Seed Harvests / Sources by Year donated to Torreya Guardians from internal document kept by Connie Barlow

2016 - Frank Callahan (Medford OR) sent Torreya Guardians seeds from the 2 Torreyas he planted from seed (National Arboretum, DC, 1995 seeds) at his mom's house in Medford; he gave Connie 1,000 seeds, Lee 1,000 seeds; Daein Ballard 1,000 and Jack 900. Parent trees are documented as coming from 1995 seeds from the U.S. National Arboretum, so Torreya taxifolia for sure. I added an Oregon page for Frank's Florida Torreyas here: http://www.torreyaguardians.org/oregon-ex-situ.html and made video # 22 in 2017: https://youtu.be/TAUTuXuAH1A Barlow distributed 1,000 seeds to: Yew Dell Gardens KY (400); Leelaunaw Peninsula MI (240); Capac MI (150); Loveland OH (60); Crossville TN (120); Mars Hill NC (40).

2016 Jack Johnston and Clint Bancroft collected branchlets from the basals of the old tree in Columbus OH near the Chattahoochee River. Jack wrote of distribution:

Jack: cuttings taken mid Aug. are well rooted. (ziplock bag method)

Jack: Cuttings taken Sept 11 have callus (kept outside in little pots inside ziplock bag with no direct sun)

Joshua Granger: Knoxville, TN graduate student got cuttings from each tree in the ground here.

Kevin Parris: Spartanburg, SC will attempt to root Columbus cuttings

Jack: will attempt to root Columbus cuttings

Clint Bancroft: will attempt to root Columbus cuttings

Jim Rodgers: Nearly Native Nursery will attempt to root Columbus cuttings. I offered Torreya cuttings from here (Jack's property in NE Georgia), but there were no takers except Joshua. Maybe next Aug. we could offer cuttings again after outlining the rooting method.

2016 we lost access to the usual GA trees we had previously gotten seeds from, so Lee Barnes got 7 from the Biltmore (which the Biltmore sent directly to Jack Johnston).

2015 seed harvest via Jack Johnston = around 7,000

Note on 2014 autumn seed source via Jack Johnston: The seeds are from a source with unknown genetic variability from about 8 female trees and maybe 4 or 5 males. Estimated 4,000 seeds, of which Connie was given 1,160. Jack email to CB 31 Oct 2014 listed the distribution. Seeds were harvested later than usual, so mature: purple in color.

Note on 2014 seed source via Jeff Morris (fr Clinton NC tree): estimated 500 seeds, all kept/distributed in NC via himself and Lee Barnes, except Lee gave Connie 200 seeds in April and Connie then distributed.

Note on overview of Jack Johnston seed distributed over the years (Dec 2014 email): Seeds I have distributed have been sent to the following states over the years: Massachusetts, Virginia, Tennessee, NC and SC, Alabama, Texas, Georgia of course, Ohio, Illinois, Kentucky, a few to Florida, Veracruz Mexico, Belgium, France, Russia, Germany

Fall 2014 - Clinton, NC. Jeff Morris, with permission from Mrs. Kennedy, harvested more than 500 seeds from the sole tree there. See this page for more detail on crucial site observations and possible source of pollen: http://www.torreyaguardians.org/clinton-bullard.html

Fall 2013 - Connie Barlow makes first visit to Clinton NC seed source (only one tree left) and to Mt. Olive seed source (descended from prior grove of trees in Clinton). She collects and distributes 102 seeds and 4 seedlings dug up at Clinton site (home of Mrs. Kennedy, with permission) and 41 seeds from the Mt. Olive pair of trees on the property of A.J. Bullard. See this joint Clinton + Mt. Olive webpage: http://www.torreyaguardians.org/clinton-bullard.html

November 2012 - Following our usual protocol, 4 of the landowners received 20 seeds each, while **Zev Friedman** received 200 for the second year in a row. Zev is a permaculture and forestry consultant in the Asheville NC area, who is collaborating with many private forest owners in the region for testing *Torreya taxifolia* as a possible (oncenative) replacement for dead and dying hemlock trees in the region.

Autumn 2007 thru Autumn 2015 was when Jack Johnston had access to collecting seeds from the shrub Torreya orchard (rooted branchlets) at Blairsville, GA (U of GA experimental station).

Fall 2009 seeds donated by Biltmore to Lee Barnes = 300 Report by Lee Barnes on distribution of those seeds = http://www.torreyaguardians.org/2009-seeds.html

Fall 2008 no seed production at Biltmore: 16 Oct 2008 email from Bill Alexander to Lee Barnes: "I hate to be the bearer of bad news, but there will not be any available seed from the Torreyas this year. Any seed formed were either aborted due to the drought or squirrels got to them before we could. Some of the trees are looking very weak and experiencing some dieback and loss of limbs. I hope it is a temporary condition, but they seem a little weaker each year. I am working with our arborist to see if we can do something to help them. He also reported finding no seed on the trees when he checked a month or so ago. That may have been a good thing for the trees in that they needed to reserve their energy to order to survive the drought. I have seen years in the past with few or no seeds followed by a bumper crop the next season. Let's keep our fingers crossed for a good 2009 season!"

Fall 2007 seeds donated by Biltmore: 4 March 2008 email by Lee Barnes: "We are pleased to again offer packets of Torreya taxifolia seed from the 2007 seed harvest at Biltmore Estate in Asheville, NC. We thank Bill Alexander and his staff for collecting and sharing seeds for this grassroots distribution project. We are releasing 20 packets, each with 5 male and 5 female seeds to allow for better pollination. We are first offering seeds to the 2006 Distribution volunteers since most of them experienced low germination rates from refrigerator stored seeds.

Fall 2005 - Biltmore donated 110 seeds to us via Lee Barnes. Full list, unspecified here: http://www.torreyaguardians.org/rewilding.html Bill Alexander reports **140 seeds** collected from the T. tax trees at the Biltmore Gardens (Asheville, North Carolina). Unknown what

percentage will be viable. Lee Barnes and Bill Alexander in communication about stratification, storage, and subsequent distribution. Note: Bill Alexander reports that this was an off year for seed production, so it is fortunate that any seeds were collected at all. Lee Barnes overwintered them, then in March 2006: I've just now sent out eight emails offering Torreya seeds to Botanical Gardens suggested by Bill Alexander (NC Botanical Gardens, Chapel Hill, NC; Bernheim Arboretum, KY; Dawes Arboretum, OH; Duke Gardens, Durham, NC; JC Raulston Arboretum, Raleigh, NC; NC Arboretum, Asheville, NC; Arnold Arboretum, MA; and Arboretum de Villardebelle, FR.). I've requested their response by April 1st. I'm hoping that email requests will be received and acted upon quicker than by US Postal Service. If everyone is interested, this leaves us about 19 seeds for individuals — or two mailings. I'll wait until the 1st week in April to count requests, and then will open to other individuals who have requested seed. My sense is to ID the top interested folks that have facilities to germinate and pot up and grow out larger seedlings. ... Lee reports that Bill Alexander donated to Torreya Guardians (TG) 110 of the 140 seeds collected at the Biltmore Gardens in October 2005. Lee Barnes cleaned, stratified (in his refrigerator), attempted to sex (via intuitive dowsing), and then grouped into 10-seed packets the 99 seeds that seemed viable (11 were "floaters"). Because there is no non-invasive way to scientifically sex a seed, TG determined to distribute the seeds in groups of 10 to ensure a mixture of male and female plants and to promote genetic diversity in the F2 generations of seed production. All recipients must, thus, have the land availability to plant a grove of ten trees in this stage of the rewilding project. (Interested parties are encouraged to study the text and photos on the California Torreya pages of this website in order to ascertain the types of habitats in which T. tax plantings might thrive.) Lee began the process of distribution by querying botanical gardens for interest in planting the seeds in outdoor settings and for long-term participation in resultant seed distribution. Two institutions responded with interest, and 2 packets (of 10 seeds per packet) were set to them: The Dawes Arboretum in Newark Ohio (near Columbus) and Arboretum de Villardebelle in S. France.

Fall 2004 - 3 Dec 2004 email by Connie Barlow: "Bill Alexander at the Biltmore told me that the hurricane season, coupled with an off-year for fruit production, meant that there was no fruit to harvest this fall. So efforts to harvest T. tax seed at the Biltmore and to begin the assisted migration process will begin autumn 2005".