

April 2019 Email Exchange
between Connie Barlow and Earther Magazine

From: Brian Kahn <brian.kahn@earther.com>
Subject: Re: Are you going to make corrections in your Torreya article
Date: April 19, 2019 at 4:14:43 PM CDT
To: Connie Barlow <conniebarlow52@gmail.com>

Hi Connie,

Thank you for re-upping your email and sorry I missed it the first time around. So first, thank you for reading our story and sharing your thoughts on how it could be improved. I've shared your email with our managing and features editors who have final say on any corrections. After discussing in-house, we will be keeping our story as is. The feedback you offered is largely editorial differences with wording, which we can certainly appreciate but aren't things we change after publication.

Best,
Brian

Senior Reporter, Earther
[@blkahn](#)
[@EARTH3R](#)

On Thu, Apr 18, 2019 at 6:12 PM Connie Barlow <conniebarlow52@gmail.com> wrote:
Brian -

Please let me know if you plan to make any of the corrections I suggested below. Your article is important, so I need to add mention of it in our chronological "Reports" webpage, but I also need to frame its relevance and reliability.

Connie Barlow

Begin forwarded message:

From: Connie Barlow <conniebarlow52@gmail.com>
Subject: factual corrections for your Torreya article
Date: April 14, 2019 at 11:49:43 AM CDT
To: Brian Kahn <brian.kahn@earther.com>

Hello Brian -

I am the founder of Torreya Guardians, so of course I (and others in our group) are aware of your article last week. **Two crucial things you accomplished in that article**, for which I thank you:

1. You documented that Atlanta Botanical Garden does not concur with U Florida fast-tracking of genetic engineering. I have been hoping that is the case, and you are the first to document it.
2. Your descriptions and your photos of your site visit to the Apalachicola powerfully document what I had only surmised: that Hurricane Michael destroyed the ravine canopy — without which even the beleaguered resprouts of old rootstocks of Torreya cannot survive.

Accordingly, **I have added 3 of your paras to a crucial webpage on the Torreya Guardians website**, where I attempt to link and annotate all important developments in the complex and increasingly politically charged saga of (a) how this endangered tree is officially managed, and (b) how we Torreya Guardians have been utilizing an "exception" for plants that was intentionally written into the Endangered Species Act (which almost was written for protection only of animals). You will find my excerpt of your piece as SECTION 1F of this webpage: <http://www.torreyaguardians.org/extinction.html>

You also did a great job in making it easy for readers to understand what we in paleoecology well understand: that Florida Torreya is a left-behind glacial relict, attempting to maintain itself in an ever-warming climate in a locale that served it well in peak glacial. That, of course, is not a fact that Emily Coffey would use as supportive of ABG work, but it is good that you found that out yourself and added it. If you would like to access reputable links on its glacial relict status, go to the above url and scroll down to SECTION 3A: "Apalachicola as glacial refugium and Torreya as glacial relict are undisputed."

Because those above accomplishments are so important to finally have documented in an online accessible form, **I would like to suggest some "corrections"** you could make elsewhere in your article which are either factually wrong or could lead the reader to an unnecessarily restricted (rather than appropriately nuanced, ideally open and questioning) perspective. So here are my suggestions for FACTUAL CORRECTIONS.

1. IMPLICATION THAT THE FUNGUS IS EXOTIC. You say: "Globalization delivered a fungus the tree had no defense against that has been slowly strangling torreyas to death for decades."

1 CORRECTION: I suggest eliminating that sentence (which is in your words) and simply use what you already have where it is Emily Coffey who says the fusarium is exotic. It is not your job to check the factuality of statements made by scientists; just make sure you do not take what they say and express it in your own words as fact. You

wrote: Then, in the early 1900s, the trees began mysteriously dying off. Researchers eventually pinned the cause of the torreyas' declining health on an invasive fungus. "We don't know the exact date but in the late 1800s or early 1900s, fusarium hitched a ride (to the U.S.)," Coffey told Earther, referring to a genus of invasive soil fungus.

1 FACT-CHECKING THE FUSARIUM'S GENESIS: First, eliminate "invasive soil" fungus and replace with "a genus of pathogens that cause stem cankers." Then, go to the same webpage of ours above and scroll down to SECTION 2B, where I link and annotate the actual peer-reviewed papers on *Fusarium torreyae*. I excerpt and highlight in red this phrase from a 2016 paper: "**it remains an open question whether this clade first evolved in the Old or New World. Furthermore, it remains to be determined whether *F. torreyae* is native to North America and restricted to *T. taxifolia*."**

2. IMPLICATION THAT ATLANTA BOTANICAL GARDEN IS DOING THE CRUCIAL WORK: You say "If successful, their efforts could yield a model for how to protect forests around the world from increasingly formidable threats of climate change and invasive pests."

2 CORRECTION. It is fine for Coffey to say that, but after you review what I say here you might wish to not present their actions in so strongly a favorable way — certainly not for the broader issue of trees in climate change. Do know that in contrast to conservation biologists, academic and onsite foresters not only accept but are moving forward with assisted migration of dominant native canopy trees (especially Canadian foresters). Go to our homepage and click on Scholarly Article and Newws to access the forestry papers on assisted migration. To quickly see how news and journal papers have presented our own work, click on the "Torreya Guardians" link on the home page, where you can scroll thru our own history or go directly to the Media links about us.

3. AUGUST 2018 USF&WS ANNOUNCEMENT WAS NOT THE NEW PLAN. You say: "The agency put out a five-year conservation plan last August, something it has to do since the tree has been listed as endangered since 1983."

3 CORRECTION: The agency announced last August that it would be undertaking revisions to the recovery plan, which was last updated in 2010 (and which gained federal protection under the Endangered Species Act in 1984).

3 FACT CHECKING DATES ABOVE: Direct links to the official program pages and history are easy to access via this Torreya Guardians page: <http://www.torreyaguardians.org/save.html> **If you would like to see my own comments** on how I would like to see the recovery plan updated, go this page and then scroll down to an October 2018 entry titled as plan update: <http://www.torreyaguardians.org/comments.html> Along the way, while scrolling down, just notice all the activity we ourselves are engaged in.

4. STATEMENT THAT SEEDS WERE HELD IN A CRYOGENIC STATE: "Elsewhere, seeds were stored in a cryogenic state because they're not capable of staying viable if they dry out."

4 CORRECTION: Change to "Elsewhere somatically cloned embryos that had been withdrawn from seeds were stored in a cryogenic state as whole seeds will not survive drying or freezing."

4 FACT-CHECKING the cryogenic statement: Go to a lengthy webpage I installed in 2018 after closure of an **FOIA query** I lodged with the U.S. Fish & Wildlife Service to uncover information as to whether anyone had been documenting a decade's worth of seed production at the two farthest north official ex situ plantings. Go to the following url and do an internal search for "cryo". There are 3 occurrences; 2 and 3 will give you the crucial background. <http://www.torreyaguardians.org/foia.html> Then do a search in the same document for "somatic".

5. ATLANTA BOTANICAL GARDEN'S FACILITIES ARE NOT IN GAINESVILLE FLORIDA. At least twice you imply that you site visited ABG greenhouse (misting facility; I've been there too; it is magnificent) and also that its ex situ plantings are in Gainesville. Gainesville is in Florida, and that is where the genetic engineering proponents reside (U Florida). I wonder if Coffey mentioned to you that their most magnificent ex situ plantings (producing thousands of seeds annually) are actually in a locale that qualifies as southern Appalachians (barely south of the border with North Carolina) — hence, in my view, now an important experiment in assisted migration, whether they wish to call it that or not. Look up Smithgall Woods and Blairsville Georgia on a map and see how far north they are. Be aware that a great deal of contention surrounds the management of those two plantings, as resistance by ABG was so strong against doing any assisted migration that not only were most of the seeds uncollected (except of course by the local squirrels) but their annual numbers were undocumented. (Hence my FOIA query above, that confirmed my hunch that massive seed production at those sites went utterly undocumented — though Ron Determann at ABG Atlanta area plantings did keep documentation of seed production there).

6. YOUR PARA ON TORREYA GUARDIANS. You wrote: "Another group, Torreya Guardians, is doing what Coffey called "rogue" work. The group doesn't follow the conservation practices set by organizations like the International Union for the Conservation of Nature, and instead transplants torreyas all over the country. That may preserve the tree, but it could also unwittingly introduce pathogens into new forests, spurring another dieoff of a different species. But the fact that they exist speaks to the oddly passionate fanbase of a scraggly, good-for-nothing tree."

6 SUGGESTION: While I personally refrain from slanderous language when speaking to a journalist (especially when open to quotation rather than expressly "background"), it is journalistically fine of course for you to quote Coffey calling us "rogue". Do know that several years ago my comments were expressly sought from the U.K representative updating the "translocation" IUCN guidelines and from an academic contributing the subject "assisted migration" to an ecology encyclopedia. However, the only crucial thing you need to do is not put yourself in the position of stating "all over the country". Please look at the map on the Torreya Guardians homepage. We send seeds only within eastern USA -- and some far beyond the southern Appalachians that was our initial focus. Northward plantings are useful to test just how far north can we get this slow-growing subcanopy tree to survive in advance of ongoing and far-too-rapid climate change. Shouldn't somebody be doing that?

Finally, please do eyeball the two NEW DOCUMENTATION PAGES I CREATED IN 2018. By documenting thrival (and non-invasiveness) in the old "Historic Groves," our group should clear the way for assisted migration on an official basis too, with the additon of course of immersion treatment to kill any fusarium bodies on the seeds. Fumigating potted seedlings is severely destructive of the mycorrhizal root fungi crucial to ancient conifers — all the more reason to engage in "free-planting seeds" directly into regrowth northward forests, as we are doing. Here are the two pages: <http://www.torreyaguardians.org/historic-groves.html> and <http://www.torreyaguardians.org/freeplanting.html>

OPPORTUNITY: I was interviewed at length back in January by the "external affairs" department of the USF&WS, which got to know me thanks to the FOIA query which led to subsequent high-level phone calls. Apparently the service will be posting on the articles page of its Southeast Region this coming week the results of that USF&WS-authored article. I have not seen a draft. But the fact that the department seeks to highlight citizen efforts in endangered species and that the deputy chief DOI just got Senate approval to become the new secretary may make this case worth watching.

Best wishes,
Connie Barlow