specimen was found in North Carolina that tested positive. I don't have all the information on it yet. Chytrid fungus can kill hellbenders in the aquatic environment.

Jeff Humphries: We will be testing them for chytrid in some NC streams.

John: You're doing that through Missouri?

Jeff Humphries: Yeah, they are sending all of the supplies. I think the film crew is actually paying for all of the testing.

John: The large message is that we are looking for volunteers to do hellbender work. Most of the records are old.

Jeff Humphries: The Division of Water Quality (DWQ) can designate high quality waters and only a few species can be used as indicators. Hellbenders are one of those. They can only use records that are less than 10 years old. So, surveys are being done on this. The presence of hellbenders in streams can have a huge effect on development.

John: There are very good streams in NC and many National Forests have populations. The last specimen collected in the Asheville area was in the 1800s

Mike: Thanks John. Now we will turn to box turtles. Gabrielle and Ann are going to give us some information.

Gabrielle gave overview of box turtle surveys that will identify distributions and roads that have high mortality. Project will rely on the general public to submit observations of box turtles crossing roads or anywhere. We are going to put the word out in Wildlife in North Carolina and local newspapers. There is a datasheet on the NCPARC website but we encourage folks to submit their observations on the Carolina Herp Atlas.

Kim: Do we need to submit our observations via the datasheet because I have already entered my observations on the Carolina Herp Atlas?

Gabrielle: No. Just put them on the Carolina Herp Atlas and I will get the data from Steve.

There was discussion about the goals of the survey and the inherent biases of the data. Other ideas of systematic surveys that would improve the data were discussed. Also, Ron brought up new statistical techniques for presence only data. John mentioned the number found at the zoo and other places; 1 or more per acre. John also mentioned the box turtle workshops and mentioned the third one would be held in the fall. Also some discussion about anecdotal observations from long time residents noticing declines in turtles crossing the road.

Gabrielle: So, if anyone has any suggestions about the surveys, let me know.

John: The box turtle meeting will be at Patuxent Research Station in Laurel Maryland and I will send out an email.

Mike: Let's move on to Ann.

Ann: A new group has formed that serves as an advisory board to make researchers aware of research opportunities on State Parks. Ed Corey was there and unfortunately could not be here today. I brought up the idea of a long term study on box turtles. It was well received and what I had in mind was a collaborative effort to establish a mark recapture program in State Parks. They have done a great job of preserving many representatives of our native natural communities. One way that this might work is to establish a standard protocol. It would eventually provide good population data in State Parks. It could also be extended to studying fire ecology. I wanted to know what y'all think.

Dave: Not only is it a good idea, but I don't know if you are aware of this but Chris Thorpe has been doing this up at Jug Bay in Maryland for a number of years. If you could pull him down here then you could borrow whatever you can from his experience so you don't have to reinvent the wheel.

Mike: It sounds like you would need a point person at each park.

Ann: Yes, it is a grandiose idea. You would need a point person at each park and you would need a point person at the state level. It has the potential to serve as a model for monitoring priority species. It is also a great way to advertise our state parks and the research opportunities there.

Mike: It sounds like you would need to form a team to get this moving.

Ann: Well, of course it would begin with those already doing research, Mike, John, Grunwald...

Ron: I would suggest doing a couple of parks in each region so that it is more manageable because the quality of information is going to level off.

Ann: Yeah, and volunteer interest would come and go. But look at Dave Lee, once you mark these turtles they are long lived. People are still finding turtles that Dickel marked in the 1950s.

Mike: This is great monitoring for places that we know are not going to be developed and will serve as a reference for comparison to other places.

General discussion of the immense benefits of the project and the questions that could be answered and a general timeline. Ann would like to get started around February 2008. There was also a discussion about how moving turtles is a problem and communicating this to people.

Dave: One more thing about box turtles and what I have been doing with schools in Bladen County. We just received a grant that will use native turtles as a teaching tool and there are many state parks nearby.

Jess: I have been interested in box turtles for a long time and I have educated neighbors. My neighbors do not relocate turtles anymore.

Dave: We discussed a box turtle refugee camp where the turtles could live out the rest of their lives in captivity. And, places where populations have blinked out, we can study how enhancement works.

Jeff Humphries: There is an issue with not knowing at what point a population is in need of enhancement.

Mike: And there are causes that might not be mitigated. If populations are going extinct because of urbanization, putting more turtles there is not going to make the population any more viable.

Discussion about the information that could be gained and examples of other stocking experiments.

Ann: It doesn't have to be successful to be valuable study.

John: No it doesn't. But my only concern is for disease.

Jess: All turtles will be screened for mycoplasma, but not viruses. I would not release any turtles until they are at least three years old.

Discussion about potential harm of Jess' project.

Ann: I think you are doing a great thing, but I think you should first determine the population size of box turtles on your property before you introduce captive turtles. I would love to help and then we can evaluate what is going on before releasing turtles.

Dave: There is an Asian market in Cary selling live herps that I see a real danger of these things being released into the wild.

Discussion and viewing pictures of merchandise. Jeff Humphries would be point man on investigating it.

Discussion about diamond back terrapins and crab pots. A crabber is interested in working with researchers. Mike said he has a paper coming out in Biological Conservation. There are still questions that need to be answered associated with excluders.

Mike: Other things?

Discussion about making your voice heard about the state amphibian issue.

NC Herp Society meeting flyers to advertise the meeting on May 12 at Grandfather Mountain.