

# HAVE WE WITNESSED A MASS EXTINCTION OF NW NATIVE PLANT SPECIES THESE PAST 20 YEARS?

[www.plc215.org](http://www.plc215.org)

*Treating Earth as if it were Heaven*

## To enrich Bonhoeffer Botanical Gardens' existing Natural Growth

we created a target list of native plants (for zoo-like exhibitions) using well-known references including:

[www.USDA](http://www.USDA), URL Links provided by NRCS. 2010 - the PLANTS Database (<http://plants.usda.gov>, 24 April 2010) National Plant Data Center; also referenced was University of Washington's [www.biology.burke.washington.edu/herbarium](http://www.biology.burke.washington.edu/herbarium) website that allows use for educational purposes, all crossreferenced to Hitchcock and Arthur Cronquist's Flora of the Pacific Northwest: An Illustrated Manual (University of Washington Press, 1976). Also referenced were the Washington Flora Checklist, E-Flora BC, CalPhotos, Wikipedia, WTU Herbarium Specimens, and PNW Herbaria Specimens, along with Eugene Kozloff's Plants of Western OR, WA & BC and Peck's Manual of Higher Plants of Oregon (that we've now used for 50+ years).

3 sources, most 20+ years old, were required to agree that a plant was a NW native.

## Of 906 Plant Species Identified, the 2018 SAM Survey found 640

451 of these are planted and staked with nameplate signs. They exist as natural growth or from seeds or seedlings; i.e., not transplanted from the wild. 266 signs that flank Peter's Cross (at the left) are unused.

## WWU's Survey & Monitor Project "SAM" - Now 2019 in Cascadia

This Posterboard was shown at a Botanical Symposium hosted by the UW in March 2018. Conversations led to the creation and funding (by BBG) of the [WWU SAM Project](#) that each year puts ~12 students in the field, walking north from the Siskiyou's in 2019 looking for lost plants from southern Oregon to BC west of the Cascades.

## 266 Plant Species have not been Found in 10 Years of Searching!

Since 2009 we have toured western WA, OR and BC. One can drive, walk, and be almost anywhere in Western Washington in a few hours' time. If plants exist today, should not one be able to find and photograph them?

## "Many native plants did not survive the 2nd cutting."

was a common pioneer lament, now lost in time (and 3rd and 4th cuttings). Other potential factors might be:

- o sprays
- o CRISPR
- o logging
- o microwaves
- o increased # of collectors decreasing the # of seeds (annuals can disappear in a year)
- o pollution and climate change (bringing Peck's text's Oregon plants northward)
- o loss of habitat caused by invasive plant and animal species (including humans)
- o loss of pollinators (insects, bats, etc.); our Gardens are bereft of native birds.

## And a 3rd (of 4) Question(s):

Populations increase, are stable, decrease, or cease to exist (slopes:  $\geq 1$ ,  $< 1$  or 0. Over time  $< 1 = 0$ ). Have the words: *rare, threatened, endangered, sensitive, imperiled, of concern* masked the  $< 1$  native plants' demise?

## Guerrilla Restoration

Over 100 of our members planted pairs of Golden Chinquapins here and there in 2018.

**BECAUSE IF WE, AS INDIVIDUALS, DON'T ASSIST OUR NW NATIVE PLANTS' MIGRATION, WHO WILL?**

This is the NW's native botanical holocaust garden. Visitors enter under the Revised Codes of Washington - RCW 4.24.200 & 4.24.210, allowing public recreational use, including nature study and viewing or enjoying scenic or scientific sites or waterways on private land. Visit the the Gardens at I-5's Exit 215, 2420 300th NW Stanwood, WA 98292.