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**Date:** August 24, 2018 at 10:05 AM  
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CB

Let me know you received this (you can read it way later); it's length might have triggered your filter.

Don (and Catherine)-

Great talking with you. I found you on Researchgate so read your 2001 coauthored paper, will say more on my connections there later. Right now I want to give you some ideas for weekend reading (and Catherine, too, though I think the personal off-time she has coming up really ought to be non-work for overworked, understaffed researchers!). The recommendations here are to help you see the crew of **top scientists (almost all forestry, not conservation biologists) already out there to tap into for free help.**

Know that I will generally be sending you to internal links on my own vast webpage "**Assisted Migration Scholarly Links**" on the Torreya Guardians website: <http://www.torreyaguardsians.org/assisted-migration.html>

First, go to that url and peruse the beginning intro (that mentions why forest researchers are so far ahead of conservation biologists). Then scan the titles of the linked internal table of contents. Then, here's what I suggest, using that Table of Contents:

1. Click on "**Ethics, Law, and History**" and you'll see the top two papers by Patrick Shirey. Those clarify not only the plant loophole in ESA but why it was intentional. Shirey's work released me to be able to make videos of our plantings, because while I knew we were legal others didn't so finally I had a paper I could point to). I periodically talk with Shirey by phone -- he now does fisheries research projects as an independent for USF&WS (despite a law degree and PhD fisheries ecology he couldn't land a university position, so desperate are these times of contraction).

2. Then look at the **Forestry** section and all its internal links. Notice that there I repost the **Paleoecology papers** that are specific to forestry. Grad students in particular who are getting into assisted migration (the youngers don't resist it the way the elders do) are very grateful for my listing an quick-read annotation work. By golly, I just eyeballed the whole paleoecology section and see that you could spend your entire weekend just on that, dipping in to read the full papers that interest you most. Notice the one titled, "**Relict species restricted to disjunct and small ranges by Pleistocene Glacials.**" That is a must-read. It only deals with NA trees of the west but it is totally applicable to Torreya and Florida yew. Interestingly, Mark Schwartz (early Torreya researcher) and I sort of mended our conflict when we had an e-discussion about the huge necessity of helping out the dozen or so relict conifers along the foggy coasts. SE region is way easier than that for a variety of reasons. Oh, the "Relict species" paper is one of the last by the three truly elder forest researchers out west, Ledig, Rehfeldt, and Jaquish. Rehfeldt USFS long-retired has been mentoring me behind the scenes for a half-dozen years, though not at all on torreya, just on my citizen advocacy on the need for A.M. of even common western trees.

3. LOUIS IVERSON - Go back to the Forestry section table of contents and **click on "Maps of USA Tree Species Future Ranges"**. There you will see the Western USA 76 tree species (Rehfeldt was the lead on that) and Iverson & Prasad 134 Eastern Tree Species. Absolutely also scroll a wee bit down to see the red-colored section "Understanding the Forestry-Climate Range Projection Maps" as the caveats and criticisms (including the the Elbert Little 1971 maps of then-current native ranges might already have been shown for slow-moving trees already lagging a lot behind then-existing warming — which is the obvious case for torreya, given the national champion T. tax is now in Ohio!

I haven't communicated with Iverson for awhile, but know that when I visited their Ohio office in May 2015, I gave Louis 20 seeds from the fall 2014 harvest; he told me later he kept 3 for his own home planting and gave the rest to the USFS woman in charge of communicating with the public. So I bet they will be thrilled to help out with plunking T. tax into their computer model, using the IPCC scenarios, which I think the 5 year update volume 1 comes out in September.

4. Back up to the table of contents Forestry, **click on "Superb Overviews ..."** link and see the 3-map graphic. Notice that TORREYA TAXIFOLIA is the case study example foresters use for the most radical form of A.M. That's why they are grateful for Torreya Guardians: we make their own "Assisted Population Migration" and "Assisted Range Expansion" projects underway look tame in comparison.

5. Back up to table of contents, **click on 2018**. First paper there is Bonebrake et al. Review Paper. I annotate it a lot as it is behind a paywall. Know that HUGH POSSINGHAM IS ON IT. He is the distinguished Aussie who took over the job of lead scientist at The Nature Conservancy when the controversial guy moved on. Possingham is far more quantitative than I prefer, but he and I have communicated and overall, because Australia is so maxed out on climate problems that A.M. is no controversy there, he would be a KEY SCIENTIST to team up with -- given how many endangered plants are protected on Nature Conservancy easements.

6. Make sure you read **the original pair of Barlow & Martin v. Schwartz forum papers** in Winter 2004-05 Wild Earth. Just google "Bring Torreya taxifolia North" and Schwartz "Conservationists Should Not Move Torreya taxifolia".

7. See that I can talk technical at a **VIDEO of a college-wide lecture I gave 2015 at the Forestry & Environmental Sciences School at Michigan Tech U**. It is on the overall assisted migration controversy, with Torreya just used as an example. There I really go into the 1491 paradigm generated fears and why forestry folk are so far ahead of conservation biologists: "[CTL 08: Foresters Outpace Conservation Biologists in Climate Adaptation](#)".

For Torreya,  
Connie

