# Field Trip Instructions

The following is advice from a lifetime of working in the field. Although in this class we will not be spending exhaustive periods of time in the field, we will experience a range of different weather conditions, and it is possible to be prepared for these.

# Getting There

Be sure of where you are going and how you are going to get there before leaving home. Check the directions provided on the webpage and plan your route. It is a good idea to keep a paper map of San Mateo County in your car. Although your GPS system may be your best friend it needs addresses and street names. Once you are lost they are of little help.

Carpooling – Carpooling has multiple benefits and I strongly advise forming carpools for most of our trips. For starters parking is often limited at the sites. Where possible I provide information about the number of parking spaces available. Most are in the range of 6-12 cars. Secondly, it will cost you less over the semester to drive once every four weeks than once every week. You can decide how you are going to compensate the designated driver over the course of the semester. Thirdly, you will be able to share your experiences with other cool people like yourself.

The downside of carpooling is that you are dependent upon other people to be on time. If one member of your carpool is frequently tardy you can drop them and form a new carpool group.

Park and Ride Facilities – fortunately there are a few of these along Highway 280 – for instance at the intersection of Highways 92 and Canada Road before heading up and over the hill to Half Moon Bay. Also just off Woodside Road (84) Exit of Highway 280 and even meeting on campus and driving to a Park and Ride Facility.

Timing your Commute – Most of the reserves are within an hour of Campus. However, I do not know how long it will take each individual student to drive to each reserve. Allow sufficient time for traffic. Allow additional time if you are carpooling.

Start and Stop Time – Classes start at 9am and I will aim to have you back in the parking lot by 12pm. However, it is likely that one or more of the field trips will take us longer than anticipated. Be careful about making commitments, such as work or picking up children, too close to the end of Fridays fieldtrips.

Weather and Apparel

Dealing with the Cold

Dress warmly and dress in layers. T-shirt, long-sleeved shirt, sweatshirt, you get the picture..

Temperature can range from frigid early morning, to sunny by 11am. The advantage of layers is that you can remove them, or add them as temperatures (both external and internal) change over the course of the morning.

Bring spare clothes and something to carry clothes – backpack with sufficient capacity.

Gloves may be useful when walking, but can you write wearing them?

### Dealing with the Sun

Hats – a baseball, or wide-brimmed hat to protect your face from sun exposure. Shading your notebook it also advisable as white pages reflect sunlight producing a glare.

Sun block – UVA/B protection, chapstick, may be useful when on the coast. However, long sleeves/pant legs give additional protection against scratches/ bug bites.

Bring water – minimum 1 Liter – ideally in two bottles of equal size to distribute weight evenly on a back pack.

#### When the Rain Comes

We will go out in the rain. If lightening is forecast we may cancel, but rain we can deal with, provided that you are well prepared.

You will want a rainproof jacket. It does not have to be a Gore-tex jacket, they are nice but bulky. Rain ponchos are another option, but the light colorful Disney-variety are not going to keep you dry for long.

DO NOT BRING UMBRELLAS FOR HIKING IN FOREST. EVERYBODY BEHIND YOU WILL HATE YOU FOREVER.

On rainy days you will be very happy if you bring a spare pair of socks (which remain dry in the car), a change of clothes, and a towel.

### Writing in the Rain

Pen will run, or not work at all, so pencil is the preferred writing tool.

You should bring a separate notepad for writing in the rain. This keeps your previous notes safe and dry.

Protect your notebook from the rain inside of a ziplock bag. When it comes time to write notes hold the notebook almost vertically close to your body using your body as a shield from raindrops. Wearing a baseball cap/ wide-brimmed hat will also shield your notebook from drips.

You will want a separate ziplock bag for your field guide.

#### Footwear

We will be hiking on trails that will be rough, uphill, and either muddy or dusty depending on the month. You will require a decent pair of hiking boots, or sneakers designed for hiking. Boots have the benefit of additional ankle support, and allow you to step in deeper water/mud.

Allowing your boots to do their work – If the trail is wet because it is raining your footwear will get wet, even muddy. DO NOT TRY TO STEP AROUND PUDDLES. Tempting though this is, and other people will do this, stepping around puddles makes the puddles larger. By stepping around the puddle you extend the zone of soil compaction, which squeezes air out of the soil and makes it impossible for plants to grow.

Always bring two pairs of footwear. Get in the practice of putting on your hiking boots in the parking lot and taking them off before you get back into your car. This keeps your car clean. Having a spare pair of sneakers is also useful if you get wet.

## Taking Notes in the Field

The purpose of field notes is to provide an aid to your memory when you write up your observations later the same day. You need to record details; names, locations, observations at the site of the plant that cannot easily be found anywhere else than in the field.

To write or not to write – although you will have a notebook for drawings, if you have a digital voice recorder, or tape recorder, you can make a vocal record of what you see. The advantages are that it is quick and you can record a lot more information this way. The quickness in the field is offset by requiring additional time to transcribe these audio notes once you get home. Although this can be done in a warm pub too.

Write in abbreviations that you can understand. There will be limited time to take long detailed notes when we are in the field.

### Making Observations in the Field

Hand Lenses – I will use a 10x hand lens for identification in the field. However, I did not possess one when I was taking botany classes. It is useful, but not essential. If you have one bring it. If you can see yourself using one in the future now would be a good time to buy one.

Cameras – It might be useful to bring a camera to take photos of plants, people, scenery, etc. Visual images can be very useful in helping remember what we did and what we saw. However, it is an extra thing to carry/keep dry when we are on the trails.

Smart Phones – in addition to the digital camera mentioned above, you may be able to use the web to find images of plants to help confirm your identification

### Hazards

In the field perhaps the best advice I can give you is to be aware of where your hands and feet are at all times. What this means is that you look at where you are stepping, where you are standing, and what you are touching. Some plants have spines, thorns, ants, you should never grab plants without looking at it first.

#### Biotic Hazards.

**Ticks** – are common in grassland and scrub habitats, but could potentially be found in any habitat we visit. They will latch onto clothing and then crawl upwards. Ideally they will crawl upwards on the outside of your clothing (tuck pant legs into socks), and they latch on where they encounter constriction. When walking scan the vegetation for ticks, and periodically inspect your pants for ascending ticks. At the car, or at home, inspect yourself for ticks, and change clothes before sitting down in your home (or car).

**Northern Pacific Rattlesnakes** – I have seen one once, but it was on a trail. One of the reasons I prefer to always be in the front is to be on the look out for snakes. With the number of people marching through the forest, the smart snakes remove themselves into hiding- but not all snakes are smart.

**Plant hazards;** More likely to cause problems are the plants. You will have to be vigilant to avoid tripping over roots and banging into low branches. You will also want to push branches out of your way with your hands. Be careful when you do so of Newtons Third Law (for every action there is an equal and opposite reaction), once you bend the branch you have creating a spring-loaded whip aimed at the head of the person behind you.

If you are allergic to Poison Oak be careful to avoid touching it, or touching anything that has touched it (like your backpack).

#### Human Hazards.

**Mountainbikers** – on some trails (El Corte de Madera Creek, Hidden Canyon) visibility is poor, the terrain is rough, and bikers are not expecting to encounter thirty people standing in the middle of the trail. When bikers approach move into the uphill side of the trail until all bikers have passed.

Stay on the trail at all times. In many of the sites we will visit the trails are in mountains, even stepping too close to the trail can cause you to fall and slide/tumble downhill.

#### First Aid

I will carry basic first aid supplies with me at all times. However, you may be grateful if you yourself carry some band-aids, antibiotic spray, bandages etc. yourself.

## Trail Etiquette

Although we are going to enjoy ourselves hiking through the beautiful forests and chaparral our purpose is to learn. Therefore, for your benefit, as well as the benefit of other students, keep your conversations to the 'Here and Now'. Gabbing on about Youtube videos is a sign of a distracted mind, and that is when accidents occur.

Not Getting Lost- with potentially 30 people on the trails somebody will inevitably be at the rear. At the rear you are at a much higher risk of becoming separated from the group and being lost. It is important to stay in touch with the group. There are numerous trails branching in different directions. If you cannot see the other students start yelling – before you try and figure out which direction we might have gone. Whistles are also useful in such situations.

Rotation – when we stop to talk about a plant, or key out a specimen I am expecting that when we start walking again that a new group of students will be at the front, and a new group will be at the back. It is the only fair way for students to hear what is going on. It is difficult for me to keep track of the position of each individual on the trail, so as adults, I am expecting you to be self-advocates and make sure that you have your turn at the front, and your turn at the back.

No Collecting Allowed – do not take samples. We are visiting State Parks, County parks, and Open Space Preserves, there are State Laws prohibiting the collection and removal of materials from these reserves. Do not be tempted to pick flowers.

Stay on the Trails – Only step off trails to examine plants when told to do so, or to let other hikers/bikers/horses pass. Do not take short cuts between one trail and another, or to cut-off a zig-zag. Hiking off trail causes erosion and can lead to the trail being closed.

# Arriving Late

Unforseen circumstance A, B, or C happened to you on Friday morning, therefore you know are going to arrive late at the meeting point for the Field Trip. The first thing to do is to accept the fact that you will be late and not drive like a lunatic to try and get there on time. Crashing or getting a ticket will not improve your morning. In the instructions

there is a description of which trails we will start on and you should look for the appropriate trail and try to catch us on the trail.

Have a list of cell-phone numbers of people in the class (plus mine) to let someone know that you will be late. Beware that reception may be poor in some areas.