

Palos Verdes Lemonadeberry

Palos Verdes has a long history of disturbance and CSS recovery and restoration efforts. One of the most aggressive and resilient CSS/chaparral species is *Rhus integrifolia* or lemonadeberry. The Biogeography Lab has a long sequence of air photos and satellite images of the Portuguese Bend Reserve and it shows an intriguing area in which *Rhus integrifolia* established nearly complete dominance of one area near the scarp of the 1956 Portuguese Bend landslide. The PVPLC sometimes thinks of it as a native invasive! The series of images shows its expansion and densification until in 1972 or so, someone girdled it with a brushcutter or plow (perhaps a firebreak). This hugely disturbed girdle generally shows little recovery of CSS. In 2009, a fire blasted through the “Lemonadeberry Forest” and burned the whole thing down. It has speedily recovered and I've sent a few teams up there to monitor its recovery. I would like to get a team back there this month to do three or four 20 meter parallel transects along Paintbrush Trail (yellow path on detail map):

- 33.75139°N 118.35675°W – point on Paintbrush Trail to start
- 33.74929°N 118.35697°W – point on Paintbrush Trail to end (it gets dangerous past this area)

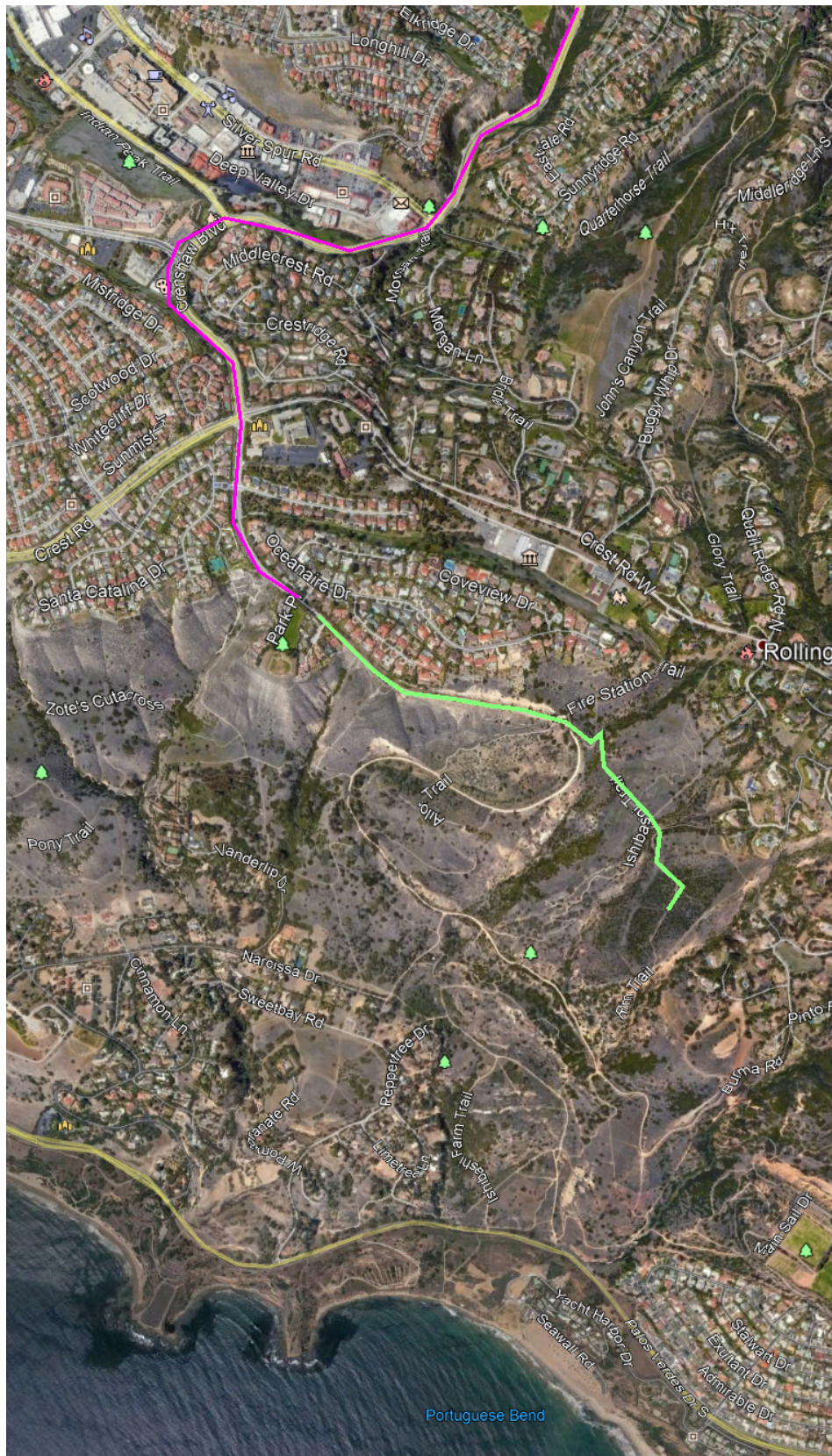
Backtrack to 33.75018°N 118.35641°W. This is the junction with an informal trail that cuts off Paintbrush Trail to the west, toward Ishibashi Canyon Creek. I would like to get three transverse transects (at right angles to the trail, centered on the trail, so about 10 m into the CSS on either side) along this trail (pink path on detail map):

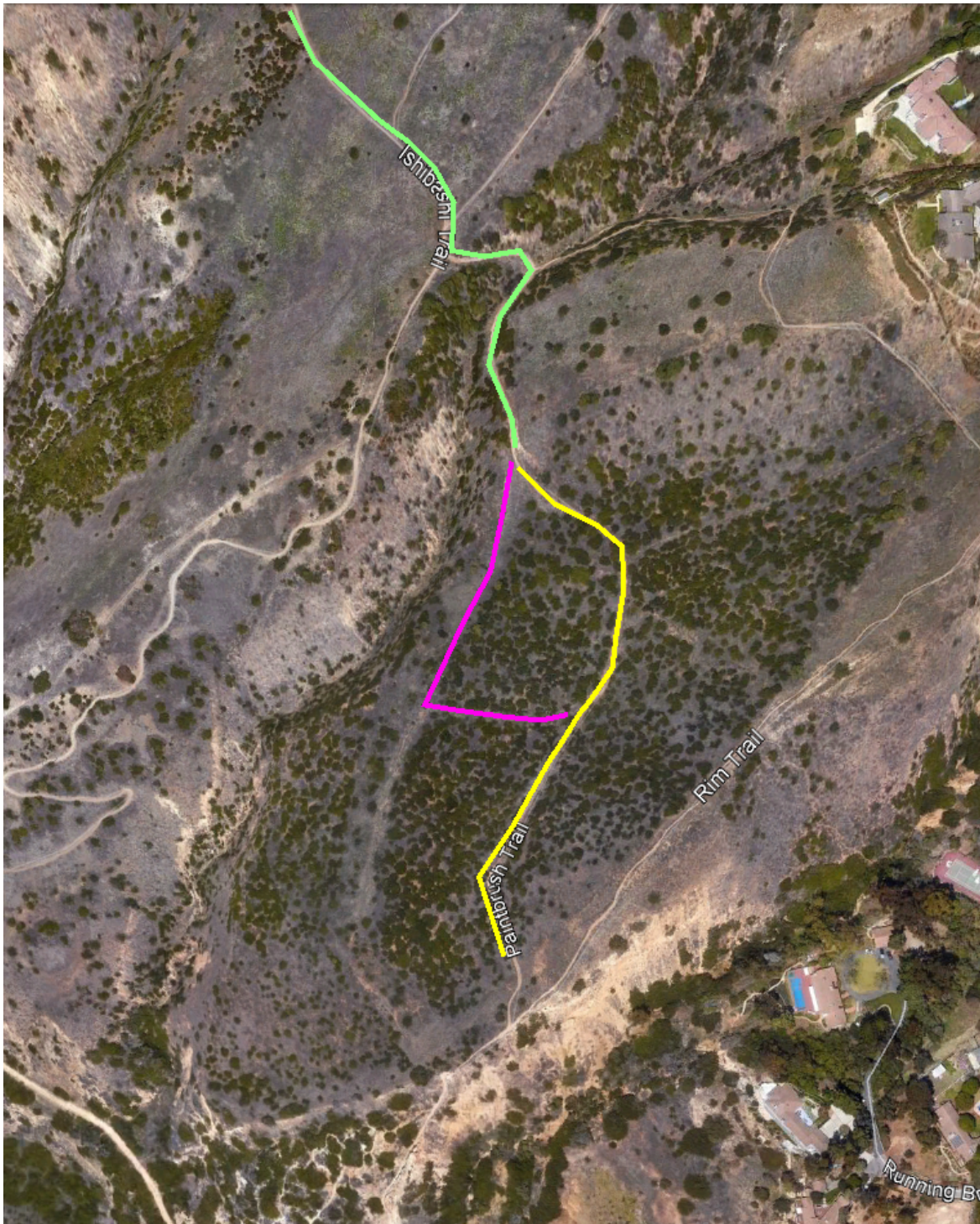
- 33.75018°N 118.35641°W -- point on informal trail to start
- 33.75025°N 118.35735°W – end of trail at the cleared area above the canyon

I would like to get three or four transverse transects across this cleared area, which you should be able to hike along back to the original Paintbrush Trail starting point. These transects would again be placed across the cleared area/informal trail, trying to get it roughly 10 meters away from the lemonadeberry and then 10 meters up into the shrubbery. So, distribute transects:

- 33.75025°N 118.35735°W back to
- 33.75139°N 118.35675°W

If the going is too rough or steep in here, do as many as you feel safe doing and then back-track to the informal trail and hike back to the starting point along Paintbrush Trail and then out. Otherwise, just hike back up that cleared area to the starting point.





Trails: https://pvplc.org/_lands/docs/PBRBrochure2017.pdf

Nearest emergency-receiving hospitals:

- Providence Little Company of Mary, 1300 W. 7th St., San Pedro 90732, (310) 832-3311 (east on Palos Verdes Dr. South by coast and then north on Western to S. Dodson Ave, which bends right (east) to become W. 7th St.
- Torrance Memorial Medical Center, 25530 Hawthorne Bl., Torrance 90505, (310) 373-2027 (north on Crenshaw past PV Dr., west on Rolling Hills Rd. to Hawthorne Bl)

Cheseboro Canyon

Three 442 students went out with graduate student Derek Emmons to redo belt transects of Cheseboro Canyon at several of Scott Eckardt's original sites. Cheseboro Canyon burned during the Woolsey Fire this fall and this field project collected early successional data on sites that had been transected or belt-transected before the fire, from 2005 to 2017. While Mr. Emmons is using the data for his own seminar project, the 442 participants can use them for comparisons with the data aggregated in the spreadsheet on the course home page.

Palos Verdes

The Biogeography Lab has been transecting and quadratting in the upper Portuguese Bend Reserve for several years, starting with the GDEP summer internship program back in 2003-2010 and continuing in classes. Though this looks like a “natural” environment, an enjoyable place to hike and commune with “Nature,” it's actually quite disturbed, with a high degree of exotic invasives. The area was also hard-hit by a fire in 2009. The PVPLC has been working like crazy to subdue some of the worst offenders (*Brassica nigra* and *Foeniculum vulgare*) and it exploited the fire's destruction of mustard “forests” to do some active restoration, especially in Peacock Flats and the old Ishibashi field. What I would like to do here is collect transects just off the main area of restoration in Peacock Flats (not wanting to disturb that) and monitor the condition of the vegetation after two years of abundant rain.

So, the map below shows general areas where data have been collected before. I would like to get several 10 meter transverse transects (running into the CSS at right angles from the trail) and a few parallel transects (running 10 meters along the trail). I have grouped the starting points by the trail they're on, but the most efficient path among them is by following the suggested numbers:

On Crenshaw Extension/Burma Trail, it would be great to get **parallel** transects in the CSS near the trail starting at and running downhill from:

- 1) 33.75600°N 118.36500°W (1, south side of trail)
- 2) 33.75555°N 118.36168°W (1, north side of trail)
- 5) 33.75480°N 118.35950°W (1, west side of trail)
- 10) 33.75400°N 118.36620°W (1, southeast side of trail)
- 11) 33.37300°N 118.36700°W (1, west side of trail)

On Fire Station Trail just east of the tank, I'd like a couple of **transverse** transects on the north side of the trail just behind the tank and just past the Peruvian pepper trees there:

- 3 and 4) 33.75550°N 118.3597°W (get 2 transects near one another in this area)

On Peacock Trail, running **transversely** north from the trail:

- 6) 33.75500°N 118.36055°W (1)
- 7) 33.75490°N 118.36150°W (1)
- 8) 33.75460°N 118.36300°W (1)
- 9) 33.75450°N 118.36330°W (1)

On Kelvin Trail, running **parallel** on either side of the trail (which gets to be tunnel-like in places):

- 13) 33.75370°N 118.36770°W (1)
- 14) 33.75350°N 118.36790°W (1)
- 15) 33.75320°N 118.3681°W (1)

