

On Oct 9, 2019, at 1:12 PM, Connie Barlow <[conniebarlow52@gmail.com](mailto:conniebarlow52@gmail.com)> wrote:

TO: Hon. David Bernhardt, Leopoldo Miranda, and Catherine Phillips  
FR: Connie Barlow, Founder of Torreya Guardians (volunteer citizen group)  
RE: **Petition to Downlist Florida Torreya (from endangered to threatened)**  
DATE: 9 October 2019

*Please acknowledge receipt of this petition and also notify me of its documentation in the Federal Register.*

Attached is a 26-page petition in pdf to **downlist from endangered to threatened** the Florida Torreya tree. I am cc-ing the Region 4 external affairs staff person who helped me, a mere citizen, to find my way through the process of actually filing a petition.

The petition is dated September 9 because, in accordance with your regulations, I first submitted it to the appropriate offices in the two states in which this tree is native (Florida and Georgia) and then have waited 30 days to formally submit it to DOI. (Documentation of my email submissions is available on request.)

The timing of this petition was **inspired by the new ESA regulation clarifying "threatened" status as distinct from "endangered."** In this particular case, downlisting to threatened could substantially help an endangered plant move toward full recovery by making it possible for we citizens to play an even greater role than we have been playing in past years.

I am the founder of **Torreya Guardians**. For 15 years our growing network of citizen landowners and other volunteers have been utilizing an **"exception for plants" in the ESA** that enables our experimentation with translocating *Torreya taxifolia* to regions (S. Appalachians and Cumberland Plateau) that offer more favorable climates for this "glacial relict" than does its "glacial refuge" in Florida, where it seems to have been stranded. (The Chattahoochee River offered the acorn-size torreya seeds quick passage southward during glacial cooling, but there was no way to float back north as the climate warmed.)

In contrast, during the 2010 recovery plan update, botanic garden implementers and other scientific advisors to F&WS **voted down a Torreya Guardians proposal for authorizing "pilot projects" northward**. So we have been working entirely on our own in these vital experiments. Thus far, as you will see documented in the attached petition, **northward translocation appears to be a winning strategy** — so winning, that "downlisting" is well supported.

Our work could also serve as **a model for how citizens could be engaged** in helping other cryptically relict plants south of the Appalachians (and coastal California as well) obtain action plans that graduate from mere "prevention of extinction" in-place to northward projects offering possibilities for full recovery.

I am aware that the new clarity in defining **"foreseeable future"** in ESA listings is controversial. However, in the case of this left-behind glacial relict, severe population and reproductive diminishment happened in the 1950s. In the 35 years since its listing as endangered, Florida Torreya has consistently diminished in health and reproductive capacity within its historically

native range. Habitat manipulations within its historic range along with reintroductions of potted seedlings grown offsite have not reversed the decline. There is no dispute that **extinction is imminent within the historically native range.**

Meanwhile, Torrey Guardians have documented **continued health (and sometimes reproduction) of mature horticultural specimens planted in northward states** long before the species was listed in 1984. As well, our own planting in Cleveland Ohio (outdoors, fully exposed to winter winds) began producing seeds in 2018. (The petition documents and links to these and additional details of northward success.)

Please consider that **two law review articles** can be pointed to that interpret the existing ESA as open to such things as "assisted migration" experimentation well beyond "historic range." They are:

- **"Biodiversity on the Brink: The Role of 'Assisted Migration' in Managing Endangered Species Threatened with Rising Seas"**, by Jaclyn Lopez, *Harvard Environmental Law Review*, 2015. [https://www.biologicaldiversity.org/publications/papers/BiodiversityOnTheBrink\\_2015.pdf](https://www.biologicaldiversity.org/publications/papers/BiodiversityOnTheBrink_2015.pdf)
- **"Endangered Species Act to the Rescue? Climate Change Mitigation and Adaptation Under the ESA"**, by Olivia Bensinger, *NYU Environmental Law Journal* 2017. <https://www.nyuelj.org/2017/03/endangered-species-act-rescue/>

Torrey Guardians has captured a good deal of **media and academic attention** over the years, as the first on-the-ground — and apparently successful — assisted migration effort. You can sample the media excerpts on us here: <http://www.torreyguardians.org/guardians.html>  
Note: I understand that in 2020 W. W. Norton & Company will be publishing a book centering on the forest tree impacts of climate change and adaptive strategies that include assisted migration. Florida torrey and our citizen effort will be featured as a case study.

That **citizens are eager to step forward and freely offer our lands and efforts** to assist recovery of an endangered plant is a noteworthy aspect of our accomplishments.

Finally, do know there is **a sister species (not endangered) on the other side of the continent known as California Torrey**. I have personally studied onsite wild groves of California Torrey in order to ascertain mountainous habitat preferences for this genus that could be applied for identifying ideal locales in the southern Appalachian Mountains for Florida Torrey. I have posted text and video documentation of those site visits on the Torrey Guardians website. I implore anyone new to the Florida Torrey situation to take some time to acquaint themselves with **the natural history of this genus, as expressed in the California Sierras and Coast Range**. Habitat preferences and ecological relationships cannot be ascertained amid the straggling survivors in Florida — a locale that is clearly the wrong place at this time in natural (and increasingly anthropogenic) climate shifts. The 2018 habitat devastation caused by Hurricane Michael in Florida Torrey's historic range makes this petition even more urgent.

Sincerely,  
Connie Barlow (signature and contact information are on page 1 of the attached petition)