

Here are the “marching orders” for the various field teams. Be sure to have GPS Status & Toolbox on your Androids or GPS Status or similar on your iPhones, and Charmlee Park teams should also remember to check out two of the Department's Garmin eTrex units and a 20 m transect tape on the class day before you go out in the field

Team Alpha

This team is going to transect the stable south side of the CSS “lump” in the East Meadow of Charmlee Park. You're going to revisit transects originally done back in Spring 2014 and see what's there now after the Woolsey Fire burned through the entire park in Fall 2018. Proceed south along the Botany Trail, bearing left on the trail fork as you enter the Meadow/valley, as the trail becomes the East Meadow Trail. Take it past the oak grove on your left and the prairie on your right up the hill covered by the CSS “lump.” You'll go through the CSS lump until you see a lobe of the grassland opening out to your right. That's where you'll be working, all along that boundary between the CSS and the grassland. Fire up your GPS (I'll lend you some of the Geography Garmin eTrex ones, as I suspect you may be out of cell phone range there), which takes a couple minutes. You will now use it to navigate to the following coordinates, which are the “0” or starting points for the older transects. If you walk north a few steps, you see the latitude increase from around 34.05-ish degrees; if you walk east, back toward the East Meadow Trail, you'll see the longitude decline a bit from around -118.87-ish degrees. By fiddling around this way, you can locate the old starting points.

Once you've found them, set up your 20 m transect line going up into the shrubbery at that point, at right angles to the CSS-grass boundary. This may be a bit of a scramble if the vegetation is dense: Do your best. Once you have the line positioned and taut, the folks at the 0 m and the 20 m ends will note their latitude, longitude, and elevation readings and shout them to the data recorder. The data recorder needs to get the latitude and longitude to the 5th or 6th decimal place (including 0's). The Garmins usually report 5 decimal places; cell phones may report 6. Now, the “botanist” (with a lot of help from the team), walks or crawls along the line, yelling out species identifications at every m. S/he should bring some Baggies and a Sharpie and a camera along. If there are two plants you could use, please call out the higher one, the one you would see from an airplane or drone. When the botanist reaches the end, the data recorder will check the data for completeness: latitude and longitude at 5 or 6 decimal places, elevation noted, 21 species identifications (for 0 m through 20 m, inclusive). Any problems should be fixed there, while the transect tape is still there, GPS units are still on the end, and the botanist is available. Once the quality assurance check has been done, the data recorder will give the all-clear and the team can now extricate themselves, the GPS units, and the tape out of the shrubbery and move on to the next one.

What happens if you can't identify a plant? Get a Baggie, label it with transect name, transect point (*e.g.*, 6 m), cut a small sample showing leaf arrangement and (if available) inflorescences or fruits, put it in the Baggie and seal it, and then take a field photo. We'll try to figure it out in the lab when you get back.

Here are your starting points:

Name	N latitude	W longitude
CP_F21_13_S	34.05137°	-118.87847°
CP_F21_09_S	34.05137°	-118.87856°
CP_F21_08_S	34.05155°	-118.87862°
CP_F21_07_S	34.05152°	-118.87877°
CP_F21_06_S	34.05150°	-118.87897°
CP_F21_05_S	34.05142°	-118.87914°
CP_F21_14_S	34.05137°	-118.87929°
CP_F21_15_S	34.05130°	-118.87950°

Team Beta

This team is going to transect the expanding northwest side of the CSS “lump” in the East Meadow of Charmlee Park. You're going to revisit transects originally done back in Spring 2013 and see what's there now after the Woolsey Fire burned through the entire park in Fall 2018. Proceed south along the Botany Trail, bearing left on the trail fork as you enter the Meadow/valley, as the trail becomes the East Meadow Trail. Take it past the oak grove on your left and the prairie on your right. You'll see the CSS up on the hill ahead of you. Look to your right and you'll notice a kind of boundary between the grassland and the CSS. You'll go along that boundary zone, sending transect lines up into the shrubbery as you go. Fire up your GPS (I'll lend you some of the Geography Garmin eTrex ones, as I suspect you may be out of cell phone range there), which takes a couple minutes. You will now use it to navigate to the following coordinates, which are the “0” or starting points for the older transects. If you walk north a few steps, you see the latitude increase from around 34.05-ish degrees; if you walk east, back toward the CSS “lump,” you'll see the longitude decline a bit from around -118.88-ish degrees. By dancing around like this, you can locate the old starting points.

Once you've found them, set up your 20 m transect line going up into the shrubbery at that point, at right angles to the CSS-grass boundary. You are trying to get the 0 m point right at the start of the CSS, which may be challenging in this boundary zone, which has been actively expanding for four decades. It may be a bit of a scramble if the vegetation is dense: Do your best. Once you have the line positioned and taut, the folks at the 0 m and the 20 m ends will note their latitude, longitude, and elevation readings and shout them to the data recorder. The data recorder needs to get the latitude and longitude to the 5th or 6th decimal place (including 0's). The Garmins usually report 5 decimal places; cell phones may report 6. Now, the “botanist” (with a lot of help from the team), walks or crawls along the line, yelling out species identifications at every m. S/he should bring some Baggies and a Sharpie and a camera along. If there are two plants you could use, please call out the higher one, the one you would see from an airplane or drone. When the botanist reaches the end, the data recorder will check the data for completeness: latitude and longitude at 5 or 6 decimal places, elevation noted, 21 species identifications (for 0 m through 20 m, inclusive). Any problems should be fixed there, while the transect tape is still there, GPS units are still on the end, and the botanist is available. Once the quality assurance check has been done, the data recorder will give the all-clear and the team can now extricate themselves, the GPS units, and the tape out of the shrubbery and move on to the next one.

What happens if you can't identify a plant? Get a Baggie, label it with transect name, transect point (*e.g.*, 6 m), cut a small sample showing leaf arrangement and (if available) inflorescences or fruits, put it in the Baggie and seal it, and then take a field photo. We'll try to figure it out in the lab when you get back.

Here are your starting points:

Name	N latitude	W longitude
CP_F21_01_R	34.05383°	-118.87796°
CP_F21_02_R	34.05386°	-118.87822°
CP_F21_03_R	34.05365°	-118.87852°
CP_F21_04_R	34.05352°	-118.87850°
CP_F21_11_R	34.05332°	-118.87842°
CP_F21_05_R	34.05309°	-118.87884° (go due east here)
CP_F21_06_R	34.05302°	-118.87873° (go due south here)
CP_F21_12_R	34.05293°	-118.87906°

Team Gamma

This team is going to transect the stable section of the East Meadow CSS “lump” that lies between the old transects being revisited by Teams *Alpha* and *Beta* that weren't consistently included among the old transects. Breaking new ground here! Probably the easiest way to get to this boundary is to follow the directions for Team *Beta*, going along the CSS-grassland boundary past their stopping point at 34.05294° at -118.87906°. You'll see the boundary becomes very irregular south of here, with a prominent lobe extending into the Meadow and then a large coyotebrush “island” to the south. This zone, including the lobe, has been fairly stable over the decades, but a long line of coyotebrush islands marks a recovering zone to its southwest. Fire up your GPS (I'll lend you some of the Geography Garmin eTrex ones, as I suspect you may be out of cell phone range there), which takes a couple minutes. You will now use it to navigate to the following coordinates, which are the “0” or starting points for the older transects. If you walk north a few steps, you see the latitude increase from around 34.05-ish degrees; if you walk west, toward the Meadow, you'll see the longitude increase a bit from around -118.87-ish degrees. By puttering around this way, you can locate the old starting points.

Once you've found them, set up your 20 m transect line going up into the shrubbery at that point, at right angles to the CSS-grass boundary. This may be a bit of a scramble if the vegetation is dense: Do your best. Once you have the line positioned and taut, the folks at the 0 m and the 20 m ends will note their latitude, longitude, and elevation readings and shout them to the data recorder. The data recorder needs to get the latitude and longitude to the 5th or 6th decimal place (including 0's). The Garmins usually report 5 decimal places; cell phones may report 6. Now, the “botanist” (with a lot of help from the team), walks or crawls along the line, yelling out species identifications at every m. S/he should bring some Baggies and a Sharpie and a camera along. If there are two plants you could use, please call out the higher one, the one you would see from an airplane or drone. When the botanist reaches the end, the data recorder will check the data for completeness: latitude and longitude at 5 or 6 decimal places, elevation noted, 21 species identifications (for 0 m through 20 m, inclusive). Any problems should be fixed there, while the transect tape is still there, GPS units are still on the end, and the botanist is available. Once the quality assurance check has been done, the data recorder will give the all-clear and the team can now extricate themselves, the GPS units, and the tape out of the shrubbery and move on to the next one.

What happens if you can't identify a plant? Get a Baggie, label it with transect name, transect point (e.g., 6 m), cut a small sample showing leaf arrangement and (if available) inflorescences or fruits, put it in the Baggie and seal it, and then take a field photo. We'll try to figure it out in the lab when you get back.

Here are your starting points:

Name	N latitude	W longitude
CP_F21_16_S	34.05280°	-118.87940°
CP_F21_17_S	34.05257°	-118.87960°
CP_F21_18_S	34.05265°	-118.87980°
CP_F21_19_S	34.05265°	-118.88000°
CP_F21_10_S	34.05238°	-118.88020°
CP_F21_21_S	34.05211°	-118.87980°
CP_F21_22_S	34.05184°	-118.87988°
CP_F21_23_S	34.05147°	-118.87984° (between “lump” and 1 st “island” -- go east into “lump”

Team *Delta*

This team is going to transect the coyotebrush “islands” leading southwest across the Meadow from the south part of the CSS “lump.” The Biogeography Lab group has been very interested in the rôle of coyotebrush as a CSS species capable of (re)invading exotic grassland and possibly facilitating the establishment of other CSS species under them as they age. Normally, I'd have you get under these shrubs and quadrat under them to find out what's under there. Because of the Woolsey Fire, which torched the Meadow, I simply want to know if the coyotebrush plants are resprouting and, whether they are or not, which species are growing on the “island” sites – exotic grasses and forbs or native shrubs or forbs. Given the open nature of any recovering coyotebrush, I think just simple transects will work this semester.

Fire up your GPS (I'll lend you some of the Geography Garmin eTrex ones, as I suspect you may be out of cell phone range there), which takes a couple minutes. You will now use it to navigate to the following coördinates, which are the “0” or starting points for the older transects. If you walk north a few steps, you see the latitude increase from around 34.05-ish degrees; if you walk west, you'll see the longitude increase a bit from around -118.88-ish degrees. By puttering around this way, you can locate the old starting points and new island sites.

Once you've found the starting points, set up your 20 m transect line going across the coyotebrush “island” starting at the CSS-grassland boundary and then moving along the island's longest axis. This may be a bit of a scramble in the largest island if the vegetation is dense: Do your best. In the smaller islands, your transect line will extend into the grassland. Do your best to identify the grasses (this is pretty hard as the grasses are all dead now and identifiable flower or grain heads may have shattered). Once you have the line positioned and taut, the folks at the 0 m and the 20 m ends will note their latitude, longitude, and elevation readings and shout them to the data recorder. The data recorder needs to get the latitude and longitude to the 5th or 6th decimal place (including 0's). The Garmins usually report 5 decimal places; cell phones may report 6. Now, the “botanist” (with a lot of help from the team), walks or crawls along the line, yelling out species identifications at every m. S/he should bring some Baggies and a Sharpie and a camera along. If there are two plants you could use, please call out the higher one, the one you would see from an airplane or drone. When the botanist reaches the end, the data recorder will check the data for completeness: latitude and longitude at 5 or 6 decimal places, elevation noted, 21 species identifications (for 0 m through 20 m, inclusive). Any problems should be fixed there, while the transect tape is still there, GPS units are still on the end, and the botanist is available. Once the quality assurance check has been done, the data recorder will give the all-clear and the team can now extricate themselves, the GPS units, and the tape out of the island and move on to the next one.

What happens if you can't identify a plant, such as a grass? corpse Get a Baggie, label it with transect name, transect point (*e.g.*, 6 m), cut a sample showing leaf arrangement and (if available) inflorescences or fruits, put it in the Baggie and seal it, and then take a field photo. We'll try to figure it out in the lab when you get back.

Here are your starting points:

Name	N latitude	W longitude
CP_F21_01_C	34.05160°	-118.88007° (go SSE)
CP_F21_04_C	34.05133°	-118.88002° (go NW)
CP_F21_02_C	34.05163°	-118.88040° (go SSE)
CP_F21_03_C	34.05195°	-118.88058° (go SSW)
CP_F21_05_C	34.05196°	-118.88080° (go NW)
CP_F21_06_C	34.05203°	-118.88106° (go NW)
CP_F21_07_C	34.05137°	-118.88181° (go NW)
CP_F21_08_C	34.05310°	-118.87936° (isolated island in the prairie on N end of “lump” -- go NW)

Team *Epsilon*

This team is going to the prairie area in the Sepulveda Dam Basin, the part that burned in October 2019 and was transected by your predecessors shortly after. You'll need a cell phone GPS, a clipboard, your plant identification materials (cell phone linked to Sepulveda Dam species list), cell phone camera, Baggies, tape, and Sharpies (for mystery plants).

Fire up your GPS. Use your cell phones with GPS Status & Toolbox (Android) or similar (iPhone) with all settings metric and using decimal degrees (DD.DDDDDD°): The Dam has great cell coverage. You will now use your phones' GPS to navigate to the coordinates given in the spreadsheet at <https://home.csulb.edu/~rodrigue/geog330/data/F19/SDfirepointdataF19andF21.pdf> (and .ods). If you walk north a few steps, you see the latitude increase from around 34.17-ish degrees; if you walk east, toward Haskell Creek and the pond, you'll see the longitude decline a bit from around -118.47-ish degrees. By fiddling around this way, you can locate the old post-fire census points.

Once you've found them, fill out the data collection form above with your observations of the soil condition at that point (normal beige/tan, charred/black-ish, ashy-white), the plants growing within arm's distance of the point (species identification), and the plant's condition (alive and green/growing, burned stems still visible, burned/dried/wilted leaves still visible, juvenile plant, resprouting injured plant). Take a picture and come up with a system for linking the photos on which phone to particular points. Don't worry about the water behavior column: That is a very specific thing that happens within hours or days of a fire.

This work can be done by one or, better, two people (your team can break up to speed things up). Any problems or blank cells should be fixed there, while you're at the spot indicated. Once the quality assurance check has been done, you can move on to the next point. Pinpointing the old sites is going to be the time-consuming part.

What happens if you can't identify a plant? Get a Baggie, label it with point name from spreadsheet, cut a small sample showing leaf arrangement and (if available) inflorescences or fruits, put it in the Baggie and seal it, and then take a field photo. We'll try to figure it out in the lab when you get back.

Team Zeta

This team is going to work on Project PigeonWatch. You will be given the data collected by those who managed not to go on the Sepulveda Dam Basin field trip, you'll go out and collect more data in the interior valleys of L.A., and you'll be given a database of 20 years of previous student data collection on pigeons. With these materials, you will be given a project to analyze with all these data, which might include courtship analyses to tease out sexual selection, evaluations of morph mixes with habitats (including inland vs. coastal), or changes in the population over time by region (I suspect COVID may have made a noticeable change in the distribution of the regional bird herd).

To learn about the interior valleys where I'd like you to do PigeonWatches, consult the directions in the guidelines for the alternative field trip on the home page, <https://home.csulb.edu/~rodrigue/geog330/>, under Lab and Field. The data collection forms are there, too, along with a guide to the different pigeon morphs and their (funny) courtship behaviors.

How to get to Charmlee Park

Charmlee Park is in westernmost Malibu, close to the Los Angeles-Ventura County border. Drive north from CSULB on the 405 to I-10. Go west on I-10 to CA 1 N (PCH) in Santa Monica. Go north ~25 miles on PCH, past Malibu and Zuma Beach, to **Encinal Canyon** (easy to miss – if you hit Decker Canyon/Route 23, you need to turn back). Go north on Encinal about 4 miles and Charmlee Park is on your left. Go down the long park road to the parking area. Look around to learn whether you have to pay for parking (it's been free the last few times I've been up there back in July and August). If you do, you'll need single dollar bills, so bring a stash of those (it was \$4 before the Woolsey Fire in 2018).

Maps

- Encinal Canyon Road: <http://home.csulb.edu/~rodrigue/geog442/Charmlee/CharmleeLocation.jpg>
- Charmlee Park vicinity map:
<http://home.csulb.edu/~rodrigue/geog442/Charmlee/CharmleeParkMap.jpg>
- Charmlee Park trails map: <http://home.csulb.edu/~rodrigue/geog442/Charmlee/Charmleetrailmap.pdf>
- Changing vegetation from 1989-2012:
<http://home.csulb.edu/~rodrigue/geog442/Charmlee/EastMeadow.odp>.

20 m transect form

- <https://home.csulb.edu/~rodrigue/geog442/data/transectdataform20m.pdf>

Species at Charmlee Park

- http://tchester.org/plants/muns/smm/charmlee_reg_park.html

Nearest emergency-receiving hospital, just in case

Los Robles Hospital and Medical Center
215 West Janss Road
Thousand Oaks, CA 91360
(805) 497-2727

Go north on Encinal Canyon Road, going straight onto Lechusa Road, which takes you almost immediately to Decker Canyon Road (Route 23), take 23 to the 101, go west on the 101 to Lynn Road, go north on Lynn Road to West Janss Road: It's on the corner. Here's a map URL:

<https://www.google.com/maps/place/Los+Robles+Hospital/@34.1239189,-118.9100275,13z/data=!4m5!3m4!1s0x80e8306b56154489:0xc2fc25c3d5c95f65!8m2!3d34.2077675!4d-118.8830459>

How to get to Sepulveda Dam Basin

Drive north on I-405 through the Westside and up over the Sepulveda Pass into the San Fernando Valley (~40 mi.). Drive past the 101/Ventura Freeway at the bottom of the grade to Burbank Blvd. and exit there. Make a left (west) over the freeway and then a right onto Woodley Ave. Parking is free on the east side of Woodley, but you need to re-park after 4 hours. There are parking lots in Woodley Park (municipal park), which doesn't have signs limiting you to 4 hours, so that's a better option.

Maps

- <https://home.csulb.edu/~rodrigue/geog330/maps/SDdirectionsF21.png>
- <https://home.csulb.edu/~rodrigue/geog330/Sepulveda/SDmapF21.png> (orange area is where you'll be working)
- <https://home.csulb.edu/~rodrigue/geog330/SepDamTimeSeriesMaps.odp> (time series of land use change in the Sepulveda Dam Basin from 1953 through 2012)
- <https://home.csulb.edu/~rodrigue/geog330/data/F21/SepulvedaFireF19edited.kmz> (you need Google Earth to open this – it shows the points where your F/19 predecessors collected post-fire vegetation and soil condition data)

Data collection form

- <https://home.csulb.edu/~rodrigue/geog330/data/F21/SDfirepointdataF19andF21.pdf>

Species at Sepulveda Dam Basin

- <https://home.csulb.edu/~rodrigue/geog330/SepulvedaDamSpecies.html>

Nearest emergency-receiving hospital, just in case

Valley Presbyterian Hospital (15107 Vanowen Street, Van Nuys. Drive north on Woodley to Vanowen St., make a right, go under the 405 freeway to Sepulveda Blvd. – it is visible from the intersection and the entrance is on Vanowen east of Sepulveda). Their telephone is (818) 782-6600 or (877) 237-9522. Just in case.