

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

Reflections by Connie Barlow

August 2, 2008

1. It Takes a Village

Three days after our assisted migration and rewilding of 31 potted seedlings of *Torreya taxifolia*, what I am most present to is how, in this time of accelerated climate change and fragmented landscapes, a very small crew with very little money could actually make a difference for one highly endangered species. I am also humbled by how our effort depended, as well, on far more powerful players and institutions who unknowingly played vital roles. **Were it not for the conservation biologists and land stewards who took alarm at the prospect of ordinary citizens acting on their own to move an endangered plant far north of its so-called "native" range, there would have been little ground for the major media to pay attention to the desperate plight of one obscure species.** And it was media attention that motivated us "guardians" to consider that maybe now *is* the time, and maybe we *are* the people.

The genesis of this first rewilding action in behalf of *Torreya* is easy to chronicle. The story would begin in January 2007, when *Conservation* magazine chose an article by writer Douglas Fox, "When Worlds Collide," as its cover story. Fox had been commissioned by the magazine to write that story because of an in-press paper scheduled for April publication in the magazine's academic parent journal, *Conservation Biology*. That paper (by McLachlan et al.) was titled, "A Framework for Debate of Assisted Migration in an Era of Climate Change." It was Fox's article, however, that alerted the media for the first time to the work and worldview of our own *Torreya* Guardians. Fox begins,

A DYING RACE IS MAKING ITS LAST STAND in the drippy forests of Florida. Its name is *Torreya taxifolia*, a species of yew tree. Only a few hundred of its kind remain—in some cases, nothing but a few green sprouts pleading for life on a rotting stump. But the tree's quiet demise far away in the woods is causing lots of hubbub.

Torreya is a charismatic tree. Its needled branches have touched the heart of many a naturalist. And so a loose band of enthusiasts calling themselves the *Torreya* Guardians is now doing exactly what we're scolded not to do in this post-kudzu, exotic-wary age. They're spreading *Torreya* around.

Like a church smuggling refugees to safe houses, they're planting *Torreya* seeds in spots from North Carolina to New York State—up to 1,000 kilometers north of its current geographic range. The *Torreya* Guardians hope to stem their tree's decline—which they blame on global warming—by moving it north to cooler climes.

It may sound like a case of eco-vigilantism—a charismatic tree with a cult following—but it's also a sign of the times.

Fox's story was covered in the major popular science media: the "Science Times" section of *The New York Times*, *National Geographic* online, the BBC, and many others. The topic then faded from media attention for awhile, resurfacing in May 2008, when *Orion* magazine published a moving and penetrating article on the human concerns surrounding assisted migration—and this time the work of *Torreya* Guardians was central. (Writer Michelle Nijhuis wrote the article, "Taking Wildness in Hand: Rescuing Species.") *Torreya* Guardians was featured because, while scientists were still just debating the question, we were the only ones out there actually beginning to *do* assisted migration — or at least committed to doing it if we could just get our hands on enough seeds and seedlings. When Michelle Nijhuis interviewed me, Jack Johnston, and Lee Barnes in August and September of 2007, we were still distributing seeds among *Torreya* Guardians for the express purpose of establishing "orchards" for yet more seed production. Only later, we envisioned, would we have enough stock to begin moving the species back into the wild as landed immigrants.

But that would soon change. In January 2008, I was contacted by writer Janet Marinelli, who was researching the possibility of writing an article on assisted migration for *Audubon* magazine. **It soon became clear that, while *Torreya* Guardians was the only act in town, so to speak, we were not yet acting enough. We had not yet planted any seeds or seedlings into natural forested settings and far to the north of their then-current range. *Audubon* magazine would commission the story only if it could be illustrated with photographs of *Torreya* Guardians actually planting seeds or seedlings in an Appalachian forest.**

That would take a bit more planning and effort than any of us Guardians had yet been up for. But it was an opportunity not to be missed. Primarily through the efforts of myself, Jack Johnston, and Lee Barnes, the preliminaries of locating seedlings, acquiring them, moving them, finding enthusiastic stewards of forested properties in North Carolina, scoping out the properties, and coordinating dates and details all fell into place.

Citizen activists, thus, were empowered and motivated to take action not only because of our own priorities and perspectives but also because of the scientists who opposed the idea enough to draw media attention, and then because of the media's penchant for real action and captivating pictures.

- An annotated list of the articles mentioned above (and hotlinked to websites) can be viewed at <http://www.torreyaguardians.org/assisted-migration.html>
- A detailed chronology of communications and actions leading up to the July 30 rewilding can be downloaded in pdf at <http://www.torreyaguardians.org/chronology.pdf>

2. A Deep-Time Perspective on “Native”

Not until the day after our July 30 rewilding action did I grasp the significance of the fact that one of the two action sites was a plot of land publicly dedicated to nurturing *native* plants in a wild setting. Ten of the 31 seedlings were planted at “Corneille Bryan Native Plant Garden.” *Torreya taxifolia*, thus, was being welcomed into the preserve as a **returning native**! This was precisely the perspective that Paul S. Martin and I had advocated in our 2004 forum piece in the final issue of *Wild Earth* magazine. We wrote,

“Might it be possible for *T. tax* to take its place once again as a thriving member of some subset of Appalachian forest communities? We say *again* because we believe that northern Florida is more properly viewed not as native range for *T. tax* but as peak-glacial range. **Helping *T. tax* establish in the southern Appalachians is thus not so much relocation for a plant struggling with global warming as repatriation of a once-native.** It is a form of rewilding that uses a deep-time baseline for determining appropriate range.”

Because I brought my deep-time perspective into this conservation action, I was especially moved whenever one of our seedlings was planted in the vicinity of a dying hemlock. Why? **In the course of previous interglacial episodes of warming climates, *Torreya taxifolia* would likely have followed in the footsteps, so to speak, of Eastern Hemlock, as the latter headed upslope and/or north.**

In the presence of **ailing hemlocks** near the North Carolina mountain home where my husband and I are staying for one week, I have conjured a not entirely fanciful story. My story is that the dying trees are now collectively breathing a sigh of relief. An immigrant population has finally arrived who is willing and able to take over the ecological functions that genus *Tsuga* so faithfully served in this region for perhaps 10,000 years.

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- The advocacy article by Barlow and Martin can be accessed at: <http://www.torreyaguardians.org/barlow-martin.pdf>

3. Spirit and Ceremony

My husband, Michael Dowd, and I earn our living by bringing a deep-time perspective into churches across America. We have been called “America’s evolutionary evangelists,” and we’ve been living entirely on the road spreading the “good news” of evolution for six years. Before we launched our itinerant ministry, my day job had been science writing and editing. All four of my published books (on evolution and evolutionary ecology) explore, at least in part, how an understanding of the science of evolution can inspire care for the natural world and a sense of kinship with the whole universe — that is, an ecological and evolutionary spirituality.

So it was second nature for the two of us to approach this rewilding action not just in a matter-of-fact way, but with the presumption that **for something this important, this heartfelt, this historic, this moving, we absolutely had to find ways to honor the action with ceremony—especially forms that could be entered into in a spirit of play as well as reverence.**

Consider: I had been traveling with one potted seedling for half a year, taking care to water it, to set it out in dappled sunlight, and above all to remember to place it back into the van before we drove on to our next assignment. “Torrey” had been to Texas and Oklahoma twice, to New Mexico and Arizona (even getting a chance to pick up some spiritual vibes in Sedona). Torrey had toured California for two months and been snowed on near Seattle. Torrey spent nearly four months chasing spring, up the coast from California to Oregon and Washington and then through a Montana blizzard and into a Minnesota thaw, finally warming up in Michigan and Ohio. Torrey had been brought into a religious education class to inspire the teens that they too could take action toward solving even the biggest problems of the world by doing one small thing, one small thing that they loved to do and enjoyed learning about.

By golly, Torrey was going to be given some special treatment at this rewilding action! I could think of no better way to honor my little friend than to plan to mix into the soil around its roots some of the ashes of another dear friend of mine: the great Alaskan conservationist Celia Hunter. I had with me a small glass container of a portion of Celia’s ashes. Celia died in December 2001, and ever since I had been placing a pinch or two of ash at the base of a tree in as many wilderness areas as I could get to. Celia had devoted her life to the establishment and protection of wilderness areas in America.

On July 30, Torrey would be our final planting. As with all the rest of the just-planted seedlings, it would be given a name—a name of an important botanist or naturalist of the past, or of an inspiring conservationist. The seedling could have kept the name Torrey, as John Torrey was an American botanist for whom the genus was named. But I felt it was time for Torrey to metamorphose into “Celia.” And so it came to pass. Alone near the weeping cliff face of seeping spring water, I knelt alongside Celia and kneaded ashes into the soil.

Inspired by the example of Jane Goodall (who insisted on naming, rather than numbering, each of the chimps she studied in the wild), a few days before the action **I decided to press the crew to agree to using names rather than numbers for distinguishing each immigrant seedling.** I offered my proposal

onsite at Bryan Native Garden. My comrades were quite willing to grant me this indulgence, and several suggested names to supplement the list that I had cobbled together during the drive north from Jack Johnston's home that morning.

Did the naming matter? Will it carry forward? Perhaps. A name (rather than a number) was etched into the standard aluminum botanical label that was tied onto each newly planted seedling. And the photographic documentation of the seedling in its habitat context always included a volunteer holding up a piece of paper onto which we had printed in large letters "Aldo," "Asa," "Annie" . . .

There was one more ceremony that I brought to the action. **I contributed a song** and took the lead in making sure it was sung.

In my work I use song all the time—and not just with kids. I compose little ditties for all sorts of uses in my teaching, and I have a personal commitment to using song as much as possible—even while delivering a sermon in a church. I know enough about our evolved brain, and have had sufficient experience in using song to great advantage, to know that if you want to embed an event or a perspective deeply into mind and heart, the most effective way to do it is via song. Song, as it turns out, is processed by the emotional part of our brain—a component that long preceded the evolution of our rational neocortex.

Fortunately, two weeks before our scheduled action, a song came to me while I was showering in our room at the Westin Hotel in Dallas, Texas. My husband picked it up because I would occasionally break into song while he was driving, or when we took a sunset swim in Oklahoma or a walk in Memphis. So he and I together introduced the song to the group after the first seedling, "Chauncey," was planted at Corneille Bryan Native Garden. He and I were subsequently able to corral the crew into standing still long enough to honor most of the rest of the seedlings we planted there. But by the time we had begun work at the higher elevation site a short drive away, everyone was so dispersed and so busy (me too!) that the singing ceased after the first several plantings.

As I was pressing a ballpoint pen into an aluminum label to write "Charles," I heard Michael far below calling my name. Apparently, everyone else had already finished and had assembled back down by the cars. Well, they would just have to wait. "I . . . am . . . la-bel-ing," I called back, spacing out each syllable to carry the distance. After I tied on "Charles" I walked over to "Julia" and pressed the name into the last label. Wearily, and wishing I had more time to just *be* with these trees, I headed back down the trail. Soon I began singing, at first softly. I repeated the single verse, and gradually ramped up the decibels. At trail's end I saw Michael walking toward me, singing too. We joined hands and turned to face upslope, our free arms reaching outward as if to embrace the entire forest, with its new and precious cargo. We sang with abandon,

On your own . . . *Torreya taxifolia*
On your own, in your ancestral home
On your own . . . *Torreya taxifolia*
Welcome home . . . welcome home
Welcome home . . . welcome home

- Listen to an audio of Connie and Michael singing this song at:
<http://www.torreyaguardians.org/torreya-rewild.mp3>
- Learn who we named each of the seedlings for at:
<http://www.torreyaguardians.org/waynesville-rewilding.html#naming>
- View photographs of volunteers holding naming signs by each seedling at:
<http://torreyaguardians.org/waynesville-1.html>
<http://torreyaguardians.org/waynesville-2.html>
- Learn about Connie and Michael’s “evolutionary evangelism” at:
<http://thegreatstory.org> and <http://thankgodforevolution.com>
- Sample Connie’s other writings at:
<http://thegreatstory.org/CB-writings.html>

A pdf of this document is available online at:

<http://www.torreyaguardians.org/connie-torreya.pdf>



Connie Barlow with “Torrey”, her husband Michael Dowd, and the van they travel in as America’s “evolutionary evangelists.”