

*Rewilding *Torreya taxifolia** to Waynesville, North Carolina, July 2008 31 potted seedlings planted into natural forest habitats

Chronology of Preceding Events compiled by Connie Barlow, 2 August 2008

January 22: initial email from Janet Marinelli to Connie Barlow (in part):
"I'm writing an article for Audubon magazine on assisted migration and other strategies plant ecologists and conservationists are using or considering to combat global climate change. I'd like to make the story of Florida torreya and the Torreya Guardians a major part of this piece. **I was hoping that I could accompany you or someone else from TG on a seed-planting trip**, but after re-reading your website I now gather that this isn't happening quite yet. I hope as the article progresses I will be able to interview you at length. For now, however, I am hoping that you can recommend a way that I can get out and see the work of the Torreya Guardians in person. Do you have any suggestions?"

January 23: Connie replies to Janet's initial query with the news that *Orion* magazine already has a story in press on the work of Torreya Guardians, so it would be better for Audubon to focus on the global warming poster plant of the American West: **Joshua Tree**.

January 24: Janet Marinelli replies that she will do some research on the possibility of shifting the focus of the assisted migration article to Joshua tree.

February 29: Janet Marinelli emails Connie. **THIS IS THE EMAIL THAT LAUNCHES CONNIE BARLOW AND JACK JOHNSTON (and later, Lee Barnes) INTO MOVING AHEAD WITH AN ACTUAL ASSISTED MIGRATION/REWILDING PROJECT:**

"I've been going back and forth with the editors of Audubon magazine about the assisted migration story. I made the pitch for **changing the focus from Florida torreya to Joshua tree**, but they have some problems with that, which I'm hoping you can help to resolve.

As you know, Audubon is big on art and design, and they are worried about how they could handle the Joshua tree story visually. They had their heart set on **sending out a photographer to take great shots of a Torreya Guardian actually planting seed (or plants) - that is, actually doing assisted migration. At this point the Joshua tree idea is at such an early stage this wouldn't be possible**, and they don't

want to end up just using stock photos of the plant to illustrate the piece.

Do you have any ideas?"

March 5: Janet Marinelli sends an email to Jack Johnston and Lee Barnes, in part:

"In recent days I have been going back and forth with the editors of Audubon over how the article will be illustrated. As you probably know, art and design are important to the magazine and they do not want to just illustrate this article with stock photos. They seem to have their heart set on **sending a photographer to take great shots of a Torreya Guardian actually planting seed (or plants) - that is, actually doing assisted migration. Connie's email wonders whether you are ready to do this on private land in Highlands**, which sounds like quite a fitting place to take this historic step. Is this something you are contemplating? If so, would it be possible for Audubon to capture it in photographs? I'd appreciate hearing back from you!"

April 10: Janet Marinelli emails both Connie and Jack that *Audubon* magazine will be interested in her story **proposal IF a photoshoot is possible of "people planting Torreya."**

April 10: Connie replies to Janet:

That's great! Jack, of course, is the centerpiece of showing any sort of planting operation, so keep communicating with him. Also, **the watersheds near Highlands and Cashiers would likely have been precisely the spots where Torreya taxifolia re-entered the Appalachians during previous interglacials, although because Torreya pollen cannot be distinguished from related conifers, there can be no absolute proof based on pollen samples drawn from bog muds.**

Definitely take photos of **Atlanta Botanical Garden torreya operation**. Go to this page of the website to see the photos and captions that I took at ABG. Especially look at photo N, as this movingly indicates that squirrels can be counted on to be of some assistance in planting seeds:

<http://torreyaguardians.org/propagate.html>

Make sure you see the photos I took of the biggest Torreya cousins in America: Torreya californica is, in my mind, a model for what Torreya taxifolia could come to look like in the Appalachians — growing in the wild there — in a few hundred years. Big trees! Peruse the photoessay I posted from my visit to those trees 3 years ago: <http://torreyaguardians.org/swanton.html>

As to trying to photograph me: good luck! **My husband and I are full-time itinerant evolutionary evangelists, and have been for 6 years.** We operate out of a big van. Right now **my potted Torreya** is enjoying the cool, moist climate of Eugene; next week we will be in Portland OR. I set the tree out wherever we are staying, careful to always put it on real soil as ABG emphasizes that that is important for ensuring good communities of mycorrhizal fungi. You can see where we will be when by going our itinerary page: <http://thegreatstory.org/itinerary.html>

May 7: **Jerry Goodbody, managing editor of Audubon magazine** contacts Connie directly that Janet Marinelli will be doing the story and that a photoshoot will be arranged to happen during the 3-day window (July 29-31) in which Connie is able to be in North Carolina.

May 9: Connie contacts Jack Johnston and Lee Barnes with an email that launches the rewilding preparation:

“Jack and Lee - **Let's try for a mini-rewilding.** Could you two use your connections to get the locals excited about this? Make sure Jeff Zahner knows and Christina Frangione and anyone else you think should be involved, and see what good ideas they might have and what they might volunteer to do. And figure out whose private forested land(s) would make the most sense to have come on board to be the location(s). My personal preference would be land with a lot of variation in slope and aspect so that we could try out different locations, but all near enough to interpollinate. Definitely some very steep slope, mimicking the areas in California where *T. californica* seemed to have the most success hanging in there on its own.

Jack - Could you contact Aiken nursery and see how many *T. taxifolia* are left and how much it would cost to purchase them all? Also, note that if you get the Nature Center in Highlands involved, they could request Atlanta Botanical Garden to donate a bunch of seedlings, so that we could have both a repository situation (Nature Center lands) and rewilding on private forested lands happen at the same time for the same photoshoot. So both radical and moderate approaches would be working together.”

Lee - Do any of our 2005 seed distribuees have actual seedlings that they might like to contribute to this effort -- and plan to attend themselves to participate in the planting?

Anybody have any other ideas of what we ought to be doing in preparation and how to get other people excited about participating in this happening (sometime between July 30 and Aug 1)?

May 13: Connie Barlow contacts **Woodlanders Nursery** by phone and email and learns that 30 potted seedlings in gallon containers are available

May 15: Jack Johnston agrees to drive to Aiken SC to pick up the 30 seedlings and to care for them at his home in NE Georgia until the rewilding day.

May 20: Connie Barlow confirms our interest in the purchase and sends Woodlanders a personal check for \$600.

May 28: Email communications between Jack and Connie about location, as a clearly excellent site of a willing land steward has not yet been found (still focussing on the Highlands NC area)

June 12: Connie emails 3 officers of the Highlands Plateau Chapter of Audubon, in search of help in finding willing land-owners for the rewilding action.

June 13: **Audubon magazine schedules the photoshoot** for Highlands, NC on July 30.

June 14: In response to Connie's mailing to Torreya Guardians list about the Orion magazine article and the upcoming photoshoot, Connie receives an email from **the private landowners in Waynesville** (who had joined the list several years before) indicating **interest in getting seedlings for planting on their land and at the Corneille Bryan Native Garden.**

June 17: Jack Johnston sends Connie this email:

"Today I noticed **7 Torreya sprouting from seeds** planted last fall in one instance and again in late winter. At harvest time I decided to chill some seeds in the refrigerator to see if that would improve germination and did not plant them until the coldest of our weather had passed. The seedlings are about 3 inches tall. I'll water them in the bed during the growing season. If the Audubon photographer makes it to my house, this feature will be of possible interest to see the seedlings coming up."

June 18: Connie replies to the June 14 email rather dismissively, as she assumes the rewilding will take place in Highlands. The landowner clarifies interest and Connie responds with enthusiasm in another email:

"Waynesville would be terrific too! Thank you for volunteering to steward immigrant *T. taxifolia* on your land! As it turns out, Michael and I need to drive from Highlands NC to Charlottesville VA, so Waynesville could be on our way. We need to be in Charlottesville by Aug 2, so we could be in Waynesville July 31 or Aug 1 -- a day or two after the planting in Highlands area."

June 18: Connie had cc'd Janet Marinelli on the above email, and then received this from Janet:

"As always, thanks for keeping me in the loop. Are there any possibilities at the moment for planting in the Highlands area? If none pan out, is there a plan B for the photo shoot on July 30th? I'll be relieved when all this is settled!"

June 18: Connie replies to Jack's June 17th email about the 7 sprouts:

"Great news on the **sprouted seedlings!!!!!!!** I talked on the phone with the main guy at **Highlands Plateau Audubon**. They are a small group and mostly do birds. He said it would take a minimum of 6 months for them to research the issue to be able to decide anything. He suggested we contact the Land Trust for Highlands/Cashiers, or the

Jackson/Macon County Conservation Alliance. Please give me a call."

NOTE: On July 8, Connie received **a very cordial and helpful follow-up email from Don Shur, president of the Highlands Audubon Group**, about the results of group discussion, with very mixed responses pro and con. The group could not move forward in any way, but he listed several names of land trust stewards in Highlands that he recommended for us to approach.

June 19: Jack sends Connie an email:

"Waynesville is not far from Highlands, and in my opinion would be a great place for Torreya. From Highlands you should be able to drive there in a little over one hour certainly less than two. Keep in mind that I have land at Otto, NC which is 30 miles west of Highlands if that. There is space for Torreya if you cannot find the situation you want. Then there is that place at Cullowhee I forwarded info to you--have not followed up on that. I do a Stewartia viewing walk on Fri. then should have a bit of time over the weekend."

June 19: **the property owners in Waynesville invite Lee Barnes to walk their land** to assess its suitability for Torreya plantings. Linda McFarland at Bryan Native Garden is cc-d on that email, so the process of introducing that garden to our effort has begun.

June 19: Communications between Janet Marinelli, Connie, and Jack put in place **a revision for the photoshoot**. Photographer will be at Atlanta Botanical Garden on the 29th, then will drive to **Waynesville** instead of Highlands for the 30th.

June 26: Connie emails all involved the suggestion that **the photoshoot on July 30 begins at Jack's place** "since he already has Torreya planted there and since he has some new seedlings just sprouting from seed."

June 30: Lee Barnes emails the group that he just **walked the Waynesville property** (the owners were not there, so he did it alone). He provides details of the suitability and diversity of the terrain and includes photos.

July 1: Jack emails Connie: "Plans are to go to Aiken, SC for the Torreya July 2, tomorrow. I still have seedlings coming up."

July 2: **Jack reports on his trip to pick up the 30 seedlings:**

"I am just returned from Woodlander's Nursery and have 30 Torreya taxifolia in one gallon pots in my yard. The round trip was 406 miles. It took a lot of time, but I had a nice visit with Bob McCartney. He had additional plants if anyone wants more. I would guess he had about 10 that were a touch scruffy from this seed lot, then about 10 more that looked great but were younger, and a big pot of seedlings that represents another 15 plants maybe.

He took me to see his seed plants which are on a private estate. There are 3 cutting grown plants, one male and 2 females. One of the females was smashed by a falling oak limb and has not recovered. The two females are

only about 3 feet tall and sprawl since they are cutting grown. The male is twice that size. It is so dry that the one female with seeds is aborting most of them. Since Bob has no way to water it, there may not be seeds this year, or certainly only a few.

July 3: Lee and Jack are in email communication, sharing ideas on how to choose the best microsites for planting the 30 seedlings.

July 7: Lee Barnes sends email to all (with photos) of his **walking the property at Corneille Bryan Native Garden**. He writes:

"I stopped by the Corneille Bryan Native Garden (CBNG) at Lake Junaluska today... here's a few photos. The Gardens are in a narrow, North-South oriented ravine that would be ideal for some Torreya... I'm guessing the shaded area on the lower west side of the gardens would work well, maybe with seedlings placed to be potential "evergreen screen" along the edge... I'd be happy to meet with Linda and Janet to discuss the site further. This site is well loved and tended and has great educational outreach possibilities. Would be a good photo opportunity."

July 10: Jack emails Connie:

"Your plants look very good. They got some water from above (close to 2 inches) which helped everything. I think I have **16 baby Torreyas** coming up! Some are just 2 inches tall.

On the day of your arrival I will be working ER and arriving home at 7:45 p.m. I expect you will be parked in my driveway when I arrive or if not shortly thereafter. You will see the Torreya in one gallon pots near a handrail leading to the back steps (which is the main entrance to the house)."

July 17: Lee emails all:

"I just met with [the property owner] and Linda MacFarland to walk [the private] property for possible Torreya plantings. I'm hoping to get up with Janet Manning to review the planting sites at Bryan Native Plant Gardens... I hear they have over 500 species/cultivars! My photos do not show much detail (yellow surveyor flags kinda hide in the herbaceous layer...) I placed flags in three areas and also eye-balled a 4th site. Basically I selected a sunnier site, a more shaded, and a more moist/humid area- I placed out flags at +/-10-20 ft. spacings... ideally we'll plant +/-20 plants at the Evans and 10-ish at the Bryan Native Gardens at Lake Junaluska. **The two locations give us variance in elevation (3400 ft. and 2600 ft.) and the Junaluska site will have more TLC with easier watering and great public exposure.** At Junaluska we can probably get sunnier planting sites also.

Some questions come to mind:

1) Is Jack coming to Waynesville for the plantings?- I wanted to query his and Connie's thoughts on planting sites since you both have seen more Torreya plantings than I...

2) **Are we going to use soil amendments (like lime, greensand, etc.) or are we going for the more re-wilding concept of little human input as if squirrels were doing the plantings?**

3) We need to figure a way to map and mark the plantings... [The property

owner] may be able to find a survey that we can use as a base map or I can photo-enlarge county property maps. I'm trying to think of an aesthetic way to mark the plantings--we may just use wooden stakes since we only need to mark them for the first few years so we can check up on them... **I'm willing to watch them this summer and make sure they get water if our drought continues...**

4) **We need to think of text that we can use on a small sign at Bryan Gardens...** I'm willing to pay for some educational info/ small signage for use in the public gardens than match what they are already using....

5) Do we know about when folks will be in Waynesville... late morning or early afternoon, etc. - Janet manages the Bryan Garden usually on Mondays and Wednesday - at first I thought you all were coming on Tuesday but I see that July 30th is Wednesday... we might want to go to the Gardens first since it will be easier for the photographer (wider trails, more open, etc.) I'm also thinking about getting the local paper to cover the Bryan Native Garden plantings but be more "low key" with Evan's plantings so that those plantings are a little more private...

July 18: Connie emails everyone the details of July 30 meeting places and contact numbers, with 3 stops: (1) early morning at Jack Johnston's, (2) late morning at Corneille Bryan Native Garden, and then moving onto (3) the private property rewilding site.

This document can be accessed in pdf at:

<http://www.torreyaguardians.org/chronology.pdf>