



**UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES PROGRAM**

TELEPHONIC INTERVIEW TIME (07:48)

**CHITTENANGO OVATE AMBER SNAIL (HOST – MEAGAN RACEY WITH
ROBYN NIVER)**

This transcript was produced from audio provided by USFWS Endangered Species Program

P R O C E E D I N G S

(Music plays.)

MS. RACEY: Hi there. This is Meagan Racey with the U.S. Fish and Wildlife Service. Today, Robyn Niver from the Service's New York Field Office has joined me on the phone to chat about a very rare snail, the chittenango ovate amber snail. Hi, Robyn.

MS. NIVER: Hi, Megan.

MS. RACEY: Thanks for joining us. Now, how did this snail get such an interesting name?

MS. NIVER: The chittenango ovate amber snail was first discovered at Chittenango Falls in Central New York in August of 1905. It was originally described as a subspecies of a more common snail, but then was later elevated to the full species status, with the scientific name, *novisuccinea chittenangoensis*.

MS. RACEY: Now, do you actually call it the full chittenango ovate amber snail?

MS. NIVER: I like to call it the chit.

MS. RACEY: The chit?

MS. NIVER: Yes.

MS. RACEY: Well, could you tell us more about the chit?

MS. NIVER: Sure. The chit is only known to occur on ledges within and next to the spray zone of the Chittenango Falls, within the Chittenango Falls State Park. And the entire range of the species is only maybe 200 square feet in size, so very limited range. They require the cool, mild temperatures and relatively constant conditions provided by the waterfall and the mist. And they eat the dead or living vegetation found on the ledges next to the falls. And they're quite small. They may be as large as your thumbnail in length and live for about two to two-and-a-half years.

MS. RACEY: And why does it need the protection of the Endangered Species Act?

MS. NIVER: Well, the chit was listed as a threatened species in 1978, and threats to the species include its small population, size and limited range. So if you think about it, anything goes wrong at this one location it affects the entire species basically.

So, for example in 2006, after some high rain events, a large section of rock came loose from the surround cliff and fell right into the snail's habitat. In addition to just having a small population, size and being in one location, there's an invasive snail, species B, that occurs throughout the entire watershed, where we're concerned about potential interactions with the chittenango ovate amber snail and that species.

MS. RACEY: So what are we doing to ensure the survival of the chit?

MS. NIVER: Well, there's a recovery team made of members of the New York State Department of Environmental Conservation, the U.S. Fish and Wildlife Service, Rosamond Gifford Zoo, the New York State Office of Parks, Recreation and Historic Preservation, and the SUNY College of Environmental Science and Forestry. And so we all work together along with several other partners to implement recovery actions that are described in the chit's recovery plan.

So for example park staff would keep visitors from entering into the snail's habitat through fencing or signage or outreach events. We've conducted research to assess the threats of hybridization or competition between the chit and species B. We conduct periodic surveys where we mark individual snails and then estimate the population size. And last year we met as a large group to discuss how to proceed with possible captive management of the species.

MS. RACEY: Is there any possibility that the chits now could live somewhere else?

MS. NIVER: As far as we know, there's only the one location in Central New York. There've been surveys of lots of other waterfalls within the Central New York area and we have not found any other chittenango ovate amber snails. At one time we thought there was another population in the Tennessee, North Carolina area, but it was later discovered that that was a different species. So, while it's possible, all evidence to date suggests that it's only at this one site.

MS. RACEY: Okay. So how are the recovery efforts going so far?

MS. NIVER: Well, based on some of the genetics work conducted by the U.S. Geological Survey, we're confident that the chits and species B are not interbreeding, so there's no hybridization. We also learned that for such a small isolated population the chittenango ovate amber snail seems to have fairly high genetic diversity. So that's a good thing. It's helpful to know before we consider starting any type of captive management.

As far as the snail surveys go, the population estimates range from around 260 in 2002, up to around 780 in 2005, and that was before that rock slide in 2006. Since then the population estimates have declined from around 550 in 2007, to only around 340 in 2009. So we're conducting a new round of surveys this summer and we've completed three of those so far. So hopefully we'll see a stabilization or increase in the population estimate later this fall. We'll have the numbers at that point.

MS. RACEY: So with the possibility of something like a rock slide wiping out the population, and with the exploration of a captive management program, is there a possibility that we may be moving chit snails to new locations?

MS. NIVER: One thing that we're considering is all of the existing chits are on one side of the falls. And so we're going to investigate whether the conditions on the other side of the falls is actually similar, and so we could possibly move some chits over to the other ledge, the other side. Another thing that we're considering is just boosting population numbers right at the one location. And then finally we're thinking about maintaining some populations within zoos so that we have kind of this refugia in case something were to happen.

So we've got several options that we're considering and trying to apply for some funding to determine what might be the best step.

MS. RACEY: So this seems like quite a unique animal. Does it play a specific role in the waterfall's ecosystem?

MS. NIVER: Well, I can't answer the specific role it plays in the broader ecosystem except that it is certainly prey for birds and for other wildlife, and being only in this one location in the whole world is, I think important enough for us to care about it. Whether or not we fully understand how it plays out its role in

the broader ecosystem, it's an extremely unique species and we're really lucky to have something right here in Central New York to work with like that.

MS. RACEY: Certainly. You've got me convinced. Is there anything else you'd like to add?

MS. NIVER: It's just been a great pleasure to work with this species and with all of the people that have helped with the surveys and the other aspects of the recovery program. And I'm just really lucky to have a job that allows me to try to help with rare plants and animals and even if it's just working on one small part.

MS. RACEY: Great. Well, thanks for joining us. It was a pleasure having you on today.

MS. NIVER: Thank you, Megan.

MS. RACEY: For U.S. Fish and Wildlife Service, this is Megan Racey. Thanks for listening.